An Exploration into Psychotherapist Attitudes Towards Evidence-Based Mental Health in Clinical Practice

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Abstract

This study investigates the utilization of evidence-based mental health (EBMH) in clinical practice and examines the associations among demographic information, educational factors, attitudes towards EBMH, therapist alignment with theoretical schools of thought, and work environment. A descriptive and correlational cross-sectional research design was employed to conduct a survey among licensed therapists. The final sample included 137 participants out of an initial pool of 232 therapists. Demographic characteristics, attitudes, and behaviors of psychotherapists were assessed, along with their distribution across institutional, organizational, and contextual levels. The majority of participants were female (84.7%) and held a master's degree (86.9%). The survey included questions on demographic information, professional practice details, and EBMH use, using a 5-point Likert scale. The questionnaire encompassed subscales on personal, contextual, and organizational factors related to EBMH use. Data were collected through various channels, including social networks, personal contacts, and targeted emailing of psychological institutions. Descriptive and correlational analyses were conducted to provide a comprehensive summary of the statistical information and explore relationships between demographics and attitudes. The findings illuminate the current state of EBMH implementation in clinical practice and offer valuable insights for bridging the research-practitioner gap in evidence-based psychotherapy.

Keywords: evidence-based mental health, EBMH, clinical practice, attitudes, therapists, work environment.

An Exploration into Psychotherapist Attitudes Towards Evidence-Based Mental Health in Clinical Practice

Introduction

What are the reasons for therapists' reluctance to incorporate research-based techniques? Is it due to their stubbornness, perhaps deeply rooted in traditional humanist ideologies, making them resistant to exploring the possibilities that research findings can offer? The well-known feud between psychological practitioners and researchers centers around the precise qualifications and meaning of the implementation of evidence-based mental health (EBMH), also known as evidence-based practice (EBP), among other terms. On one side, the researchers emphasize the necessity of empirically studied and validated treatment methods and therapies. On the other, practitioners seek to foster a more holistic perspective on patient care, combining a psychologist's intuition (Smith, 2012), the client-therapist relationship (Norcross & Lambert, 2018), and evidence-based treatments as pieces of the toolbox which practitioners can combine (Safran, Abreu, Ogilvie, & DeMaria, 2011). In light of this ongoing debate, it is crucial to explore the potential benefits and limitations of evidence-based mental health approaches and their associated strategies for integration with practice, ultimately aiming for a framework that incorporates the best of both research-based techniques and holistic patient care.

Implementation

Evidence-based mental health or evidence-based practices, also called evidence-supported treatments or empirically supported treatments (ESTs) are defined as treatments which are "shown to be beneficial in controlled research," "useful in applied clinical settings" for a specific defined selection of patients, and "cost effective relative to other

alternative interventions" (Chambless & Hollon, 1998, p. 7). The academic literature reveals a diverse range of perspectives regarding the implementation of empirically validated EBPs among clinical psychotherapists.

While some clinicians embrace EBPs (Safran, Abreu, Ogilvie, & DeMaria, 2011), others express skepticism (Lilienfeld et al, 2013) or practical concerns (Cook, Biyanova, & Coyne, 2009). For instance, psychotherapists may hold reservations about the relevance of research findings to the clinical context, the feasibility of adapting EBPs to individual patients (Titzler, Saruhanjan, Berking, Riper, & Ebert, 2018), or the extent to which these treatments align with their own theoretical orientations (Johnson, Hoffart, Havik, & Nordgreen, 2016; Stewart, Chambless, & Baron, 2011). These concerns coalesce in the field of implementation research, for which Powell, Hausmann-Stabile, and McMillen (2013, p. 1) use the definition "the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices' to improve the quality (effectiveness, reliability, safety, appropriateness, equity, efficiency) of service delivery in routine care" is focused on addressing these known problems between clinicians and scientists in both established and new psychotherapies. Towards that end, the National Institute of Mental Health among many other methods and organizations exist while others are concerned with the applicability of evidence-based treatments to clinical settings such as the Society of Clinical Psychology (Hunsley & Lee, 2007). These efforts to align practice and research into a closer parallel unfortunately have mixed results (Smith, Sexton, & Bradley, 2005), as the gap between research and practice remains a key schism in the field of clinical psychology.

A multitude of investigations have diligently examined the determinants shaping psychotherapists' perspectives toward EBPs. Notably, Chorpita et al. (2011) conducted a

systematic review of the literature, illuminating therapists' overall inclination to endorse the use of EBPs. However, concerns pertaining to the suitability of EBPs for individual patients, coupled with resource and training insufficiencies requisite for their implementation, emerged as prevalent obstacles to their integration. Moreover, an association was found between clinicians' level of clinical experience and their acceptance of EBPs, whereby experienced therapists exhibited amplified skepticism regarding their efficacy and practicality (Stewart, Chambless, & Baron, 2011). The empirical findings underscore the complex interplay of factors influencing psychotherapists' attitudes toward evidence-based practices, emphasizing the need for targeted interventions and support mechanisms to address concerns surrounding individual patient fit, resource allocation, training provision, and the impact of clinical experience on the acceptance of EBPs.

Furthermore as a contrast to a practitioner's use of EBP, Smith (2012) posits that the intuition of psychotherapists is an oft-neglected aspect of a therapist's treatment and that while EBPs are essential tools for a psychotherapist, an effective therapist must know how to combine and adapt therapies to holistically cater to the needs of a client. Similarly, logistical and practical considerations may affect the enactment of EBPs, such as concerns about patient suitability or the availability of appropriate instruments and resources (Lilienfeld et al, 2013). Clinicians and researchers also voice concerns over a lack of adequate training to perform EBPs which might be recommended prematurely to their inclusion in official guidelines (Garfield, 1996), instead needing a validation of the therapies' effectiveness in real-life clinical scenarios, which researchers and clinicians likely have different definitions and criteria to evaluate effectiveness of a therapy by as well (Lilienfeld et al, 2013; Stricker & Goldfried, 2019). While many therapists recognize the importance of evidence-based practice, they may also experience

challenges in implementing EBPs in a manner that aligns with their clinical expertise and the unique needs of their patients. These challenges highlight the necessity for continued efforts to bridge the gap between research and practice and address the concerns surrounding the application of EBPs in clinical settings.

In fact, some therapists may be skeptical of or hesitant to incorporate empirically validated treatments (Lilienfeld et al, 2013) and prefer to rely on their clinical experience and intuition, others embrace evidence-based approaches as an important tool in delivering effective treatment to clients. Gaudiano, Brown, & Miller (2011) find that a therapist's preference favoring an intuitive approach was indeed negatively associated with a proclivity to the inclusion of EBP and less willing to comply with EBP requirements. Stewart and Chambless (2007) also found a preference for clinical experience over consulting the research literature, although those provided literature for use during the experiment reported a higher likelihood of considering an EBP than those who were not. Welling (2005) asserts that a hybrid approach which combines EBP and a therapist's intuition is optimal, that evidence-based treatment plans provide the greatest confidence in efficacious practice, while intuition is indispensable in detecting and establishing the particular case of a client.

Within the scholarly discourse, a prominent topic of investigation revolves around the differentiation between treatment efficacy and treatment effectiveness. Treatment efficacy pertains to the degree of favorable outcomes achieved within controlled conditions, while effectiveness scrutinizes the extent of desirable outcomes observed within authentic clinical settings. Treatment efficacy refers to the degree to which a particular treatment produces a desirable outcome under controlled conditions, such as in randomized controlled trials or laboratory experiments (Kazdin, 2007). In other words, efficacy refers to how well a treatment

works in ideal or optimal circumstances, where the treatment is delivered according to a specific protocol and with a high degree of fidelity to that protocol. On the other hand, treatment effectiveness refers to the degree to which a particular treatment produces a desirable outcome in real-world or everyday clinical settings, where there may be more variability in the delivery of the treatment and the characteristics of the patients receiving it (Bernal, Jiménez-Chafey, & Domenech Rodríguez, 2009). Effectiveness studies often use less restrictive inclusion criteria than efficacy studies and typically assess treatment outcomes across a range of diverse patients and settings, including community-based clinics and primary care settings. Therapists may be suspicious of guidelines for emphasizing efficacy without properly considering clinical treatment effectiveness (Hunsley & Lee, 2007) because neither of these conditions of a treatment necessarily refer to general widespread clinical applicability.

The discourse on EBPs in mental health reveals a diverse range of perspectives among psychotherapists, with some embracing EBPs while others express skepticism or preference for clinical experience and intuition. Challenges such as concerns about patient suitability, resource availability, training adequacy, and the distinction between treatment efficacy and effectiveness all further contribute to the ongoing gap between research and practice.

Resistance

Research findings have illuminated potential barriers that contribute to therapists' resistance in adopting evidence-based psychotherapies. Concerns regarding perceived rigidity, prescriptiveness, and limited accommodation of individual complexity have been identified as factors influencing reluctance towards these approaches (Wallace & Ransom, 2012; Johnson, Hoffart, Havik, & Nordgreen, 2016). Additionally, time constraints and resource limitations can further impede therapists' willingness to embrace novel treatments or modify existing practices.

Nonetheless, it is noteworthy that many therapists hold a favorable stance toward evidence-based psychotherapies and actively incorporate them into clinical practice. These empirically validated interventions provide therapists with a valuable framework for comprehending and addressing a wide range of psychological issues. Moreover, research underscores the potential for treatment customization to suit varying pathological or symptomological backgrounds (Emmelkamp et al., 2014; Wright & Woods, 2020) and diverse cultural contexts (Bernal, Jiménez-Chafey, & Domenech Rodríguez, 2009). For instance, Wright and Woods (2020) have developed statistical models that contextualize individual psychopathology by leveraging longitudinal data, facilitating precise assessment and treatment recommendations tailored to each client's specific needs. In conclusion, while certain barriers and concerns exist regarding the adoption of evidence-based psychotherapies, the value which many therapists attribute to these approaches, coupled with the potential for customization to individual clients' needs and the increasing availability of longitudinal data-driven models, highlights the ongoing efforts to bridge the gap between research-supported interventions and the complexity of real-world clinical practice.

Practitioners also dismiss the importance of a high degree of technical competency in a particular therapeutic treatment in favor of their own clinical intuition (Smith, 2012), but some also express fear that an over-reliance on EBPs would inhibit their relationship with their clients by dampening the individualistic touch (Addis, Wade, & Hatgis, 1999). Therapists who prefer to rely on their own intuition are also those who tend to have less exposure to and training in manualized therapies, despite these therapies having strong support in the literature for their efficacy and potential for positive client outcomes (Cook, Schwartz, & Kaslow, 2017; Powell, Hausmann-Stabile, and McMillen, 2013; Cha & DiVasto, 2017). Even those with exposure to EBPs may worry that the process of manualization restricts the capacity for the personalization

of treatments to individuals (Jensen-Doss, Hawley, Lopez, & Osterberg, 2009). There is still limited evidence that therapists can appreciate the structure, expectations, and regularity of treatment and progress that can be associated with EBPs (Godley et al., 2001).

The adoption of new treatments or modifications in therapeutic practices by therapists may be impeded by constraints on time and limited resources (Youn et al, 2019), presenting substantial obstacles to broadening their skills and embracing evidence-based approaches. The work of a therapist is already a time-intensive occupation, so motivated material and temporal support is a necessary foundation for expanding a therapist's repertoire (Fairburn & Cooper, 2011), whereas it follows that a lack of resources may hypothetically be a deficit which inhibits the development of therapists' abilities in new treatment methods. Stewart, Chambless, & Baron (2011) indeed find that therapists are most averse to a new training workshop due to the necessary time and financial investment, and doubt about the need for additional training. Ergo, catering interventions to address concerns must be considered to effectively convince psychotherapists of the value of adopting EBPs, and educational resources on EBMH alone are insufficient to change minds of those who are predisposed against their use.

The harmonization of research efforts and the integration of effective treatment interventions by mental health practitioners play a vital role in enhancing the quality of care for individuals seeking mental health services and the further development of those mental health services. However, the precise distinctions between practitioners who endorse EBPs and those who prioritize clinical experience necessitate further investigation (Dawson, 2018). Addressing this gap is a primary objective of this exploratory research endeavor. As our operationalization of EBP versus non-empirically validated therapies took the form of theoretical background alignment, Lilienfeld et al's (2013) designation between romantic and empiricist therapeutic

foundations are deferred to. He defines romantics as those who qualify intuition and clinical observation as valid evidence, while an empiricist prefers more rigorous standardizations of data such as randomized controlled trials. As such, CBT, acceptance and commitment therapy (ACT), systemic therapy, and neuropsychology sort into empiricist therapies for their theoretical foundation in research, while Jungian analytical therapy, psychodynamic therapy, and person-centered therapy classify as romantic for their intuitive approach.

In pursuit of addressing the profile difference between empirical evidence-based and intuitive-experiential practitioners, the present study seeks to provide a balanced perspective by incorporating the insights of both researchers in the field and practicing professionals. To accomplish this, we have designed a survey distributed to psychotherapeutic counselors practicing primarily in the Netherlands and Germany. The survey was designed to elucidate practitioners' perceptions of the barriers they encounter when attempting to implement evidence-based mental health care, as recommended by research, as well as their perspectives on the research-practitioner divide. By exploring the survey data, suggestions will be proposed for fostering improved collaboration and communication between the distinct realms of research and practice, guided by the insights derived from the data.

Methods

Study Context and Design

The survey that is used in this study is based on previous research of a psychology student. This psychology student conducted semi-structured interviews with trainers of the GZ-training. The GZ-training is a Dutch two-year postmaster psychology education program that allows graduated psychology students to become licensed health psychologists. The trainers in

this previous study that were interviewed give training at the PPO-trainings institute located in the northeast of the Netherlands. The survey instrument basis served as a template to expand upon the attitudes, theoretical background orientation, relevant demographic information, and potential other objects of association within psychotherapists. Some items were only intended for the connection with the individual hypotheses and planned analyses of other collaborators on the research team. Standard inventories are available for measuring psychotherapist attitudes towards EBP such as the Evidence-Based Practice and Attitude Scale, but these tools were not available.

The study explored the use of EBMH in clinical mental health practice. Specifically, the aim is to examine the relations among demographic information, educational factors, attitudes towards EBMH, therapist alignment of theoretical schools of thought in practice, and work environment. To investigate these variables, the study was conducted under a correlational cross-sectional research design. The outcomes of interest were descriptive data about 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.

Participants

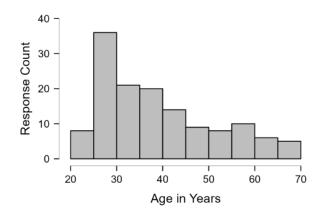
All professionals with a psychology background who were licensed to and actively practicing psychotherapy in the Netherlands, Germany, or the United States were eligible to participate in the survey. We identified and contacted potential participants based on the public visibility of their practice. Because the organizations themselves which employ multiple practitioners were contacted, the exact contact to response ratio is difficult to determine. No incentives were provided to participate in the survey.

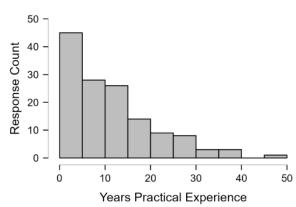
The survey was online between the dates of May 2 and May 16. The initial number of participants was 232, which was decreased to 137 for various reasons after processing.

Responses were excluded if participants did not provide consent to participate in the study (Q5, see Appendix A) or did not consent to the processing of their personal data (Q6, see Appendix A). Additionally, responses were excluded if participants indicated that they do not work as a psychologist in mental health care (Q7, see Appendix A) or if they reported having a high school diploma or bachelor's degree as their highest academic degree (Q10, see Appendix A). One response, which was submitted before the active survey was officially distributed, was omitted, as was one other with a suspicious response pattern that also did not complete the questionnaire.

The sample consisted of N = 137 participants. The gender distribution revealed that 84.7% were female (n = 116) and 15.3% were male (n = 21). Participants' ages ranged from 24 to 68 (see Figure 1), with a significant skew towards younger age groups. The respondents' years of practical clinical experience in the sample had a mean of 12.17 years (M = 12.17, SD = 9.94) (see Figure 2). 86.9% held a master's degree (n = 119), while 13.1% had a Ph.D (n = 18). In terms of nationality, the majority of participants were from the Netherlands (79.6%, n = 109), followed by Germany (18.2%, n = 18) and the United States (2.2%, n = 3).

Figure 1 Figure 2





Years of Practical Clinical Experience

Materials

Age of Respondents

The trainers in this study were asked what can promote the application of evidence-based mental health (EBMH) and what they think the obstacles are in applying EBMH. The given answers were used to establish a questionnaire that can be used to assess how EBMH is embedded in the practitioner's professional practice and environment.

The final questionnaire consisted of questions regarding demographic information (e.g. age), professional practice information (e.g. average treatment trajectory) and EBMH-use. The EBMH-use questions are divided in different subscales that represent different factors relevant for EBMH-use: personal factors, contextual factors, and organizational factors. The questions are asked as statements that can be rated by a 5-point Likert scale (1 = disagree totally, 5 = agree totally). When adding the scores of the statements together, this total score should indicate the level of EBMH use. Scores from 1-5 can be interpreted as follows: 1 corresponds to strongly

disagree, 2 corresponds to disagree, 3 corresponds to neutral, 4 corresponds to agree, and 5 corresponds to strongly agree. Average scores from 1.5-2.5 should be interpreted as a sample consensus of disagree, 2.5-3.5 as neutral, and 3.5-4.5 as agree. An example of a question in the subscale personal factors, is: "I am open to adjusting my practices when I discover new scientific evidence". An example of a question in the subscale contextual factors, is: "I am regularly part of conducting scientific research". An example of a question in the subscale organizational factors is: "My institution provides me with opportunities to learn new academic skills which make it easier for me to apply EBMH." The complete questionnaire can be found in the appendix. The first segment of the survey collected participants' demographic information, educational background, the psychological school of thought they identify most closely with, and their current work setting through predetermined answer options. The second half of the survey used Likert scales to obtain attitudes and opinions on several variables related to the use of EBMH in clinical practice.

Procedure

First, a short pilot survey was developed asking about the respondent's country of residence and the school of psychotherapy that they incorporate to their treatment to assess how varied the psychotherapeutic approaches are among respondents in different countries. There were limited responses; however, the research team adapted the scope and distribution of the full survey accordingly. The full survey was previously developed by another student and was then augmented and expanded upon for our purposes to ask about details of their treatment methods, openness to new scientific literature, and support from their institutions for integrating evidence-based treatments into their practice.

The survey was made in Qualtrics (Qualtrics, Provo, UT, 2023), and we distributed a link to the survey through the social networks of the researchers to home in on practicing clinical psychologists in the Netherlands and Germany. We used a targeted convenience sampling method to focus on psychological institutions which provide mental health care and especially those who provide clinical psychotherapy. The primary distribution channels included LinkedIn posts and messages, associates through the university, personal contacts, and cold-open emailing psychological institutions throughout the Netherlands, Germany, and the United States.

Analysis Plan

The intention of this study is to analyze the results of the questionnaire on a surface level given the condition of the existing literature that provides commentary on the research-practitioner gap in psychology. The foundation of the analysis will simply be a contextualized summary of the statistical descriptive information, from which suggestions for the future development of the literature will be provided. A second, more engaged analysis will entail correlative measures to support or oppose assertions on why practitioners do or do not apply evidence-based psychotherapy practices as is suggested by the research establishment. These correlations will be primarily done between demographics and attitude variables, while also exploring potential connections among various attitudes. All statistical calculations and figures will be made and conducted in JASP Version 0.17.2 (JASP Team, 2023).

Results

Therapy Preferences and Work Setting

Participants displayed a slight general preference for short-term therapy compared to long-term therapy. The most common workplaces reported by the participants in order were general mental health institutions, private practice, child/youth mental health institutions,

followed by other assorted settings. Notably, there was a substantial preference for educational training focusing on a foundation of Cognitive Behavioral Therapy (CBT). The next most common approaches were psychodynamic therapy, which was followed by systemic therapy (see Table 1).

Table 1Therapy Preferences and Work Setting

	<i>n</i> (Survey <i>N</i> = 137)	% of Total
Term Preference	-	-
Short Term	58	42.3
Long Term	37	27.0
Varied	42	30.7
Workplace	-	-
General Institution	43	31.3
Private Practice	38	27.7
Child/Youth Institution	20	14.6
Approach Education	-	-
CBT	101	73.7
Psychodynamic	13	9.5
Systemic	8	5.8
Other	15	11

Correlations among the surveyed theoretical backgrounds used in practice reveal significant associations between certain pairs. Specifically, there is a strong negative correlation between CBT and psychodynamic orientations, indicating an inverse relationship between the practical inclusion of these approaches. Similarly, a CBT orientation shows a negative correlation with analytical therapy. A psychodynamic approach is significantly positively correlated with an analytical orientation. The practical inclusion of a systemic orientation demonstrates positive correlations with psychodynamic and analytical orientations. Additionally, systemic orientation is positively correlated with neuropsychology and person-centered orientations. Furthermore, ACT shows a positive correlation with neuropsychology and a marginally significant positive correlation with person-centered therapy. The average romantic-empiricist (R-E) correlation between psychotherapies is r = .324, while the average romantic-romantic (R-R) or empiricist-empiricist (E-E) correlation is r = .465. For a full correlation matrix, see Table 2.

 Table 2

 Symmetric Correlation Matrix of Use of Theoretical Backgrounds in Practice

Orientation	^E CBT		RPsychody	ynamic	^R Analytical	
	r	p	r	p	r	p
^R Psychodynamic	339	< .001***				
^R Analytical	281	.010*	.663	<.001***		
^E Systemic	.084	.373	.339	<.001***	.345	.002**
^E Neuropsychology	.101	.356	.292	.010*	.315	.010*
^R Person-Centered	106	.275	.508	<.001***	.467	<.001***
^E ACT	098	.295	.090	.396	.125	.282
	^E Systemic		^E Neuropsy	chology	RPerson-Ce	ntered
	r	p	r	p	r	p
^E Neuropsychology	.325	.003**				
^R Person-Centered	.469	< .001***	.174	.135		
^E ACT	.131	.192	.365	.001**	.204	.048*

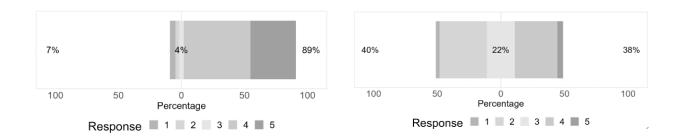
Notes. Empirical orientations are denoted by E , and romantic orientations are denoted by R . *=p < .05. **=p < .01. ***=p < .001.

Attitudes Towards Evidence-Based Practice

The participants' familiarity with EBMH was measured, and indicated (M = 4.13, SD = 0.949) a high general level of familiarity (see Figure 3). Participants also considered themselves highly open-minded towards new scientific literature (M = 4.30, SD = 0.612) and reported a strong ability to understand English literature (M = 4.33, SD = 0.596). However, there was disagreement regarding the exclusive value of evidence-based treatments in practice (M = 2.99, SD = 1.004) (see Figure 4). Participants were highly polarized over if research accurately reflects clinical practice (M = 3.36, SD = 0.860) and did perceive a gap between research and practice (M = 3.85, SD = 0.806). Despite these perceptions, participants were still divided over a desire to use more evidence-based treatments (M = 3.35, SD = 0.884) (see Figure 5).

Figure 3 Figure 4

Familiar with EBMH Only EBP Should be Used in Practice



Support and Resources

Regarding support from employers, participants reported that they generally received support when seeking training in a new treatment (M = 3.71, SD = 0.979) (see Table 3).

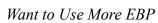
However, financial support from employers for reviewing scientific literature varied considerably (M = 2.91, SD = 1.100) (see Figure 6), and time for literature review was not always recognized as part of therapists' working hours (M = 2.80, SD = 1.110). Physical space for reviewing literature was also not consistently provided (M = 2.97, SD = 1.239).

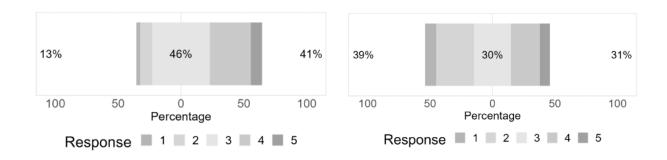
Table 3Support of Training by Workplace

Question Item	M	SD
Colleagues collaborate on staying updated on	3.57	1.01
scientific literature		
Feel comfortable to try new EBMH interventions	4.05	0.82
Application of EBMH is endorsed by colleagues	3.65	0.86
Application of EBMH is endorsed by supervisor	3.38	0.88

Notes. Mean scores from 2.5-3.5 should be interpreted as an average consensus of "neutral" to the prompt. Mean scores of 3.5-4.5 should be interpreted as an average consensus of "agree."

Figure 5 Figure 6





Updating in Literature Employer-Funded

Education and Training

Participants reported that their employers generally provided opportunities to acquire new academic skills supporting the application of EBMH (M = 3.62, SD = 0.948). Additionally, participants indicated that their university education placed a significant emphasis on the importance of EBMH (M = 4.14, SD = 0.877). Respondents generally felt that their education and training adequately prepared them for daily practice (M = 3.79, SD = 0.908).

Figure 7 Figure 8

Employer Provides Practical Support University Emphasized EBMH



Correlations with Years of Experience

The findings revealed that CBT showed a negative correlation with years of experience, suggesting a decrease in its practical use as experience increased. On the other hand, psychodynamic therapy, analytical psychotherapy, systemic therapy, and person-centered therapy exhibited positive correlations with years of experience, indicating an increase in their use as therapists gained more experience (see Table 4).

The findings indicate that therapist experience is negatively correlated with the use of evidence-based mental health interventions and the willingness to incorporate more evidence-based practices into treatment approaches (see Table 4). Specifically, years of experience exhibited a significant negative correlation with receptiveness to adjusting practices based on new scientific evidence and the inclination to employ more evidence-based approaches. However, no significant correlation was found between years of experience and the belief in the

indispensability of EBMH in clinical practice, nor between years of experience and the perception that clinical experience outweighs clinical research in guiding treatment decisions.

Table 4

Correlation with Years of Experience

	Correlation with Years Experience		
Theoretical Background	r	p	
Empirical Therapies	-	-	
CBT $(n = 135)$	190	.026*	
Systemic $(n = 113)$.264	.004**	
Neuropsychology ($n = 85$)	.042	.704	
ACT $(n = 115)$.167	.075	
Romantic Therapies	-	-	
Psychodynamic ($n = 102$)	.265	.007**	
Analytical $(n = 81)$.294	.007**	
Person-Centered ($n = 106$)	.378	< .001***	
Incorporation of evidence	-	-	

Openness to adjusting practice from	0177	.041*
new scientific evidence ($n = 135$)		
Desire to use more evidence-based	171	.047*
practices $(n = 133)$		
Belief that EBMH is an essential	168	.50*
approach in clinical practice ($n = 134$)		
Clinical experience is more valuable	.083	.341
than clinical research ($n = 133$)		

Notes. * =
$$p < .05$$
. ** = $p < .01$. *** = $p < .001$.

Relationship to Education

Education level did not show a significant correlation with the preference for incorporating specific schools of thought into daily practice among the respondents r = .06, p > .05). Furthermore, the respondents demonstrated a high level of agreement that their university education already emphasized the use of evidence-based treatments. However, this agreement was negatively correlated with the inclusion of analytical psychology techniques (r = -.17, p < .05), while no significant correlations were observed for other schools of thought.

Discussion

The current study examined therapist perceptions of EBPs within the context of the research-practitioner gap in psychology. By investigating the attitudes of therapists towards EBPs, the study aimed to address gaps in the existing literature and enhance our understanding of

the factors influencing the adoption and implementation of EBPs in clinical mental health practice. Data was collected on demographic information, educational factors, attitudes towards EBPs, therapist alignment with theoretical schools of thought, and work environment. Among these variables, correlative associations among attitude, demographic information, theoretical background, and education were found, encapsulating the beginning of a rich tapestry of influences on a practitioner's attitude toward EBMH, some of which are supported by the research literature while some contradict it. The survey sample included licensed and actively practicing psychotherapists from the Netherlands, Germany, and the United States. The findings from this study provide insights into the research-practitioner gap and shed light on the factors that may influence the integration of EBPs in clinical practice.

The existing research illuminates a paradigm of conflicting sides split between skepticism and endorsement of EBMH (Safran, Abreu, Ogilvie, & DeMaria, 2011; Lilienfeld et al, 2013; Titzler, Saruhanjan, Berking, Riper, & Ebert, 2018). The reasons for these differences are multitudinous (Cook, Biyanova, & Coyne, 2009; Johnson, Hoffart, Havik, & Nordgreen, 2016), and the sample responses contain varying degrees of support for this variety of perspectives observed by the research. This study finds that practitioners are indeed split on their support of EBMH, indicated in the data through association with their experience and theoretical orientation. The negative association between practitioners' clinical experience and their willingness to use EBMH found by Stewart, Chambless, and Baron (2011) was supported in this study as well. Possible explanations for these observed correlations include initial training biases towards CBT in modern training programs, generational differences in treatment preferences or education, or therapists becoming more versatile over time. Following this line of logic, one would expect that as therapists become more versatile and eclectic in their treatment repertoire

that they would also become more open to new therapies, but this is not supported by the data. In fact, the average of all measured correlations between theoretical backgrounds which are congruent in their theoretical foundation of research evidence or their theoretical foundation in intuition correlate more strongly than theoretically discordant schools of thought. This may potentially indicate some lock-in mechanism in which psychotherapists familiar or comfortable in interventions based either in a romantic-intuitive theory or EBMH could be more likely to seek diversifying their therapeutic portfolio within that underlying framework instead of also diversifying their philosophical approach to therapy.

Even with their reported willingness and openness to indulge in EBP, therapists may be divided over their desire to incorporate more EBP for a multitude of reasons. Therapists may be worried about fitting manualized treatments to individual patients, doubt about the cost-benefit of training to become adequately competent in an EBP (Chorpita, Becker, & Daleiden, 2007), or even an entire lack of belief that a new EBP would be more useful than those the therapist currently uses. These feelings are mirrored in the data relating to openness to using more EBP in practice, showing that therapists with more experience also have a lower desire to use evidence-based practices. Efforts have been made to remedy this deficit in therapists' perceptions of EBMH, for example Wright and Woods' (2020) statistical model which seeks to account for the multifaceted dynamic interaction of systems unique to each person, improving the effectiveness and addressability of EBP to individuals. However, the overarching endeavor fails to address the crux of the matter, which is not solely the comparative effectiveness EBMH versus non-EBMH approaches, but rather the perceived utility of the novel EBMH methodology in relation to the existing techniques and therapies employed by practitioners, taking into consideration the investment of training. Adjacently, while years of experience were correlated

with a lower desire to use EBP, experience was not significantly correlated with the belief that research is more or less valuable than clinical experience. This indicates that while therapists are comfortable and confident in their own melange of therapeutic techniques which may not include EBP, they neither reject nor denounce the use of EBP by other therapists. There was a slight negative correlation (r = -.245, p = .004) between the belief that only EBP should be used and the belief that clinical experience is more valuable than clinical research for informing the practitioner's treatment decisions, but this importantly does not necessarily apply to the practitioner's opinion of other therapists using non-EBP. The extent to which pro- or anti-EBMH therapists' attitudes towards the implementation of these practices by other therapists are applied to others is a subject for future research. Such investigations could suggest the degree of entrenchment of practitioners in their theoretical foundations, which could necessitate a more comprehensive strategy to engage with these positions.

While it is true that the data indicated that therapists' constant review of the research literature was largely unsupported by their employers, the assertion by Corrigan, McCracken, and Blaser (2003) that the workplace and its professional relationships are inhibitory to the adoption of new EBP is not supported by this study's data. Most respondents felt comfortable to try new EBMH interventions (see Table 3), and although experiences were variable, were generally supported by their workplace and colleagues in the use of new EBMH approaches. A larger issue revealed by the data is a lack of engagement with scientific research. The therapists sampled seem to have access to training in new therapies, but if therapists are not primed to consider the research as applicable to their practice, then they may be less likely to do so (Stewart & Chambless, 2007), although even this has been shown to be inefficacious and more intensive interventions such as accessible, affordable, and time-effective EBMH workshops may

be required (Herschell, Kolko, Baumann, & Davis, 2011; Youn et al, 2019). Given how a lack of adequate resources may possibly influence a therapist's interest in seeking new EBP to incorporate into daily practice (Fairburn & Cooper, 2011), the reported widespread lack of support in pursuing new EBP could be an institutional and professional obstacle to what is often framed as a personal attitudinal obstacle.

Most efforts catered to convincing psychotherapists to use more EBMH practices focus on education about EBP, and such recommendations continue to be made (Corrigan, McCracken, & Blaser, 2003). However, Gaudiano, Brown, and Miller (2011) digest what the data in the present study supports: the vast majority of therapist practitioners are very familiar with EBMH (see Figure 8) and their university and training already most commonly focused on EBMH. These results suggest that increasing pressures from universities and research entities may not have the desired effect of positively influencing the appraisal and acceptance of evidence-based treatments in therapeutic practice. Further, demographically there was no significant correlation between education level and the preference for incorporating specific schools of thought into daily practice among the respondents in the data. This finding suggests that an increase in education and emphasis on evidence-based training may not have a substantial impact on changing attitudes and improving adherence to providing evidence-based mental health treatments, as those with greater university education acquired through the pursuit of a PhD would have greater affinity for research-supported EBMH.

These findings highlight the complex relationship between education, attitudes towards specific schools of thought, and the adoption of evidence-based treatments in the clinical setting. It implies that alternative factors beyond education and training may play a more influential role in shaping therapists' treatment preferences and practices. Therapists must be considered by the

literature as complex people whose rigor and content of education is not so different from that of the researchers analyzing them. While research institutions may disagree with the positions on the nature of valid evidence and the integrity of the knowledge that guides the decisions of practitioners, speaking from the so-called "ivory tower" only serves to further isolate the population of collaborators who are the most essential in realizing the goals and ideals of research. Increasing the use of EBMH in practice must be done collaboratively, accompanied by the support necessary for therapists to practice new techniques. The value and performance increase of the techniques must also be proven to justify the costs of new EBP implementation for the therapists. To meet in the middle, research could hybridize its conceptualization of evidence between the golden standard randomized controlled trials with case studies, shifting to a standard case-assignment study design which could fulfill the experimental criteria of research while also providing in-depth information about the discrete moments in a patient's progression that would be more useful to practitioners.

Further, it is important for future research to explore additional factors, such as personal beliefs, clinical experience, and organizational factors, that may contribute to the adherence and integration of evidence-based treatments within mental health care settings. Such investigations can provide valuable insights for the development of effective strategies to promote the use of evidence-based approaches and bridge the gap between research and practice in the field of psychology.

Limitations

This study has several limitations which should be heeded to attenuate the impact of the findings. First, the number of participants was only moderate, and the variables considered so

vast that the security of the findings may not be stable. As this was an explorative study considering the likely potential associations between variables, the full picture of influences which affect a psychotherapist's attitudes may simply have been insufficiently considered. While some relationships may seem to be very statistically substantial with a likely influential relationship, no assumptions or assertions can be made about the nature of any examined relationships, and the quantity of examined relationships from a single moderate dataset overpressures the data's clarity of interaction. Further, the sample of participants was hardly diverse and well-distributed over all the variables and items which were investigated. Most of the responses were from practitioners in the Netherlands, a country known for its emphasis on CBT over other therapies and schools of thought, an assumption that was met with the data. This lack of representation of other therapies may have also developed a polarized sample in which those who became more eclectic did so under stronger reasoning or different patterning than those in other samples would. This describes a possible issue with cross-cultural and cross-national external validity to regions outside the primarily the Netherlands and Germany. If the Netherlands is truly different from the rest of the world in their use of CBT however, the Netherlands may be an effective model for encouraging the use of EBP and a case study on the results of such policies. Despite these limitations, the associations revealed in this study suggest possible directions for future research to investigate how different facets of a psychotherapist's profile may interact with their attitudes towards using EBMH in practice. This knowledge should increase their capability to provide such care, striving towards the goal to improve the standard of mental health care.

References

- Addis, M. E., Wade, W. A., & Hatgis, C. (1999). Barriers to dissemination of evidence-based practices: Addressing practitioners' concerns about manual-based psychotherapies.

 Clinical psychology: Science and practice, 6(4), 430.
- Baker-Ericzén, M. J., Jenkins, M. M., Park, S., & Garland, A. F. (2015, February). Clinical decision-making in community children's mental health: Using innovative methods to compare clinicians with and without training in evidence-based treatment. In *Child & youth care forum* (Vol. 44, pp. 133-157). Springer US.
- Barnett, M., Brookman-Frazee, L., Regan, J., Saifan, D., Stadnick, N., & Lau, A. (2017). How Intervention and Implementation Characteristics Relate to Community Therapists'

 Attitudes Toward Evidence-Based Practices: A Mixed Methods Study. *Administration and policy in mental health*, 44(6), 824–837. https://doi.org/10.1007/s10488-017-0795-0
- Bernal, G., Jiménez-Chafey, M. I., & Domenech Rodríguez, M. M. (2009). Cultural adaptation of treatments: A resource for considering culture in evidence-based practice. *Professional Psychology: Research and Practice*, 40(4), 361–368. https://doi.org/10.1037/a0016401
- Cha, C. B., & DiVasto, K. A. (2017). Introduction: applying clinical psychological science to practice. *Journal of Clinical Psychology*, 73(5), 504-510.
- Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of consulting and clinical psychology*, 66(1), 7.
- Chorpita, B. F., Becker, K. D., & Daleiden, E. L. (2007). Understanding the common elements of evidence-based practice: misconceptions and clinical examples. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46(5), 647-652.

- Chorpita, B. F., Daleiden, E. L., Ebesutani, C., Young, J., Becker, K. D., Nakamura, B. J.,
 Phillips, L., Ward, A., Lynch, R., Trent, L., Smith, R. L., Okamura, K., & Starace, N.
 (2011). Evidence-based treatments for children and adolescents: An updated review of indicators of efficacy and effectiveness. *Clinical Psychology: Science and Practice*, 18(2), 154-172.
- Cook, J.M., Biyanova, T. & Coyne, J.C. Barriers to Adoption of New Treatments: An Internet Study of Practicing Community Psychotherapists. *Adm Policy Ment Health* **36**, 83–90 (2009). https://doi.org/10.1007/s10488-008-0198-3
- Cook, S. C., Schwartz, A. C., & Kaslow, N. J. (2017). Evidence-based psychotherapy: Advantages and challenges. Neurotherapeutics, 14, 537-545.
- Corrigan, P., McCracken, S., & Blaser, B. (2003). Disseminating evidence-based mental health practices. *BMJ Ment Health*, *6*(1), 4-5.
- Dawson, G. C. (2018). Years of clinical experience and therapist professional development: a literature review. *Journal of Contemporary Psychotherapy*, 48(2), 89-97.
- Eells, T. D. (2013). In support of evidence-based case formulation in psychotherapy (from the perspective of a clinician). *Pragmatic Case Studies in Psychotherapy*, *9*(4), 457-467.
- Emmelkamp PM, David D, Beckers T, Muris P, Cuijpers P, Lutz W, Andersson G, Araya R, Banos Rivera RM, Barkham M, Berking M, Berger T, Botella C, Carlbring P, Colom F, Essau C, Hermans D, Hofmann SG, Knappe S, Ollendick TH, Raes F, Rief W, Riper H, Van Der Oord S, Vervliet B. Advancing psychotherapy and evidence-based psychological interventions. *International Journal of Methods in Psychiatric Research*. 2014 Jan; 23 Suppl 1(Suppl 1):58-91. doi: 10.1002/mpr.1411. PMID: 24375536; PMCID: PMC6878277.

- Garfield, S. L. (1996). Some problems associated with" validated" forms of psychotherapy. Clinical Psychology: Science and Practice, 3(3), 218.
- Gaudiano, B. A., Brown, L. A., & Miller, I. W. (2011). Let your intuition be your guide?

 Individual differences in the evidence-based practice attitudes of psychotherapists. *Journal of evaluation in clinical practice*, 17(4), 628-634.
- Greenhalgh, T. (2002). Intuition and evidence--uneasy bedfellows? *British Journal of General Practice*, *52*(478), 395-400.
- Godley, S. H., White, W. L., Diamond, G., Passetti, L., & Titus, J. C. (2001). Therapist reactions to manual-guided therapies for the treatment of adolescent marijuana users. *Clinical Psychology: Science and Practice*, 8(4), 405.
- Fairburn, C. G., & Cooper, Z. (2011). Therapist competence, therapy quality, and therapist training. *Behaviour research and therapy*, 49(6-7), 373-378.
- Herschell, A. D., Kolko, D. J., Baumann, B. L., & Davis, A. C. (2010). The role of therapist training in the implementation of psychosocial treatments: a review and critique with recommendations. *Clinical psychology review*, *30*(4), 448–466. https://doi.org/10.1016/j.cpr.2010.02.005
- Hunsley, J., & Lee, C. M. (2007). Research-informed benchmarks for psychological treatments: efficacy studies, effectiveness studies, and beyond. *Professional Psychology Research* and Practice, 38; Numb 1(1), 21–33.
- JASP Team (2023). JASP (Version 0.17.2) [Computer software].
- Jensen-Doss, A., Hawley, K. M., Lopez, M., & Osterberg, L. D. (2009). Using evidence-based treatments: The experiences of youth providers working under a mandate. *Professional Psychology: Research and Practice*, 40(4), 417.

- Johnson, S. U., Hoffart, A., Havik, O. E., & Nordgreen, T. (2016). A survey of clinical psychologists' attitudes toward treatment manuals. *Professional Psychology: Research and Practice*, 47(5), 340.
- Kazdin, A. E., Kraemer, H. C., Kessler, R. C., Kupfer, D. J., & Offord, D. R. (1997).Contributions of risk-factor research to developmental psychopathology. *Clinical psychology review*, 17(4), 375-406.
- Levant, R. F. (2004). The empirically validated treatments movement: A practitioner/educator perspective. *Clinical Psychology: Science and Practice*, *11*(2), 219-224.
- Lilienfeld, S. O., Ritschel, L. A., Lynn, S. J., Brown, A. P., Cautin, R. L., & Latzman, R. D. (2013). The research–practice gap: Bridging the schism between eating disorder researchers and practitioners. *International Journal of Eating Disorders*, 46(5), 386-394.
- Lilienfeld, S. O., Ritschel, L. A., Lynn, S. J., Cautin, R. L., & Latzman, R. D. (2013). Why many clinical psychologists are resistant to evidence-based practice: Root causes and constructive remedies. *Clinical psychology review*, *33*(7), 883-900.
- Moran, P. (2011). Bridging the gap between research and practice in counselling and psychotherapy training: Learning from trainees. *Counselling and Psychotherapy Research*, 11(3), 171-178.
- Najavits, L. M., Weiss, R. D., Shaw, S. R., & Dierberger, A. E. (2000). Psychotherapists' views of treatment manuals. *Professional Psychology: Research and Practice*, *31*(4), 404–408. https://doi.org/10.1037/0735-7028.31.4.404
- Norcross, J. C., & Lambert, M. J. (2011). *Psychotherapy relationships that work II* (Vol. 48, No. 1, p. 4). Educational Publishing Foundation.

- Patihis, L., Ho, L. Y., Tingen, I. W., Lilienfeld, S. O., & Loftus, E. F. (2014). Are the "memory wars" over? A scientist-practitioner gap in beliefs about repressed memory.

 Psychological science, 25(2), 519-530.
- Powell, B. J., Hausmann-Stabile, C., & McMillen, J. C. (2013). Mental health clinicians' experiences of implementing evidence-based treatments. *Journal of Evidence-Based Social Work*, 10(5), 396-409.
- Qualtrics XM (2023). [Computer software]. Qualtrics and all other Qualtrics product or service names are registered trademarks or trademarks of Qualtrics, Provo, UT, USA. https://www.qualtrics.com
- Safran, J. D., Abreu, I., Ogilvie, J., & DeMaria, A. (2011). Does psychotherapy research influence the clinical practice of researcher–clinicians? *Clinical Psychology: Science and Practice*, 18(4), 357.
- Smith, H. B., Sexton, T. H., & Bradley, L. J. (2005). The practice research network: Research into practice, practice into research. *Counselling and Psychotherapy Research*, 5(4), 285-290.
- Smith, Heather. (2012). The Spaces In-between: How the Art of Intuition Informs the Science of Evidence Based Practice in Psychotherapy. Retrieved from Sophia, the St. Catherine University repository website: https://sophia.stkate.edu/msw_papers/93
- Stewart, R. E., & Chambless, D. L. (2007). Does psychotherapy research inform treatment decisions in private practice? *Journal of clinical psychology*, 63(3), 267-281.
- Stewart, R. E., Chambless, D. L., & Baron, J. (2012). Theoretical and practical barriers to practitioners' willingness to seek training in empirically supported treatments. *Journal of Clinical Psychology*, 68(1), 8-23.

- Stricker, G., & Goldfried, M. R. (2019). The gap between science and practice: A conversation. *Psychotherapy*, *56*(1), 149.
- Titzler, I., Saruhanjan, K., Berking, M., Riper, H., & Ebert, D. D. (2018). Barriers and facilitators for the implementation of blended psychotherapy for depression: a qualitative pilot study of therapists' perspective. *Internet interventions*, *12*, 150-164.
- Wallace, L. M., & von Ranson, K. M. (2012). Perceptions and use of empirically-supported psychotherapies among eating disorder professionals. *Behaviour Research and Therapy*, 50(3), 215-222.
- Waller, G. (2009). Evidence-based treatment and therapist drift. *Behaviour research and therapy*, 47(2), 119-127.
- Wright, A. G., & Woods, W. C. (2020). Personalized models of psychopathology. *Annual review of clinical psychology*, 16, 49-74.
- Youn, S. J., Valentine, S. E., Patrick, K. A., Baldwin, M., Chablani-Medley, A., Aguilar Silvan,
 Y., Shtasel, D. L., & Marques, L. (2019). Practical solutions for sustaining long-term
 academic-community partnerships. *Psychotherapy*, 56(1), 115.

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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

\square 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.

\Box 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.

\Box 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.

\Box 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.

\Box 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.

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.)

• Below I am indicating what I am consenting to.

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

Demographic questions:

- Q8 What is your age?

Demographics

- **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)

Practice 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!