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Does the Scientist-Practitioner Gap Have Ontological Roots?

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ABSTRACT

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In this thesis, the nature and extent of practitioners' dissatisfaction with the psychotherapy research literature will first be described. A case will be made that a deeper analysis needs to be conducted to fully understand this dissatisfaction. Next, this dissatisfaction will be framed in the context of a particular ontology that seems to have largely contributed to it. Most importantly, several features of this ontology will be described and connected to practitioners' dissatisfaction. Finally, an alternative framework for understanding practitioners' dissatisfaction will be tentatively proposed, and it will be suggested that this alternative could help researchers and practitioners understand their dissatisfaction with one another and lead to a more fruitful dialogue.

Keywords: scientist-practitioner, ontology, psychotherapy

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Nearly 70 years after the American Psychological Association officially accredited the scientist-practitioner model, tension and dissatisfaction persists between psychological researchers and mental health clinicians. This tension has remained a consistent theme in the history of psychological research and practice (Cautin, 2011). There is a considerable literature on the "gap" between psychological scientists and practitioners (e.g., Mumma, 2014; Ogilvie, 2011; Pinsof, Goldsmith, & Latta, 2012; Sobell, 2016), the very gap the Boulder Model was intended to begin closing in 1949 (Petersen, 2007; Raimy, 1950 as cited by Lau, Ogrodniczuk, Joyce, & Sochting, 2010). As recently as 2011, this gap "seem[ed] only to be widening" (Cautin, 2011). The communication between researchers and practitioners is sparse and often strained (Lilienfeld, Ritschel, Lynn, Cautin, & Latzman, 2013), and findings of psychotherapy studies are notoriously slow to emerge in routine clinical practice (Morris, Wooding, & Grant, 2011). This relationship has troubled psychologists on both sides of the scientist-practitioner divide (Newnham & Page, 2010).

Practitioners' dissatisfaction is additionally troubling given that psychotherapy research is designed to *serve* psychological clinicians and their work. If medical professionals did not find the research or technologies offered to them useful, it would seem of pressing importance to understand what this research or technology was lacking for physicians, or at least to search for ways to increase their awareness of how the research findings and technology could improve their practice. As will be shown, researchers understand poorly *why* practitioners are dissatisfied with research. Several commentators have offered opinions on the contributors to this dissatisfaction (Lilienfeld et al., 2013; Shean, 2013), and several quantitative and qualitative studies have explored it (e.g., Gyani, Shafran, Myles, & Rose, 2014; Gyani, Shafran, Rose, &

Lee, 2015). However, the gulf between researchers and practitioners persists (Cha & DiVasto, 2017; Lau et al., 2010).

In what follows, the nature and extent of practitioners' dissatisfaction with the psychotherapy research literature will first be described. A case will be made that a deeper analysis needs to be conducted to fully understand this dissatisfaction. Next, this dissatisfaction will be framed in the context of a particular ontology that seems to have largely contributed to it. Most importantly, several features of this ontology will be described and connected to practitioners' dissatisfaction. Finally, an alternative framework for understanding practitioners' dissatisfaction will be tentatively proposed, and it will be suggested that this alternative could help researchers and practitioners understand their dissatisfaction with one another and lead to a more fruitful dialogue.

Practitioner Dissatisfaction

For these purposes, it will be necessary to describe the nature of clinicians' dissatisfaction with research in some detail. Although several commentators have discussed the dissatisfaction of clinicians with research, and several empirical studies have explored these issues, the literature lacks a coherent theme or theory on the deepest philosophical level explaining the nature of practitioners' dissatisfaction. Indeed, the primary purpose of this paper is to provide at least the beginnings of such a theory. Providing a better understanding of the nature of practitioners' dissatisfaction will suggest potential solutions and potential concrete steps that clinicians and researchers can take to unify their efforts to alleviate the burden of mental illness and improve the lives of psychotherapy clients.

Although this paper focuses on the dissatisfaction of clinicians with research, the dissatisfaction—or frustration—has often been mutual between researchers and clinicians. On

the one hand, psychological researchers have expressed concern about the long latency period between their discoveries and the implementation of their discoveries in clinical practice (Christopherson, 2016; Morris et al., 2011), poor adherence among practicing clinicians to manualized protocols (Kosmerly, Waller, & Robinson, 2015; Waller, 2009), and a general reluctance or refusal of clinicians to consult empirical research when making clinical decisions (Lilienfeld et al., 2013). On the other, practicing clinicians have questioned the actual utility or relevance published findings have for their work with patients and clients (Shean, 2013). In addition, many articles are separated from clinicians working outside of university-affiliated settings lack the financial backing to access (Bartunek, 2007; Taubner, Clasen, & Munder, 2016).

This paper focuses on the dissatisfaction of practitioners in particular because it assumes the purpose of psychotherapy research is to serve psychotherapy clients *through* practitioners. Understanding practitioners' perspective, therefore, constitutes an essential aim in mending the system where research and practice work jointly to deliver the best possible service to patients and clients efficiently and effectively. Here, I will examine some themes among clinicians' dissatisfaction that appear in the literature in detail, attempting to be as thorough as possible. These themes include (1) cleanness over messiness, (2) the abstractness of research findings, (3) the lack of concreteness, and (4) the rule-following of research.

Cleanness Over Messiness

Many clinicians have questioned the helpfulness of highly controlled studies (e.g., RCTs) for their clinical work, often preferring case studies and qualitative work (Gyani et al., 2015). In fact, in their research on clinician preferences, Gyani and colleagues (2014) wrote: "The finding that, generally, clinicians prefer to rely on clinical experience rather than research to inform

treatment decisions replicates previous studies (. . . Stewart & Chambless, 2007)" (p. 208). These preferences conflict with what are generally considered the highest standards of evidence in the psychology research community (American Psychological Association, 2006; Kazdin, 2003; Lilienfeld et al., 2013). Kazdin (2003), a prominent figure in the clinical psychology methods literature, has stated that "methodology encompasses the procedures and practices of conducting and designing research so that lawful relations can be identified" (p. 12). Identifying lawful relations requires the cleaning up the messiness and particularity of observations to generalize "across different categories of people . . . and across different contexts" (Van Lange, 2013). It is with specific people and contexts that practitioners work, however, with individuals, couples, and families who are deeply embedded in contexts that are often messy.

Throughout the dialogue between researchers and practitioners, the tension that appears most prominent is between the desire of the research community to confidently establish an internally valid system of clean causal relations and the desire of the practitioner community to understand the effectiveness of their interventions in the thick, varied contexts of their clients. The result is that, although clinicians are most interested in understanding the idiographic, researchers—although they often note the importance of the idiographic in clinical practice (e.g., Kanter et al., 2009)—focus their work on the nomothetic. This tension has been called a battle between rigor and relevance (Barkham & Mellor-Clark, 2003) or between efficacy and effectiveness (Nathan, Stuart, & Dolan, 2000), and it has not gone without definitively successful attempts as resolution. On the tendency in the research literature to favor internal validity to external validity, Weisz, Krumholz, Santucci, Thomassin, and Ng (2015) write that "it is an interesting paradox that funding designed to improve clinical care through research may have produced treatments that do not fit the very clinical care they were designed to improve" (p.

145). In this statement, they capture the ethos of much of what follows in this discussion of clinicians' dissatisfaction.

Clinicians seem dissatisfied with a status quo that upholds internal validity—the identification of causal relations—as the highest goal of psychotherapy research. Rather, they believe the focus should be on the way individual clients *experience* change in therapy. Consider what Levine, Sandeen, and Murphy (1992) write about the differences between psychotherapy in the laboratory and psychotherapy in actual practice:

> There is a notable lack of correspondence between what our students do in the clinic and what they read in the literature . . . We believe that this disparity between clinical practice and clinical research arises primarily because therapy proceeds idiographically, by intervening with the individual, while clinical research is organized and presented nomothetically, generally by use of diagnostic categories. We practice by understanding and helping the individual while we preach according to universal or group norms. (p. 410)

Clinicians have, in some sense, to "create a new therapy" (Yalom, 2009) for each client, and the research they find most helpful in this task focuses on the more idiographic pole of psychotherapy process (Gyani et al., 2014). It focuses on meanings over rules and clean, quantitatively-based outcomes.

This is not to say practitioners find nomothetic research findings unimportant. To the contrary, they believe such "scientific advances in psychology and related disciplines are important to the development of psychological therapies" (Marzillier, 2004). Marzillier, however, further explains that claims such as "research has shown that 90 percent of people with panic attacks will recover with anxiety management" are "misleading and simplistic." He writes that

"it is this 'outcome research' I have a problem with. It does justice neither to the complexity of people's psychology nor to the intricacies of psychotherapy" (p. 392). So, while it is fair to characterize CBT-oriented clinicians as more heavily research-reliant (Gyani et al., 2014) and to note that therapists of other orientations see value in the nomothetic research tradition that prizes internal validity as the highest goal, it stands that the *priority* of cleaner findings over messier findings contributes to the dissatisfaction of many psychotherapists with the body of research at their disposal.

Abstractness of Research Findings

It is no secret that practitioners struggle to identify the relevance of the nuances involved in the largely abstractive research literature (i.e., research aimed at identifying underlying causal mechanisms; Begley, 2009). Indeed, clinicians and researchers both lament this struggle—the former usually calling on the latter to increase the concreteness or particularity of research (Shean, 2013) and the latter calling on the former to increase their research competence and literacy (Lilienfeld et al., 2013).

This abstractness of research presents a burden to clinical practitioners, many of whom work fulltime and are not compensated for their direct consumption of primary research. It is important for practitioners to experience a high return for their effort in reading research, and the abstractness of results and the language in which much research is communicated diminishes the perceived return on effort, as look for resources that help them with particular clients (Gyani et al., 2014; Gyani et al., 2015; Shean, 2013). Practitioners' preference for qualitative research and case studies represents another aspect of their preference for research that helps them understand messiness and particularity—that is, research that meets them, so to speak, where they are

(Binder et al., 2011). Case studies and qualitative research focus, after all, on the uniqueness of client experiences and processes, not on differences between group norms (Levitt, 2015).

As opposed to case studies and qualitative research, most quantitative research is communicated in a way that does not reflect the language or processes of actual psychotherapy practice. Rather, it is communicated largely in the rarified language of abstractions and statistics as applied to groups rather than to individuals (Kazdin, 2003). This trend limits the degree to which practitioners are able to recognize its relevance in their work. A practicing clinician with a full caseload will only have so much (likely uncompensated) time in the day to read research, and when this is considered, it makes sense that many would steer away from more abstract, statistically-laden research and gravitate toward research that reads with clearer relevance or, as is more common, seek guidance through supervision or colleague consultation (Stewart & Chambless, 2007). The difficulty many practitioners find in deciphering the meaning of research articles leads well into the next theme of practitioner dissatisfaction, the lack of concrete engagement of research in routine practice.

Lack of Concrete Engagement

The lack of concreteness in research has led to the institution of research itself being out of touch the routine practice of most clinicians, although it should be noted that efforts are being made in segments of the research community to engage with routine practice more concretely (e.g., Warren, Nelson, Mondragon, Baldwin, & Burlingame, 2010). That is, it has led to a state where those who conduct psychotherapy research often do not even practice psychotherapy themselves. Himeliem and Putnam (2001), for example, found in a survey of over 200 academic clinical psychologists that nearly half dedicated no time to clinical practice at all, citing lack of time and interest as justifications. Despite the synergy the Boulder model aimed to establish

between research and practice by training researchers as clinicians and clinicians as researchers, the two groups remain, in Bartunek's (2007) words, "solid, separate, and challenging for each other to penetrate" (p. 1323). One prominent reason practitioners have cited for not participating in research is that the settings of research and practice only slightly overlap (Taubner et al., 2016). As Meyer (2007) put it, "Many clinicians remain sceptical and disenchanted about the merits of clinical research, and many academic clinical psychologists remain removed from the concerns of the clinical trenches, perhaps in part because . . . they rarely engage in clinical practice" (p. 545).

Evidence of researchers' disconnection from the concrete particularities of practice can be found additionally in the difficulty many practitioners have in accessing published research. Even while working at a university, the number of articles that are published behind paywalls can present issues for researchers (Shaw, 2016). The problems associated with pay-walled content are even more pronounced for practicing clinicians, who typically lack university affiliation and library access. Researchers and practitioners alike have noted this lack of reciprocity between the lab and the clinic (Cautin, 2011; Gaudiano & Miller, 2013). This gap is troubling given that published psychotherapy research is meant to serve clients through practitioners. It is not feasible, for example, for practitioners to spend hundreds of dollars of their own money to access articles of which they can only read the abstract, and which, therefore, might not even be useful to their work with clients. Consider what Shaw (2016) says in this context:

> Any psychologist trying to review research literature has encountered a paywall that does not allow reading of the full text without paying for the article or subscribing to the

> journal. Unless everyone has access to research, then . . . full implementation of evidence-based practices are not possible. (p. 345).

Shaw highlights the way in which the institution of research is has lost touch with the concreteness of practice and how it operates, to a large extent, in isolation from everyday practice.

The Rule-following of Research

Apart from the issue of research lacking concrete engagement in practice, practitioners have expressed some dissatisfaction with the rule-following of research and of clinical prescriptions based on research (e.g., Stewart, Chambless, & Baron, 2012). Researchers have found significant resistance among practitioners to the push for evidence-based practices (EBPs) and evidence-supported treatments (ESTs; e.g., Lilienfeld et al., 2013; Marzillier, 2004). As was discussed in the section on the cleanness over messiness, clinicians have questioned whether the standards that qualify an approach as an EBP truly apply to the context of therapy (Lilienfeld et al., 2013). As such, they have expressed dissatisfaction with the therapeutic approaches—and the structure of those approaches (e.g., manualized treatments)—offered to them as options for treating specific disorders (Shean, 2013).

Some commentators have pointed to the relative ease with which some therapeutic approaches are supportable via current standards of evidence (e.g., cognitive-behavioral therapies) and contrasted it to the relative difficulty with which other potentially effective approaches are able to acquire such empirical support (e.g., interpersonal and existential psychotherapy; Shean, 2013; Yalom, 1980; Yalom, 2009). They have argued that the push for a narrow brand of empirical support delegitimizes approaches that they have found beneficial in their practices and that it constricts the importance of their clinical intuition (Gyani et al., 2014;

Shean, 2013). Recall that Stewart and Chambless (2007) found that practitioners "prefer to rely on clinical experience and supervision in their practice, not on research" (p. 208). From the perspective of many practitioners, "treatment manual adherence is not the same as psychotherapeutic expertise, and treatment fidelity is not the same as clinical competence" (Havik & VandenBos, 1996, p. 265). In other words, what counts for evidence of treatment quality from the practitioner's point of view does not necessarily overlap with the standard of evidence from the point of view of clinical researchers.

An Explanatory Framework

A Deeper Analysis?

The dissatisfaction of practitioners with research, as well as the gap that exists between practitioners and researchers, are not new issues (see Drabick & Goldfried, 2000; Kazdin, 2008; Lau et al., 2010). Researchers have analyzed these issues and tried to harmonize their efforts with practitioners' on both a practical level (e.g. Gyani et al., 2015; Kazdin, 2008) and on some conceptual (e.g., epistemological) levels (e.g., Teachman et al., 2012; Shean, 2013). However, as Cha and DiVasto (2017) put it, these groups remain "divided in how to seek solutions" (p. 504) to therapeutic problems. Despite the efforts to close this rift between researchers and practitioners, which began in earnest in 1949 with the accreditation of the Boulder model by the American Psychological Association (Hunt, 1951), the rift remains open, and dissatisfaction remains between both groups (Lilienfeld et al., 2013; Stewart & Chambless, 2007). As Lau and colleagues (2010) wrote, "little progress has been made with respect to integrating research findings into clinical practice" (p. 178).

Although much has been written about the scientist-practitioner gap from an empirical and even a conceptual level, there does not appear in the literature an examination of the

scientist-practitioner gap or of practitioner dissatisfaction with research that takes place on the *deepest* conceptual level possible, what some call the "ontological" level (Lundh, 2017; Slife, 2004; Slife & Richardson, 2008; Slife & Wiggins, 2009), which pertains to what is seen as most fundamental (Lundh, 2017). Given that some of the field's best thinkers and researchers have yet to resolve these tensions, even after conducting conceptually deep analyses of the problem, an analysis on the deepest level would mark an important step in refining the field's understanding of practitioners' dissatisfaction and pointing the way to potential solutions. Given that these issues haven't been resolved, is it perhaps worth conducting an ontological analysis to shed light on new facets of researchers' and practitioners' differences, seeing what conceptual fruit might follow?

But what, exactly, is meant by an analysis on the ontological level? Ontology refers simply to a branch of philosophy that addresses questions about what is deepest or most fundamental. It deals not with *how* we attain knowledge (i.e., epistemology) but with what knowledge is about. In this case, analyzing practitioner dissatisfaction with research on an ontological level will involve examining how the assumptions practitioners and researchers tend to make about what is most fundamental differ and how these differences contribute to the dissatisfaction themes developed above.

What Ontology?

What deeper assumptions are getting in the way of practitioner acceptance? What assumptions are the researchers making, particularly, that might be less relevant or turn off the clinician? Practitioners' dissatisfaction has seemed to revolve, for example, around the heavy use of abstractions on the part of the research community (e.g., the valuing of cleanness over messiness, the abstractness of research findings). Yet, is it perhaps the case that something

deeper underlies this propensity to abstract? Consider what Van Lange (2013) writes concerning psychological theories: "A theory *should* pursue as high a level of abstraction as possible, to transcend particular observations and link them at a *deeper* (i.e., *more abstract*) level to other observations" (p. 43, emphases added). This tendency to regard abstractions as the deepest form of truth—and to place them atop the hierarchy of knowledge—constitutes an ontology, or a framework of assumptions about what is most real or fundamental, what has been called abstraction*ism* (Slife, Ghelfi, & Martin, 2017).

In order for the following section—where the connections between practitioner dissatisfaction and abstractionism will be drawn—to be clearest, abstractionism and some of its features must be introduced. Slife and colleagues (2017) have described seven features of abstractionism, but only the four most salient features will be summarized here. These four include (1) the separation of entities from their contexts, (2) the precedence of the simpler, (3) prioritizing relations of similarity, and (4) top-down thinking. *Separation* in abstractionism refers to the idea that entities are most deeply themselves when separated—or abstracted—from the messiness of their contexts. From this perspective, for example, a person's self is "only secondarily related to the context [he or she] might be part of" (para. 5). *The precedence of the simpler* refers to the ideal of parsimony in research, the idea that simpler or cleaner explanations are better than complex or messy ones. *Prioritizing relations of similarity* consists of paying attention to the way in which entities are alike while overlooking the ways that they are different. Determining clinical trial group inclusion, for example, involves attending to the ways in which participants are alike while taking measures to control for their individual differences. Finally, *top-down thinking* refers to the process of reasoning from abstract rules to particular cases. From

an abstractionist perspective, since abstractions are most fundamentally true, it follows that "the important aspects of our lives proceed from these abstractions" (Slife et al., 2017).

Abstractionism and Practitioner Dissatisfaction

In this section, the themes of practitioner dissatisfaction and the features of abstractionism will be meshed. Where do the abstractionism features show up in practitioners' dissatisfaction? In what way does the concept of abstractionism help to explain the rift between practitioners and clinical researchers? The connection to abstractionism is clearest in theme of cleanness over messiness, but it appears in the other themes as well. For example, practitioners voiced that the abstractness of research findings diminished the perceived relevance of research to their work (Lilienfeld et al., 2013; Shean, 2013). The lack of concrete engagement of researchers is itself a sort of abstracting of a whole community (researchers from practitioners) on the grounds that the scientific method can sufficiently illuminate truth even when investigators are disengaged from the context of inquiry. Finally, the rule-following of research—and practitioner resistance to EBPs and ESTs—harkens to the overarching theme of abstractionism in that practitioners' resistance is largely grounded in the abstractness of the guidelines and rules emanating from research. In what follows, the role of abstractionism is developed within each of the dissatisfaction themes.

Cleanness Over Messiness

Practitioners appear dissatisfied with the tendency of published research to reduce rich, contextual phenomena to rules and regularities. It was seen that most clinical researchers believe striving for internal validity is *the* way to conduct science and so do not see the need to adjust their methods to the wants of practitioners, which would make sense if researchers are working within an abstractionist framework. Indeed, to establish a treatment as empirically supported, the

American Psychological Association (2006; 2002) requires that it have an internally valid effect on outcomes, thus incentivizing the abstraction of particular cases so that universal claims can be made even when these claims might have little bearing on the concrete, particular level of psychotherapy. Perhaps the most frequent gripe practitioners express in the literature is with this emphasis on the nomothetic over the idiographic (Lilienfeld et al., 2013). Yet, leaders in the research community have continually prioritized the nomothetic, sometimes even basing the value of research aimed at discovering idiographic truths (i.e., qualitative research) in its ability to generate hypotheses that can then be tested in more "rigorous" ways (Kazdin, 2003).

Precedence of the simpler. Striving for rigor in the sense described above involves cleaning up, or simplifying, the messiness of a given context. In psychotherapy research, is it not part of the purpose of randomization and control in outcome studies to arrive at simpler conclusions about whether interventions worked while minimizing the messiness of individual differences? Isn't the particularity of the participants and the complexity of their individual responses to treatment is reduced? There is a discord between this tendency to abstract lawful—or quasi-lawful—relations between the phenomena of psychotherapy and the messiness in which practitioners work with individuals, a discord that has led practitioners to describe the most "rigorous" outcome research as "misleading and simplistic" (Marzillier, 2004).

Separation. In the Practitioner Dissatisfaction section, it was shown that practitioners are dissatisfied with the degree to which clinical researchers attempt to strip individuals from their contexts in order to make generalizations across groups (Shean, 2013). Yet, as Slife and colleagues (2017) highlight, this separation of individuals from their contexts is another feature or consequence of adopting an abstractionist ontology: "Abstractionism, then, as an ontology, postulates that what is most real or fundamental about the things or ideas in question is that

which is abstracted from their contexts." If one takes abstractions to be the most real and, therefore, the primary aim of science, then contextual messiness—the collections of phenomena that make individuals unique—will be seen as ultimately confounding. It makes sense, then, that the methods given the most credence by clinical scientists as lending support to a particular therapeutic approach (e.g., RCTs, quasi-experiments; Kazdin, 2003) minimize the effects of individual uniqueness on study results. But it is this very uniqueness that practitioners are hoping to learn how to work with when they consult the research literature, since this uniqueness is seen as more fundamental in the domain of practice (Shean, 2013; Stewart & Chambless, 2007).

Abstractness of Research Findings

The difficulties many practitioners have found in trying to understand the relevance of research also indicate the influence of abstractionism. Recall that many practitioners cited the abstract aspects of research results as a reason for being skeptical of EBPs (Lilienfeld et al., 2013). Recall also that this skepticism and resistance was rooted in the abstractness of research language and measurement (Lilienfeld et al., 2013; Slife, Wright, & Yanchar, 2016), methods that are designed to abstract and generalize results across unique participants. When practitioners read research, it was shown, they tend to gravitate toward qualitative and case studies (Gyani et al., 2014; Gyani et al., 2015), and they tend to seek treatment guidance in the form of collegial support, supervision, and intuition more often than in peer-reviewed empirical research (Pignotti, 2009; Stewart & Chambless, 2007). Unlike most research, the forms of guidance that practitioners tend to rely on pay close attention to individual clients' unabstracted experiences (Levitt, 2015). For example, when consulting directly with a colleague about a case, is not a psychotherapist colleague likely to ask questions and respond to the particulars of the case?

Relations of similarity. Are these practitioner issues not manifestations of the abstractionist feature of selectively attending to relations of similarity? Specifically, practitioners actually seem to be more interested in relations of difference (e.g., what, particularly, is going on with a given client; Gyani et al., 2015) than in relations of similarity (e.g., depressed clients tend to respond well to therapy *x*). Quantitative studies, particularly those that involve greater experimental control, are especially well designed to identify such relations of similarity (Slife et al., 2016), but they are not especially well suited to describing the unique experience of clients in the process of psychotherapy (Shean, 2013). The higher status (American Psychological Association, 2006; 2002) and relative preponderance of quantitative studies over qualitative studies and case studies (Levitt, 2015) in the literature, then, might well contribute to the persistent dissatisfaction of practitioners with research.

Lack of Concreteness

The divergence of researchers and practitioners can frustrate practitioners because researchers tend to seem "removed from the concerns of the clinical trenches" (Meyer, 2007). It is additionally frustrating in that the research itself is often inaccessible to practitioners, the majority of whom must pay large sums of money to access articles in relevant journals or behind paywalls online (Shaw, 2016). That is, the research is often separate from the context in which practitioners work.

Separation. From the assumption that the truth at which research should aim is abstract, it follows that research methods will aim to elucidate abstractions as clearly as possible. And the procedure for accomplishing this—for doing "good" science—is considered by many clinical researchers sufficient unto itself (Himeliem & Putnam, 2001). In other words, it is thought that science can operate *separate*—or abstracted—from the institution of clinical practice. Its

findings should, from the perspective of abstractionism, apply to the institution of practice regardless of how involved researchers are in practice themselves (Himeliem & Putnam, 2001). After all, if the truths at which science aims are truly universal and replicable, should not there be no need for the institutions of research and practice to overlap as long as the methods are adequately rigorous? As Meyer (2007) wrote concerning clinical researchers' beliefs about whether they should conduct psychotherapy themselves, ". . . a small but vocal minority of researchers . . . find, for example, that 'the last thing researchers should do is see one client per week' –primarily because such part-time exposure to clinical cases might interfere with one's impartiality as a scientist" (p. 259). To approximate truth in the objective and abstract, it seems crucial to many researchers to extricate themselves from the land of the concrete, which is associated with "subjective" biases. In fact, Meyer (2007) found in this survey that not a single clinical researcher in their sample believed researchers should be required to practice psychotherapy. Some even believed that researchers and practitioners *should* remain separate so that researchers could avoid distorting their "impartiality" as scientists. Is it any wonder that practitioners have felt that much of the research offered them is out of touch with their reality?

Rule-following of Research

Relations of similarity. Practitioners have challenged the veracity and utility of the process of organizing clients into "diagnostic categories" in order to better fit psychotherapy into the procedures of research (Levine et al., 1992; Yalom, 2009). Organizing and studying clients according to diagnostic categories points to another central feature of abstractionism, its emphasis on relations of similarity over relations of difference. This feature of abstractionism would dictate focusing on the relations of similarity between, say, depressed research participants, and purposely not attending to their relations of difference. The goal of

psychotherapy research from an abstractionist perspective is to arrive at statements such as "therapy *x* efficaciously and effectively ameliorates symptoms of diagnosis *y* in population(s) *z*" (e.g., Wampold & Imel, 2015). Abstractive categorization, of course, is central to the process of forming and testing such hypotheses in this fashion.

As was mentioned, this type of research has not gone without its resistance from practitioners. Yalom (2009) captures this sentiment when he advises "the next generation of therapists" against diagnosing their clients except when a diagnosis is required by insurance companies: "Today's psychotherapy students are exposed to too much emphasis on diagnosis. Managed care administrators demand that therapists arrive quickly at a precise diagnosis and then proceed upon a course of brief, focused therapy that matches that particular diagnosis. Sounds good. Sounds logical and efficient. But it has *precious little to do with reality*" (p. 4, emphasis added). The tension between reifying the abstractions of client categories and maintaining their contextual uniqueness cuts through Yalom's words. Yalom continues to describe the process of treatment via strict diagnoses and treatment protocols an "attempt to legislate scientific precision into being when it is neither possible nor desirable" (p. 4). Yalom is objecting to the reifying of abstractions when, for him and most other practitioners, reality is actually more pristine in its thick, situated, and unabstracted state (Shean, 2013).

Top-down thinking. The presence of top-down thinking, another feature of abstractionism, can help explain the dissatisfaction practitioners have expressed about the push to make precise diagnoses and to administer precise treatment plans. Top-down thinking refers to the notion that abstracted universals or rules can and should be strictly applied to particular instances, in both research and practice, as opposed to more reflexive approaches where researchers and clinicians remain open to respond and interpret situations (Binder, Holgersen, &

Moltu, 2012). For example, if a sufficient number of well controlled psychotherapy outcome studies concluded that diaphragmatic breathing reduced psychotic symptoms in schizophrenia patients, then one could justifiably begin with diaphragmatic breathing in the treatment of schizophrenia (Christopherson, 2016). Many Practitioners would not deny that abstract statements about what works for whom can be helpful guideposts (Marzillier, 2004), but practitioners ultimately need to respond to their clients' experience, no matter how messy or surprising it is (Slife, Johnson, & Jennings, 2015). In other words, practitioners' work has often to operate from clients' immediate, lived experience—in conjunction with the practitioner's lived interpretation of that experience—*primarily* guides the direction of treatment. And this process, from practitioners' perspective, is not abstractable into a stepwise process without misrepresenting or misunderstanding its nature (Shean, 2013; Slife, 2004).

A Potential Alternative: Ontological Relationality

How does this new understanding of the problems aid us in coming to some kind of rapprochement between researchers and practitioners? The analysis has three implications. First, it provides the conceptual roots of the problem—including the recognizing of different sorts of phenomena as most fundamental, a difference that researchers would do well to more richly comprehend. The phenomenal world of the practitioner, as has been shown, is intensely context-laden. In administering psychotherapy, practitioners must attend to—and ultimately help change—the lived experience of unique individuals and groups. These experiences are concrete, embedded in particular contexts, and invite practitioners to experience this richer form of reality as deeper than the abstract.

It is important to ask who is being served by psychotherapy research. Of course, this research is aimed at improving psychotherapy clients' lives *through the services* of

psychotherapists. If this is true, it is necessary to take the practitioners' world more into account. Unlike pure mathematics, for example, psychotherapy research cannot thrive in isolation. It must, in some sense, cater to the experienced reality of its consumers, psychotherapists. Otherwise, the beneficiaries of psychotherapy research, psychotherapy clients, will not benefit by all the efforts and all the funding that pour into the research institution. No manufacturer of any good would succeed, no matter how high-quality the product, without a way to deliver its product to the public. Yet, the ontological level of disconnect between researchers and practitioners has effectively prevented the transmission of thought and study resources from making as strong an impact on psychotherapy practice as they should.

Second, the ontological level of disconnect is the reason there's been no sufficient resolution to the scientist-practitioner gap. Not only have they been interpreting differing phenomena as most fundamental; both researchers and practitioners have been dealing with an abstractionist understanding of science. The work so far done to ameliorate the problems that come with the scientist-practitioner gap has been conducted with an inadequate understanding of the origins of the gap—that is, without understanding its ontological underpinnings. This analysis, then, offers a new of understanding that suggests potentially novel solutions, one of which will be outlined below.

Third, outlining the ontological culprit also implies other ontological conceptions that can be explored. One such conception has been called ontological relationality. These scholars, some of them psychological practitioners, have outlined this ontology because they encountered similar problems abstracting from lived experience in their practice and research (Binder et al., 2011; Slife & Richardson, 2008; Slife & Wiggins, 2009). In contrast to abstractionism, ontological relationality posits that relationships are the most fundamentally real entities. From

this perspective, one could say the *betweenness* of phenomena is more fundamental their separation (Slife, 2004). Their relations of difference—and, therefore, the individuality of each client or study participant—from this point of view, remain as or more important to understand than the abstracted relations of similarity. Additionally, this ontological conception can address practitioners' gripes with top-down thinking and the tendency to separate individuals from their contexts inherent in abstractionism.

Ontological relationality accommodates practitioners' desires for more context-sensitive interventions by recognizing relations, not abstractions, as most fundamental. That is, the uniqueness of each client is automatically assumed and accounted for, not ignored. By emphasizing relations as most fundamental, ontological relationality overcomes the practitioner gripes associated with the separation of clients from their contexts. Relationality assumes individuals are most deeply understood in a situated context (Slife & Richardson, 2008), that is, as members of larger relationships (e.g., of families, religions, etc.), setting the groundwork for research that honors the experience of practitioners (and their clients) as importantly embedded in the process of therapy.

Research that could be considered ontologically relational often falls within the qualitative tradition (Levitt, Pomerville, & Surace, 2016). Qualitative psychotherapy research aims primarily to understand the lived experience of clients in the therapeutic process. Researchers in this tradition are interested in clients' experience of change throughout therapy, in what the process is actually like, both when it helps and does not (Levitt, 2015; Mörtl & Gelo, 2015). As Binder and colleagues suggest, "Qualitative methods are increasingly being recognised as useful for investigating the experiential world of clients and therapists. Their exploration of the relational context of clinical interventions and their study of personal growth

processes has led to this recognition" (2011). Instead of reducing and abstracting experience, these methods aim to understand it in its most situated, singular form. They aim, in other words, to describe psychotherapy in a context and language that recognizes the concrete and particular—the lived experiences of clients—as most fundamental.

Even relational qualitative research, however, deals in abstractions, namely, in language. It is important to consider, however, how its aims differ from abstractionist research. Although relational qualitative research uses language, a system of abstractions, as a tool, it is ultimately aimed at understanding the lived experience of participants, the very information practitioners tend to prefer when seeking research (Gyani et al., 2015). Lived experience, in other words, occupies the highest seat of reality for the qualitative researcher. From this perspective, while abstractions (e.g., lists of "best practices") would certainly remain significant, they would not be seen as the most real or the most important products of psychotherapy research.

It also remains to consider how reconceptualizing research along ontologically relational, less rule- or procedure-based (Levitt et al., 2016) lines would change the notion of what constitutes an "evidence-based practice." What would the skills and learning practitioners gain from consuming research look like? Throughout the literature on practitioner dissatisfaction, practitioners appear to strive for contextual excellence. They seek research, in other words, that will help them develop an appropriate responsiveness to clients' concrete needs in the moment as their understanding of clients unfolds. Although the development and application of such contextual skills might not admit of the same level of precision that abstractionist research aims to achieve, researchers and practitioners believe they are possible to teach and develop (Slife, 2017; Slife, 2004).

Finally, it should be stressed that ontological relationality is one alternative ontology to abstractionism among many. It is included here as much to suggest *that* alternatives exist as to suggest it is *the* alternative. Certainly, this branch of theoretical psychology could benefit from additional commentaries on the ontological underpinnings of research and practice. At the very least, it is hoped that this paper has helped develop a deeper understanding in the reader of the tension between psychological practitioners and clinical researchers.

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