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## Adventure Therapy and the Routine Outcome Monitoring of Treatment: The Time is Now

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Keywords:	adventure therapy, routine outcome monitoring, Evidence-based practice < Methodology
Abstract:	<p>Background: Routine outcome monitoring (ROM) was popularized in the mid-1990s to improve client outcomes in psychotherapy, though implementation in clinical practice has been slow. While increased outcome research in adventure therapy (AT) in the last decade has demonstrated AT as a viable treatment option, recent reviews have found worrying trends regarding research methodology and poorly substantiated claims of superiority. Purpose: The purpose of this article is to explore the potential for ROM in AT. Approach: We conducted a brief review of the literature on ROM and offered a discussion that positions principles of ROM with the nascent knowledge base of AT. Conclusion: We propose ROM is a viable next step in AT research and practice. ROM can explore when change is likely to occur during an AT program and provide a platform for improving client engagement and outcomes. Implications: We recommend implementation of ROM in AT and that future AT research explore therapist effects and important therapeutic factors, such as the therapeutic alliance and deterioration.</p>

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## Adventure Therapy and Routine Outcome Monitoring of Treatment: The Time is Now

**Abstract**

**Background:** Routine outcome monitoring (ROM) was popularized in the mid-1990s to improve client outcomes in psychotherapy, though implementation in clinical practice has been slow. While increased outcome research in adventure therapy (AT) in the last decade has demonstrated AT as a viable treatment option, recent reviews have found worrying trends regarding research methodology and poorly substantiated claims of superiority. **Purpose:**

The purpose of this article is to explore the potential for ROM in AT.

**Methodology/Approach:** We conducted a brief review of the literature on ROM and offered a discussion that positions principles of ROM with the nascent knowledge base of AT.

**Findings/Conclusions:** We propose ROM is a viable next step in AT research and practice. ROM can explore when change is likely to occur during an AT program and provide a platform for improving client engagement and outcomes. **Implications:** We recommend implementation of ROM in AT and that future AT research explore therapist effects and important therapeutic factors, such as the therapeutic alliance and deterioration.

*Keywords:* adventure therapy, routine outcome monitoring, evidence-based practice

## ADVENTURE THERAPY AND ROUTINE OUTCOME MONITORING

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3 Progress monitoring is nothing new. When it comes to expert performance among  
4 amateur musicians, Lehmann and Ericsson (1997) found that outcomes need to be carefully  
5 monitored in order to locate areas in need of improvement. Stecker, Lemke, and Foegen  
6 (2008) described the same to improve education outcomes. For improving safety for surgical  
7 procedures, Haynes et al., (2009) found the simple to use *Surgical Safety Checklist* led to a  
8 drop from 19.9% to 11.5% in complication rates and a reduction from 1.6% to 1.0% for  
9 inpatient mortality rates.

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19 When it comes to implementing monitoring systems in psychotherapy,  
20 implementation has been slow, much like the *Surgical Safety Checklist* in medicine which,  
21 despite the robust improvements in patient safety, surgeons still described as ineffective and  
22 time consuming (Haynes et al., 2011). Routine outcome monitoring (ROM), which involves  
23 “using session-to-session measures of client progress to evaluate and improve treatment  
24 outcome” (Boswell, Kraus, Miller, & Lambert, 2013, p. 2), was championed by Howard et al.  
25 (1996). However, instances of ROM in general psychotherapy have been reported as early as  
26 the 1960s when one psychologist reportedly began monitoring his clients (Clement, 1994).  
27 Over the past twenty years, research has shown promise for improving outcomes and aiding  
28 in the development of highly effective therapists (Lambert, 2010; Miller, Hubble, Chow, &  
29 Seidel, 2015; Lambert, Whipple, & Kleinstäuber, 2018).

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This article presents the implications and promise of ROM as it relates specifically to  
adventure therapy (AT), an umbrella term for a myriad of approaches that bring together  
adventure and psychotherapy (Harper, Peeters, & Carpenter, 2014). In AT, ROM has been  
discussed or trialed in just a few papers (Dobud, 2017; Gillis, Kivlighan, & Russell, 2016;  
Russell, Gillis, & Couillard, 2018; Russell, Gillis, & Kivlighan, 2017) and we argue that AT  
research has become misaligned with values and standards of the broader psychotherapy  
literature. Despite slow implementation, there is an acute need for ROM to be accelerated in

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3 outdoor therapies given gaps and omissions in the extensive research on adventure and  
4 related therapies (Dobud & Harper, 2018). To do so, we first examine the relevant literature  
5 beyond AT to discuss the equivalency of outcomes across psychotherapy models and the lack  
6 of statistical improvement in psychotherapy outcomes over time (Dobud & Harper, 2018;  
7 Wampold, 2010). Second, we present the variance in therapist effects and professional  
8 development in general psychotherapy outside of AT (Chow et al., 2015). Third, implications  
9 are provided for future AT research and suggestions for ROM in AT practice are offered. For  
10 example, the Joint Commission (2018), an independent not-for-profit accreditation body in  
11 the United States, recently amended their practice standards to require all accredited  
12 behavioral health care organizations to routinely monitor individuals' progress throughout the  
13 course of therapy. As advocates and practitioners of AT, we acknowledge our bias towards  
14 the experiential and outdoor therapies and will approach this analysis of best practices in AT  
15 grounded in research from the broad literature of psychotherapy, of which AT is a part.

### 32 **Moving Beyond Models in AT**

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35 AT has been defined extensively in the literature (Alvarez & Stauffer, 2001; Gass,  
36 Gillis, & Russell, 2012) and is known to include associated disciplines, such as wilderness  
37 therapy, outdoor behavioral healthcare (OBH), adventure-based counseling, bush adventure  
38 therapy, and related approaches using other similar names. In this article, we will refer  
39 separately to wilderness therapy which is a form of adventure therapy delivered in remote,  
40 natural environments that often utilizes group living and survival skills (Russell, 2001). We  
41 refer to wilderness therapy separately because research on wilderness therapy was the most  
42 common research found in the literature (Harper, 2017). This may be in part because of the  
43 large amount of research produced by the Outdoor Behavioral Healthcare (OBH) Center,  
44 which appears to do much of its work on wilderness therapy programs. Additionally, since  
45 ROM may look different for those offering wilderness therapy away from the convenience of  
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3 an office setting, we opted to specify which examples were from wilderness therapy  
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5 programs.  
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8 The paradigm of evidence-based practice in psychotherapy stems from the history of  
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10 evidence-based medicine and the concept that certain models of therapy contain hypothesized  
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12 ingredients which are remedial for specific mental disorders, much like ibuprofen or  
13  
14 paracetamol work to alleviate a fever (Wampold & Imel, 2015). In AT, supposed active  
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16 ingredients include time in nature, a group setting, or the learning of various outdoor travel  
17  
18 and survival skills, such as mastering a bow and drill fire (Gass et al., 2012). These active  
19  
20 ingredients are portrayed in AT literature as if essential for effective practice. Two common  
21  
22 forms of research, dismantling studies and direct comparison trials, have led to two replicated  
23  
24 and concerning findings related to our understanding of various models of psychotherapy  
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26 (Asay & Lambert, 1999; Smith & Glass, 1977).  
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31 We have ordered this discussion based on three replicated findings from the  
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33 psychotherapy literature. First is a presentation about the limits of specific models, based on  
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35 dismantling and direct comparison trials. Second, because models hold little variance in  
36  
37 outcomes (Miller et al., 2013; Wampold & Imel, 2015), we argue that exploring individual  
38  
39 therapist outcomes is worthy of future exploration. Finally, these two findings inform our  
40  
41 discussion about ROM as a useful future research and practice paradigm for AT.  
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#### 45 **Direct Comparisons & Dismantling Studies**

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47 Direct comparison trials are used to find if one psychotherapy is more effective than  
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49 another. Historically, these studies have found no differences in outcomes among  
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51 theoretically different models (Miller et al., 2013; Wampold et al., 2010). Used less  
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53 frequently, dismantling studies test the impact of removing supposed active ingredients from  
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55 established psychotherapy models. In the case of eye-movement desensitizing and  
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57 reprocessing (EMDR), a form of psychotherapy founded upon using side-to-side eye  
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## ADVENTURE THERAPY AND OUTCOME MONITORING

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3 movements or hand tapping to alleviate distress, dismantling studies have removed eye  
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5 moments from the psychotherapy, testing if eye movements are truly essential to outcomes.  
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7 Like other studies comparing or dismantling approaches of psychotherapy, no differences in  
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9 outcomes emerged in EMDR (Cahill, Carrigan, & Frueh, 1999; Cusack & Spates, 1999;  
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11 Wampold et al., 2010). Evidence has found no added benefit of eye movements and, given  
12  
13 the available evidence, claims of superiority are unjustified given the equivalency of  
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15 outcomes when two or more models of psychotherapy are compared (Meichenbaum &  
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17 Lilienfeld, 2018; Smith & Glass, 1977).  
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21 Harper (2010) cautioned advocates of AT against uncritically adopting evidence-  
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23 based practice without understanding the consequences, referring to the evidence-based  
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25 paradigm provocatively as a false idol. Like all models, AT is not short on research showing  
26  
27 that adventure-based activities can be successfully implemented in both outpatient and  
28  
29 inpatient therapy settings (Bettmann, Gillis, Speelman, Parry, & Case, 2016; Bowen & Neill,  
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31 2013; Tucker, Javorski, Tracy, & Beale, 2013). Outcome studies have found AT effective in  
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33 working with sexual offenders (Somervell & Lambie, 2009), adolescents with cancer  
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35 (Stevens et al., 2004), veterans (Hyer et al., 1996), and a diverse population of youth  
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37 identified as facing increased levels of risk (Norton et al., 2014), to name a few.  
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43 Scholars have advanced the theories and claims as to what specific ingredients are  
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45 contributing to the effectiveness of AT (Gass et al., 2012) and WT (Russell & Hendee, 2000;  
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47 Russell, Hendee, & Phillips-Miller, 2000). If these factors are more effective than modalities  
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49 omitting or without these factors, they would most likely outperform them in direct  
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51 comparison trials. Dobud and Harper (2018) reviewed the available direct comparison trials  
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53 where AT was compared to interventions void of these 'adventurous' AT components. The  
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55 authors found no differences in outcomes in all but two of the included trials. The differences  
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57 in those studies (e.g., Tucker et al., 2013) could be explained by nonequivalent treatment  
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## ADVENTURE THERAPY AND OUTCOME MONITORING

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3 groups. Furthermore, when components of AT, such as backpacking expeditions, were used  
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5 as adjuncts to established programs, outcomes did not improve (Hyer et al., 1996). Simply  
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7 adding ‘adventure’ did not improve outcomes. Dobud and Harper's (2018) article attended to  
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9 Harper's (2010) warning that a research agenda driven by political and economic forces could  
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11 lead to a *bias blind spot* (Meichenbaum & Lilienfeld, 2018), or a narrowing of vision, where  
12  
13 researchers omit a healthy amount of self-doubt and conduct studies with weak comparison  
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17 groups.

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19 For example, DeMille et al. (2018) compared the effects of participation in OBH  
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21 programs, a form of adventure therapy using wilderness therapy techniques from the United  
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23 States to what the authors referred to as treatment as usual (TAU). In this study, clients ( $n =$   
24  
25 60, average age = 15.17) participated in a Utah-based, rolling-admission wilderness therapy  
26  
27 for young people who had not experienced significant symptoms reduction in previous forms  
28  
29 of treatment. These young people were compared to young people ( $n = 60$ , average age =  
30  
31 14.98) whose families had initially considered wilderness therapy but did not elect for to  
32  
33 participated for unstated reasons. While comparisons to TAU are common across the  
34  
35 psychotherapy literature, a review of these studies found “most of the comparisons...involve  
36  
37 a TAU that is not a legitimate psychotherapy service” (Laska, Gurman, & Wampold, 2014, p.  
38  
39 474). They are not “comparable doses of therapy” (p. 474). While DeMille et al. (2018)  
40  
41 found that participants who received OBH were “functioning significantly better than the  
42  
43 TAU group” (p. 241), the authors did not provide a thorough discussion of the mechanism of  
44  
45 change or specific interventions of the TAU group to suggest two bona-fide psychotherapies  
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47 were fairly compared. Completion rates for the TAU group were omitted and all OBH  
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49 participants successfully completed their intervention. Finally, the potential for researcher  
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51 allegiance was not mentioned or tested (Meichenbaum & Lilienfeld, 2018).  
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### **Allegiance in Evidence-Based Practice**

Our search through the literature has found unjustified claims stemming from research agendas aligned with the paradigm of evidence-based practice as they relate to AT (Dobud & Harper, 2018; Harper, 2010). For example, treatment completion rates have been reported in OBH at 97% (Russell, 2003) and 94% (Gass et al., 2019) without acknowledging that OBH is often an *involuntary treatment* where adolescents are not given the right to disengage (Becker, 2010; Tucker et al., 2018). Gass et al. (2019) utilized these high completion rates to suggest greater cost benefit for adolescents participating in OBH over a TAU group, again without mentioning involuntary treatment or lack of client autonomy or choice in treatment processes or participation. Publications such as these have been used for attaining recognition on lists such as the late National Registry for Evidence-Based Programs and Practices (SAMHSA, 2012) and receiving third party reimbursement (Miller et al., 2013). That said, Wampold and Bhati (2004) caution consumers of research aiming for registry to be on guard against control groups not intended to work and that seek to demonstrate efficiency without disclosing key details, such as the involuntary nature of OBH programming. These studies leave us with important questions for AT.

If AT, like other models of therapy (Meichenbaum & Lilienfeld, 2018; Miller et al., 2013), lacks specificity, how does one become trained in AT? What factors are most important to eliciting better outcomes? Similarly, how can a clinician currently practicing AT improve their outcomes? Here, we argue that AT scholars, though aligning with the evidence-based practice paradigm, have not met the standards of rigor, based on the extensive evidence base on therapy over the last 50 years (Wampold & Imel, 2015). We are raising concerns about the lack of transparency in this enterprise, which we discuss further below.

### **The Variance in Therapist Effects and Professional Development**



## ADVENTURE THERAPY AND OUTCOME MONITORING

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Psychotherapy has a dilemma regarding treatment choices. A clinician's treatment approach is, unlike in medicine, no forecast of outcome (Chow et al., 2015). Studies have shown that *who* provides the therapy is a more robust predictor of outcomes than any factor studied, even in tightly controlled clinical trials (Baldwin & Imel, 2013; Baldwin, Wampold, & Imel, 2007; Chow et al., 2015). That said, little is known as to why certain therapists predictably perform better than others, though research, such as Baldwin et al. (2007), has found variability in how high-achieving therapists form helping relationships with their clients.

Discussion and research on therapist effects are limited in AT. In one example, Roberts, Stroud, Hoag, and Combs (2016) did not locate significant variance in outcomes for therapists in OBH, though the sample included only five therapists. Little is known about the development of adventure therapists and if adventure therapists contribute to client outcomes as seen in the broader field of psychotherapy. In a wilderness therapy program, for example, an adolescent or young adult may encounter numerous professionals, from outdoor field staff to licensed psychotherapists (Harper, 2009). This might make it difficult to capture therapist effects, though Miller et al. (2013) argued, "one cannot remove the effect of the therapist without undermining the therapy" (p. 90). In the broader psychotherapy literature, the model of therapy provided to clients does not appear to predict therapist effectiveness (Miller, Hubble, & Duncan, 2008), nor does the gender, age, qualification, education, years of experience, professional discipline, caseload, or theoretical orientation of a therapist (Chow et al., 2015). These studies, however, did not include AT therapist outcomes, though this would be worth replicating. More troubling, the largest study of longitudinal therapist outcomes demonstrated in the psychotherapy literature that, on average, therapist outcomes in traditional talk therapy declined with experience over time (Goldberg et al., 2016) and therapists suffer from self-inflated bias with the average therapist rating themselves in the

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3 80<sup>th</sup> percentile when comparing themselves to their peers (Walfish, McAlister, O'Donnell, &  
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5 Lambert, 2012).

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8 If the difference in outcomes among therapists relies on their ability to form stronger  
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10 helping relationships with a more diverse range of clients, it is worth exploring the client's  
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12 experience of the therapeutic relationship. Meta-analyses have found this relational bond  
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14 between the therapist and client, consensus about the purpose or goals, and the means or  
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16 methods of the therapy to be a significant indicator of a positive experience of care (Del Re et  
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18 al., 2012; Gelso, Kivlighan, & Markin, 2018; Norcross & Lambert, 2011). These factors  
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20 surely increase in difficulty when young clients are involuntarily admitted or transported to  
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22 programs, as they can be in wilderness therapy, and are therefore worth further consideration  
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24 (Tucker et al., 2018).

### 25 26 27 28 **Dropout & Deterioration**

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30 Deterioration rates have been published in AT. Tucker et al. (2013) found varying  
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32 rates of deterioration for 1,135 young people in a community-based mental health center. For  
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34 example, a group receiving only AT services ( $n = 18$ ) experienced 11.1% of no change or  
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36 deterioration. Those receiving AT and psychological counseling ( $n = 104$ ) experienced 20.2%  
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38 and those receiving only psychological counseling ( $n = 652$ ) experienced 18.7%. Given the  
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40 nonequivalent treatment groups, these findings should be interpreted cautiously, though this  
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42 does signify that AT practitioners should be aware of participants who may not be benefitting  
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44 from their care.

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49 Studies have suggested that therapists may not be the best at gauging how clients'  
50  
51 progress in therapy. Hannan et al. (2005) asked a group of talk therapists from a variety of  
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53 theoretical orientations to predict deterioration in their 550 available cases at a university  
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55 counseling clinic. The therapists failed to identify 39 of the 40 deteriorating cases.  
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## ADVENTURE THERAPY AND OUTCOME MONITORING

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3 One way to overcome the limitations of focusing on various models of psychotherapy  
4 is to focus on the development of highly effective therapists (Miller et al., 2013). Therapists  
5 can become their own evidence-builders, relying on their individual performance to establish  
6 their baseline effectiveness. The aggregate data they build and feedback from their clients,  
7 coaches, and supervisors can locate areas of their performance which they can improve using  
8 deliberate practice. Chow et al. (2015) found it was this *deliberate practice*, such as time  
9 spent watching videos of sessions, and practicing specific skills, that predicted the outcomes  
10 of the most effective therapists. A body of literature continues to emerge on this process for  
11 therapists to improve their effectiveness (Goldberg et al., 2016; Rousmaniere et al., 2017)  
12 The process, however, begins with ROM.  
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### **The Promise of ROM**

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28 The notion of systemically and routinely monitoring session progress throughout the  
29 course of therapy was pioneered in psychotherapy by Howard et al. (1996). This inventive  
30 concept was atypical given that evaluation of psychotherapy outcomes typically occurs in  
31 pre/post research designs (Wampold, 2015). ROM typically involves administering outcome  
32 measures in real time, at each therapy session or week of residential treatment and providing  
33 this information to the therapist throughout the course of therapy. Therapists can engage in  
34 open and frank conversations with their clients about progress and adjust the treatment based  
35 on their feedback (Lambert, 2010). Models of ROM, like the Outcome Questionnaire (OQ)  
36 System (Lambert, 2015) or Feedback-Informed Treatment (Bertolini & Miller, 2012) have  
37 also recommended using alliance measures as a second confirming form of feedback, which  
38 the literature has supported (Anker, Duncan, & Sparks, 2009; Miller et al., 2015). The  
39 therapeutic alliance is typically defined as including a 1) relational bond, 2) agreement of the  
40 goals or purpose of therapy, and 3) agreement about the means or methods of the therapy  
41 (Miller et al., 2013).  
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## ADVENTURE THERAPY AND OUTCOME MONITORING

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3           Meta-analytic data suggests consumers whose therapist receives feedback are 3.5  
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5 times more likely to experience reliable change (Lambert & Shimokawa, 2011). Another  
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7 meta-analysis of randomized clinical trials, conducted by Miller (2011), included a sample of  
8  
9 12,374 cases. The study found when therapists monitored outcome and alliance data  
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11 throughout the course of therapy, rates of dropout and deterioration were reduced, and  
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13 outcomes as much as doubled.  
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**Outcome Monitoring in Adventure Therapy**

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18           Only recently has ROM become present in the AT literature, but the research has its  
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20 limitations. Hoag, Massey, Roberts, and Logan (2013) administered outcome measures to  
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22 young adults in wilderness therapy settings at intake, week 3, week 5, and discharge, though  
23  
24 the time between week 5 and discharge is unclear. The study found that it took five weeks, or  
25  
26 three administrations of the outcome measures, for consumers to experience reliable change.  
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28 AT research has yet to implement the OQ measures weekly as recommended in the  
29  
30 measures' manual for clinical use (Burlingame et al., 1996).  
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35           Russell et al. (2017) administered the *Adventure Therapy Experience Scale (ATES)*  
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37 (Russell & Gillis, 2017) to 168 young adults attending a 90-day adventure-based substance  
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39 abuse program. This program was described as an eclectic form of AT that used experiential  
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41 activities, motivational interviewing, cognitive behavioral therapy, and group therapy. In this  
42  
43 program, clients were described as alternating in and out of different wilderness trips that  
44  
45 lasted from 1–5 days. This new measure attempts to capture the “inherent factors” (Russell et  
46  
47 al., 2017, p. 273) unique to AT and how participants report these factors in relation to  
48  
49 treatment outcome. The scale includes four subscales: *group adventure*, *reflection*, *nature*,  
50  
51 and *challenge*. Russell et al. (2017) also provided the participants the opportunity to score the  
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53 *helpfulness* of the intervention and their *mindfulness*, which relates to how mindful  
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55 participants were of their treatment goals throughout the program. Of these six domains,  
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## ADVENTURE THERAPY AND OUTCOME MONITORING

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3 group adventure, helpfulness, and mindfulness were the only factors to predict treatment  
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5 outcome. Group adventure was measured using questions, such as “*I was intentionally*  
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7 *supportive and encouraging of my peers*” (p. 275, emphasis in original). The study found that  
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9 weeks when participants felt engaged with the group, focused on the goals, and found the  
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11 intervention helpful predicted improvement.  
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15 A second study found client engagement to predict improvements in wellbeing at the  
16  
17 same program (Gillis et al., 2016). The promise of ROM rests in the implementing of brief  
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19 measures to ask a client about the helpfulness of an intervention and to assess their level of  
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21 engagement so therapists can locate participants who may not be responding and adjust the  
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23 course of therapy.  
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### Discussion & Implementation

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28 Throughout this article we made connections between psychotherapy literature and  
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30 the field of AT. In this section, we discuss factors relating to implementation, including  
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32 implications from both the literature and our experience in using ROM in our own AT  
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34 practice. This may be timely for the field, especially so since it is assumed that less than 1%  
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36 of AT practice undergoes any empirical evaluation (Bowen & Neill, 2013).  
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39  
40 Successful implementation commences when clinicians begin to champion ROM and  
41  
42 help fellow therapists establish their baseline of effectiveness. This process should be taken  
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44 slowly. Program directors can complete the free *Feedback Readiness Index and Fidelity*  
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46 *Measure* (Miller, Mee-Lee, & Plum, 2012) to identify potential obstacles affecting  
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48 implementation. Published manuals provide step by step guidelines for therapists to  
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50 beginning measuring their outcomes (e.g., Bertolini & Miller, 2012).  
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54 Practitioners can implement simple and ultra-brief measures, such as the Outcome  
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56 and Session Rating Scales (Duncan et al., 2003; Miller, Duncan, Brown, Sparks, & Claud,  
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58 2000) at the beginning and end of each therapeutic encounter, typically defined as each  
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## ADVENTURE THERAPY AND OUTCOME MONITORING

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3 outpatient therapy session or each week of residential treatment. Additionally, the OQ  
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5 measurement system (Lambert, 2015) could be used in this way. Though used extensively in  
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7 pre/post wilderness therapy research, these measures were designed as a clinical tool for  
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9 monitoring progress and the creators cautioned against using them for simple program  
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11 evaluation or outcome research without incorporating other measures (Burlingame et al.,  
12  
13 1996). Therapists gathering client feedback can enter discussions with their clients about  
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15 progress in therapy and the client's perception of the therapeutic alliance (Teyber & Teyber,  
16  
17 2017). When clients report a lack of progress early on in therapy or issues in the alliance,  
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19 drop-outs become more likely. As therapists continue to monitor their effectiveness with each  
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21 client, their individual data builds and can be used to create a plan for improving their  
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23 outcomes.  
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29 Concern should be taken when agency managers and supervisors foist outcome  
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31 monitoring on to their clinicians. In these cases, the likelihood of successful implementation  
32  
33 of client feedback is low. For example, Esmiol-Wilson et al. (2017) found the  
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35 implementation of ROM was met with initial resistance from the therapists in their qualitative  
36  
37 study. Over time, the therapists felt ROM helped them to be more collaborative, improve  
38  
39 therapeutic relationships, and to be more empathetic with their clients. When training  
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41 therapists, focus should go beyond the simple use of measures to the possibilities for  
42  
43 improving client engagement through feedback and ROM. When therapists feel ROM is  
44  
45 simply another administrative task, chances for implementation are reduced. Therefore, the  
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47 focus of training should be on how ROM can improve therapist outcomes and reduce their  
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49 overall workload instead of increasing it.  
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54  
55 de Jong et al. (2012) found more than half of therapists monitoring outcomes admitted  
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57 to not using their clients' feedback to adjust the course of therapy. Throughout this article, we  
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59 cited literature to show that client feedback can be used by therapists to improve outcomes. In  
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AT research, clients' self-reported levels of engagement have been shown to predict treatment outcomes (Gillis et al., 2016; Russell et al., 2017). ROM may be of particular interest to OBH practitioners because they frequently utilize the Youth Outcome Questionnaire (YO-Q) to evaluate their programs (Bettman et al., 2016; Bowen & Neill, 2013; Burlingame et al., 1996).

There are more concerns which may need to be addressed when it comes to AT practice specifically. For example, wilderness therapy and residential treatment for adolescents in the United States is typically an involuntary practice which comes at a high cost to families (Mooney & Leighton, 2019). Gass et al. (2019) reported adolescents remaining in OBH for an average of 90 days at a cost of \$561 per day. Though these participants, on average, are likely to have experienced clinically reliable change on outcome measures, these participants are often referred to ongoing residential treatment (Bettman et al., 2016), an equally intensive out-of-home treatment model (Harper, 2017). More research is needed to determine the effects of adventure-based therapy services for clients of different social class, race, ethnicity, and level of education.

In this article, we raised concerns about a research agenda in AT focused on specific ingredients or the unsubstantiated claims of superiority when compared to other treatment modalities. Philosophically, this strategy supposes there is something unique to AT that makes it more effective than other therapies. The literature does not support such claims (Dobud & Harper, 2018), and we propose a direction less focused on the recognition of AT and one centered on improving outcomes and the development of highly effective therapists.

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