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Patient centered assessment in psychotherapy: Towards a greater bandwidth of evidence

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The review authored by Alves and Sales (2016) serves as a timely reminder to clinical psychology both as a discipline and as a profession of the extent of available patient centered outcome and process measures at their disposal. The review is one of an increasing number of articles that focus on, for example, specific idiographic measures (e.g., Personal Questionnaires; see Elliott et al., 2015) and the design of patient oriented measures (e.g., Rose, Evans, Sweeney, & Wykes, 2013).

The early work of Gordon Allport in the United States and the seminal work of Monte Shapiro at the Maudsley Hospital in the United Kingdom laid the foundations for an idiographic approach to clinical assessment. This tradition was also espoused by Monte Shapiro’s son, David A Shapiro, and was an embedded component along with nomothetic measurement in the Sheffield Psychotherapy Projects that ran in the UK through the 1980s and 1990s (e.g., Barkham, Stiles, & Shapiro, 1993). And the combination of nomothetic and idiographic measurement is the foundation for the clinical trainees in the Sheffield Doctoral Clinical Training Program in carrying out their single case experimental design assessment project. So, when asked by clinical trainees, what two outcome measures I would recommend, my response invariably is: one nomothetic and one idiographic. Hence, from the perspective of the interested reader, clinical trainee, and experienced practitioner seeking to broaden their approach to clinical assessment and outcome, the review by Alves and Sales is to be applauded.

However, it also belies current tensions between idiographic and nomothetic measurement, which, if anything, may be more pronounced now than previously. My reasoning is that this is partly a function of a growing interest in patient generated measures themselves that has been rightfully promoted by the understanding that patients as experts-by-experience have a legitimate voice in informing the items that determine the status of their outcomes. There are,
perhaps, parallels with the similar rise within the last decade or more in the appreciation and value of qualitative research, often now a required component within clinical trials in the psychological therapies.

But while the arguments for including patient generated measures have increased, so too have arguments by policy makers for the collection of standardized measures in order to secure evidence for funding clinical provision via clinics and clinical organizations. The UK’s Improving Access to Psychological Therapies (IAPT) initiative, the largest social experiment in the psychological therapies, mandated completion of a minimum dataset at every session that included the Patient Health Questionnaire-9, Generalized Anxiety Disorder-7, and Work and Social Adjustment Scale (together with other specific measures relating to anxiety conditions). Notwithstanding the freedom to include additional measures, concern about adding to the patient burden and precious time will always weigh heavily on any practitioner’s mind. If patient generated measures are to have a seat at the table, then there needs to be some giving of ground regarding an overinvestment in the psychometric properties of mono-symptomatic and quasi-diagnostic measures. I recall someone many years ago arguing that the key component to measure was functioning, irrespective of what a patient claimed was their presenting psychological issue.

Taking a step back from Alves and Sales’s article, my own view is that we cannot build a robust, rigorous, and relevant evidence base for the psychological therapies via any single approach, whether it be one treatment (e.g., CBT), one research design (RCTs), one assessment approach (nomothetic measures), or one statistical analytic approach (e.g., single-level analyses where patients are assumed to be independent of therapists rather than nested within therapists, as they always are). We need choices of evidence-based treatments, a
recognition of the complementarity of trials methodology and practice-based evidence, a broader bandwidth of measurement approaches, and the application of multilevel modeling to data that acknowledges the variability inherent in therapists. In other words, we need to be expanding our scope and definition of evidence rather than narrowing it. But this is not an argument for ‘anything goes’. Rather, it is an argument for the appreciation of a broader definition of the relevant evidence base – a greater bandwidth – of evidence to underpin the science of the psychological therapies and the experiences and outcomes of patients seeking a responsive therapist and effective treatment.

In many ways, the restrictive view of science and of what counts as evidence has become a major focal point of debate. There is a strong and growing argument that trials methodology and practice-based evidence – where data is taken from large routine practice settings – are, and should be seen as, complementary paradigms to contributing to a broader evidence-base for the psychological therapies (see Castonguay, Barkham, Lutz, & McAleavy, 2013). A similar argument applies to nomothetic and idiographic measures. That is, they are complementary rather than competitive. Our clinical psychology trainees need to be as skillful in being able to determine the reliability, validity, and appropriateness of a nomothetic measure and the application of methods of reliable and clinically significant improvement as they are in listening to a patient’s story or account and being able to capture the subtle nuances or turn of phrase by a patient that provides the basis for a Personal Questionnaire item that is then specific and meaningful to that patient. And then also be able to apply the many techniques for determining the extent of non-overlapping data between baseline and intervention. This is one way in which we initiate our trainees into the paradigm of practice-based evidence via the routine collection of a broader base of evidence in relation to their session-by-session clinical work.
However, a flaw emerges when components of one approach (i.e., nomothetic measurement) are used to critique the other (ideographic) on the basis that they do not contain the same component to the same standard. It misses the fundamental point that they are different but complementary approaches to accumulating a broader base of evidence. The same flaw is also evident in judging and then applying standards intrinsic to trials methodology to practice-based evidence. The issues that lead to false dichotomies in clinical psychology are too many.

Hence, the concept I am espousing from the review by Alves and Sales is that of widening the bandwidth of measurement in addition to the fidelity derived from nomothetic measures, thereby broadening of the evidence base we collect and value as scientists. Related to the concept of bandwidth is that of capturing natural clinical variability. In the first Sheffield Psychotherapy Project, when we considered the shapes of change (intensity, rate of change, instability, and curve) derived from PQ items completed by patients three times a week, the most intriguing shape or pattern of change was that of instability. The mean variability of a patient’s score within a week (instability) was 18 times the mean change achieved across each week (rate of change; Barkham et al., 1993). This is the clinical reality we know from patients but we would not, surely, propose the completion of any nomothetic measure at such a frequency. The rapid development of apps for smart phones makes collection of such PQ information much more feasible.

All measures contain measurement error – hence the requirement for confidence intervals and for the use of indices such as reliable and clinically significant improvement. But as the trend towards shorter nomothetic measures increases, so then does the reliability of such measures decrease. All measures have limitations and applying the same standards used to evaluate nomothetic measures to idiographic measures does not seem to me to be an especially
productive route. The value of idiographic approaches lies in their distinctiveness and not the extent of their conformity to a single psychometric standard. So I am not sure how far we have moved in the near 50 years since Irene Waskow’s (Elkin) seminal notion of a core outcome battery that included patient target complaints. But at the same time, the political climate surrounding outcomes has been transformed and the world of outcomes has become a major factor in justifying and protecting clinics and clinical organizations (termed ‘services’ in the UK).

In considering the issues raised by Alves and Sales’s (2016) review of personalized outcome measures, five key desiderata for outcome measures emerge in my mind:

1. **Creative Commons license**: There can be little, if any, justification for charging for outcome measures beyond an initial period of development work. In this respect, idiographic measures perform well. But equally they tend to lack a coordinated body to push for their broader inclusion. Perhaps this position is changing.

2. **Repeated measurement**: The raison d’être for PQs is repeated measurement and this usage retains the close association with the personal clinical and life experience of the individual patient. Repeated idiographic measurement seems clinically more natural than repeating mono-symptomatic measures week in, week out.

3. **Measure allegiance**: In most areas of healthcare, including the psychological therapies, the drive is towards discovery, innovation, or, at the very least, refinement. And yet in some common psychological areas we are still using measures largely developed over 50 years ago. All measures have error and the over adoption of any single measure with invariant items (i.e., nomothetic measures) freezes the field. The balance has to be between the chaos of too many measures versus the constraints of mandating a selected few. Ideally
there should be a basket of bona fide outcome measures for which we can judge clinically significant improvement.

4. *Walk across techniques:* Too little attention has been paid to establishing the empirical and clinical walk across between nomothetic measures. Do we have the evidence that we learn more from the application of two condition-specific measures as opposed to one generic measure?

5. *Bandwidth and fidelity:* These are, for me, the underpinning themes that bind both idiographic or personalized measures and nomothetic measures with practice-based evidence for the therapist in routine practice and also for researchers within trials methodologies. But there needs to be clarity as to the provenance of a measure. The potential tension comes when a measure is proposed as an all-in-one measure. Who wins out in the debate between the expert-by-experience favoring an item and the expert psychometrician arguing that it fails an inclusion criterion using Rasch analysis? In considering this issue, I find the radio analogy helpful. We need a clear signal that derives from a nomothetic measure that stands up to psychometric scrutiny with ever increasing standards of statistical precision. But emphasizing the bandwidth provides the framework for both high-fidelity signals (i.e., nomothetic measures) and more personalized or community-based signals (i.e., idiographic measures) that may have less clarity (psychometric precision) but greater meaning to the listener (i.e., the patient).

Conclusion

The future of process and outcome measurement probably lies in item banks drawing on the 100s or 1000s of well used items with the aid of computer assisted technology for maximizing individually tailored items for each individual patient. Such an approach will, is some way, bring nomothetic items more closely aligned with idiographic ones. The position I have
proposed is that measurement is as much about bandwidth as it is about fidelity. There is little point in having a highly precise signal that focuses on a single patient issue but omits to capture the breadth of the additional noise that will interfere and impact on the key issues in a patient’s life. Whether in trials or in routine practice, it is greater bandwidth that is needed and the review by Alves and Sales serves this argument well.

References


