Abstract

Routine outcome monitoring can support client progress in psychotherapy and provide evidence on population-level outcomes. However, measures have been almost exclusively nomothetic. *Idiographic* tools provide a complementary approach, combining individually set outcomes with standardized progress ratings. Evidence suggests that goal-focused idiographic measures may particularly facilitate client progress, and this systematic review aimed to identify and critically evaluate such measures, as used in psychotherapy. In total, 104 texts were eligible for inclusion in the review, with nine measures identified. These took the form of multidimensional tools, brief rating forms, and goal attainment scaling. Psychometric and clinical evidence suggests that these measures may be appropriate tools for supporting client progress, but there is insufficient evidence to validate their use for population-level evaluation.

*Keywords:* Routine outcome monitoring (ROM), patient-generated measures (PGM), goals, outcome and process assessment, idiographic, patient reported outcome measures (PROMS)

Public Significance Statement

Preliminary evidence suggests that the setting, and monitoring, of goals may enhance the outcomes of psychotherapy. This critical, systematic review identifies nine measures that have been used for this purpose, and examines their relative strengths and limitations.
Over the last two decades, the use of routine outcome monitoring (ROM) in psychotherapy has become a major area of research activity, and has had a “substantial impact on national and international policy decisions” (Lutz, De Jong, & Rubel, 2015, p. 625). The session-by-session use of outcome measures, for instance, is integral to NHS England’s Improving Access to Psychological Therapies program (IAPT; Clark, 2011). Routine outcome monitoring has the potential to serve two key functions: first, at the population level, it can provide evidence on the outcomes of different services and treatment, thereby informing service commissioning and policy guidelines; second, at the individual level, it has the potential to enhance therapy progress. Here, meta-analyses indicate that providing therapists with feedback on client progress using specific measures brings about positive improvements in outcomes, particularly for “not on track” clients (Lambert, Whipple & Kleinstäuber, 2018; Bickman, Kelley, Breda, de Andrade & Riemer, 2011).

To date, systems for monitoring client progress have almost exclusively used nomothetic measures, with pre-defined and pre-determined items that are consistent across clients (Sales & Alves, 2016). However, nomothetic measures may not capture the specific problems, or goals, that are of greatest importance to individual clients. They may also neglect differences in the meanings that clients give to the same item. Hence, at a population level, nomothetic measures may not capture changes that are of most relevance to particular groups of clients. Equally, at an individual level, they may fail to track—or feedback on—changes that are of greatest importance to the specific client.

Idiographic, or patient-generated, measures provide an alternative to nomothetic approaches (Sales & Alves, 2016), and have “grown in popularity over the last two decades” (Elliot et al., 2016, p. 263). Here, clients construct—and rate progress against—their own items, within a standardized questionnaire format. Such individualized measures allow clients to establish, for themselves, their psychotherapy foci; enabling the broadest possible
array of value systems and conceptualization of treatment success (Jacob et al., 2018; Kiresuk, 1994b). This “client-centered” approach to outcome measurement has been hypothesized to capture complex change processes that are of greatest relevance to individual clients, and to be most consistent with the clinical reality of psychotherapeutic work (Edbrooke-Childs, Jacob, Law, Deighton, & Wolpert, 2015; Sales & Alves, 2016). This may be important as research indicates that clients with similar diagnoses may want very different things from psychotherapy (Holtforth & Grawe, 2002; Rajkarnikar, 2009). In addition, in terms of supporting client progress, it has been hypothesized to empower clients (Kiresuk, 1994a) and to promote individual rather than normative identity (Smith, 1994), sending “a clear message to clients that their individuality and uniqueness are highly valued, and that their distinct perspective is considered an important contribution to the therapy process” (p. 252).

Idiographic outcome measures take one of two forms: problem-focused and goal-focused. Problem-focused measures invite clients to identify the issues, difficulties, or concerns that they are wanting to overcome, and then to rate the magnitude of these problems. By contrast, goal-focused measures invite clients to identify the objective that they would like to strive towards, and then the degree to which they have achieved them. Sales and Alves (2016), in their systematic review of individualized assessment tools used in psychotherapeutic practice and research, identified two problem-focused outcome measures: the Simplified Personal Questionnaire (PQ; Elliott et al., 2016; Shapiro, 1961) and the Psychological Outcome Profiles (PSYCHLOPS; Ashworth et al., 2005). They identified one goal-focused outcome measure, Goal Attainment Scaling (Kiresuk & Sherman, 1968; Kiresuk, Smith, & Cardillo, 1994).

Emerging evidence supports the reliability, validity, and clinical utility of both problem-focused and goal-focused outcome measures (e.g., Ashworth et al., 2005; Elliott et
al., 2016; Kiresuk, Smith, & Cardillo, 1994; Sales & Alves, 2016). However, the potential for goal-focused measures to contribute towards client progress is supported by several additional lines of research. First, as initially summarised by Locke (1969), there is an extensive body of psychological evidence to indicate that goal setting and goal monitoring procedures enhance task performance (Locke, 1969; Locke & Latham, 2002; Locke, Shaw, Saari, & Latham, 1981). Indeed, Locke et al. (1981) described this as, “one of the most robust and replicable findings in the psychological literature” (p. 145). Recent meta-analyses indicate an effect size ($d$) of 0.34 for goal setting (Epton, Currie, & Armitage, 2017), and 0.40 for the monitoring of goal progress (Harkin et al., 2016) across a range of behavioural outcomes. In addition, of relevance to routine goal monitoring in psychotherapy, these effects were larger when the outcomes were reported or made public, and when they were physically recorded (Harkin et al., 2016). Second, research indicates that agreement between clients and psychotherapists on the goals of therapy—which is likely to be enhanced by goal setting and monitoring procedures—is associated with positive outcomes, with a mean correlation of .24 (Tryon, Birch, & Verkuilen, 2018). Third, there is evidence that goal setting is desired by a majority of clients, with approximately 60% of laypeople expressing a preference for it, 20% not wanting it, and 20% not having a preference (Cooper & Norcross, 2015). This means that the use of goal measures may lead to greater clinical improvement, because matching therapeutic activities with client preferences is associated with reduced drop out and improved outcomes (Swift, Callahan, Cooper, & Parkin, 2018). Finally, in contrast to problem-focused measures, goal-focused measures allow for the setting of “approach”, as well as “avoidance”, objectives; and there is evidence that the former may be more effective regulatory devices (Elliot & Church, 2002). For instance, clients who are oriented towards approach goals show better psychotherapeutic outcomes than those oriented to avoidance goals (Elliot & Church, 2002; Wollburg & Braukhaus, 2010).
A systematic review of goal setting as an outcome measure within physical and neurological rehabilitation environments was conducted over a decade ago by Hurn, Kneeborn, and Cropley (2006). The authors identified 15 eligible articles, 11 of which utilized Goal Attainment Scaling. They concluded that there was “strong evidence for the reliability, validity and sensitivity of this approach”, though “further work needs to be carried out with goal setting to establish its reliability and sensitivity as a measurement tool” (p. 756).

Despite the value that goal-based idiographic measures may have for psychotherapy, no systematic information is available for clinicians or researchers on the types of measures that have been used in this field, their psychometric properties, or their distinguishing features. Hence, the purpose of this study was to conduct the first systematic review of goal measures in psychotherapy. Our aims were to identify (a) What goal measures, with at least some evidence of psychometric quality, have been used in the psychotherapy field? (b) What evidence is there for the reliability, validity, and clinical utility of these measures? (c) What are the relative strengths and limitations of the measures identified, with respect to their potential use in routine outcome monitoring? Through these lines of inquiry, we hoped to generate recommendations for the use of such measures in psychotherapy, as well as identifying key areas for further research. In contrast to Sales and Alves (2016) we focused, in depth, on just goal-focused idiographic measures; and, in contrast to Hurn, Kneeborn, and Cropley (2006) we focused, in depth, on just the use of these measures within a psychotherapeutic context.

**Method**

Our systematic review was conducted based on the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) (Moher, Liberati, Tetzlaff & Altman, 2009) guidelines.
Protocol

A draft protocol for the systematic review was prepared by the first author and subsequently refined by the third author. Subsequent modifications were made to the protocol during the process of the review to maintain a clear focus (see below).

Eligibility Criteria

Inclusion and exclusion criteria for the review are detailed in Table 1. Our study inclusion criteria meant that we focused on all forms of psychological treatment, including psychotherapy, counselling, and other forms of talking therapy.

Information Sources

The following computerized bibliographic databases were searched for the review from August 2016 to February 2017: PsycINFO, PsycARTICLES, PsycTESTS and Web of Science Core Collection. The search terms employed for PsychINFO, PsycARTICLES, and PsycTESTS (and modified, as applicable, for further search engine) were as follows (restricted to academic journal papers and dissertations):

- goal* or *goals or GBOM* or GBO* or plan* or project* or striving* or want* or life task* or purpose* or *personal or attainment* or hope* or aim* or aspiration* or self* or interest* or pursuit* or progress* or ambition* or intention* or objective* or target* or ideal* or destination* in title (TI) AND
- mental* or psychology* or counselling* or therapy* or psychotherapy* in abstract (AB) AND
- measure* or test or invent* or question* or survey* or outcome or effect* or efficacy* or trial or evaluation or goal attainment or scaling or goals form in abstract (AB) AND
• personal* or personalize* or individual* or individualize* or idiographic* or customise* or customize* or client generated* or client focused* or patient generated or patient focused* or patient customised* or patient customized* or patient rated* or patient valued* or client valued* or client rated* in abstract (AB)

• Publication Year (PY) = (1968- February 2017).

Requests for information about published and prospective relevant studies were also made via email to known academics and clinicians in the field (n = 9) who had created existing goal based measures, however, no extra papers were identified. A wider recruitment call for relevant papers was also made via social media, and through a large professional counseling body in the UK.

**Study Selection**

The first author undertook a preliminary search on PsycINFO and refined the specified search terms, utilizing a trial and error approach, until given results were agreed by the first and last author to be both sensitive and inclusive of the research area. The revised search terms were then run on PsycINFO, which also included PsycARTICLES and PsycTESTS, in addition to Web of Science Core Collection (amended as appropriate). All records were downloaded onto a single bibliographic management file (Endnote), with duplicate records discarded. The first author carried out a first-stage screening process based on title relevance. This selection was then sent to the third author for verification. The abstracts of all remaining papers were screened by the third author, with a final selection of papers identified for full-text review. At this stage, review papers were removed, but scrutinized for potentially eligible references, as were our included papers. Any articles identified from expert sources were also included at this stage, providing they met inclusion
criteria, as assessed by all authors. In order to focus the review, at the final stage, only those papers that had evidence of use in psychotherapy were selected for inclusion.

**Method of analysis**

Our write-up of the measures follows the structure developed by Sales and Alves (2016). This divides the critical description of each measure into four sections: brief descriptive overview, evidence of reliability and validity, clinical utility (defined as any empirical data which assesses the contribution made by the measure to therapeutic outcomes or processes), and comments on identified strengths and limitations.

**Results**

**Study selection**

In total, 8,475 articles were identified through searching electronic bibliographic databases (Figure 1). Of these, 191 were selected for abstract review following title scrutiny. Subsequently, 52 studies were excluded: because they were duplicates ($k = 21$), because they did not report any goal measures ($k = 14$), because they were problem-focused only ($k = 13$), or because they were solely theoretical ($k = 4$). Inter-rater reliability for this stage of the selection process was substantial (Cohen’s kappa = 0.53). This resulted in 139 articles for inclusion in the review. In addition, scrutiny of the reference sections of these papers gave 58 additional papers that potentially met eligibility criteria, giving 197 for full text review. Of these, 104 focused specifically on measures that have been used within a psychotherapy context. Nine goal measures were identified and are described below in approximate chronological order of development.

Goal Attainment Scaling (GAS).

Goal Attainment Scaling (Kiresuk & Sherman, 1968; Kiresuk, Smith, et al., 1994) was developed to evaluate the results of mental health interventions and has been applied to a
wide range of other domains, such as education, rehabilitation, drug treatment, and correction (Kiresuk & Choate, 1994; Mintz & Kiesler, 1982). It has been used extensively within the psychotherapy field, such as in motivational interviewing (Lewis, Larson & Korcuska, 2017), cognitive behavioral therapy (CBT), and psychodynamic psychotherapy (Bögels, Wijts, Oort & Sallaerts, 2014), and with both adult and child clients. It is, by far, the most widely adopted of the idiographic goal measures; with over 700 citations to the original 1968 article (Springer citations) and an upwards citation trajectory (Google Scholar).

The GAS procedure is unique amongst goal measures, in that it involves the setting, and rating, of expected levels of outcomes. It is estimated to take 20 minutes, with a similar time for posttreatment and follow-up assessment (Kiresuk & Lund, 1994). The procedure needs to be led by a trained professional—for instance, therapist, researcher, or intake worker—but it is recommended that this should be in collaboration with the client (Cardillo, 1994; Smith, 1994). The procedure begins with the identification of focal issues for the treatment (Smith, 1994). At least three goals are then identified, and a brief title is chosen for each goal (for instance, “decrease hostility”). This is followed by the selection of an indicator for that goal: the “behavior, affective state, skill, or process that most clearly represents the goal and can be used to indicate progress in meeting the goal” (Smith, 1994, p. 8) (for instance, “number of angry outbursts”). The next stage is to set an expected, posttreatment outcome for that goal (for instance, “3-4 angry outbursts per week”). Two outcome levels are then set on either side of this expected outcome: a “Somewhat more than expected level” (for instance, “1-2 angry outburst per week”), and a “Somewhat less than expected level” (for instance, “5-6 angry outburst per week”). Two further outcome levels—“Much more than expected” and “Much less than expected”—are then set (for instance, “no angry outbursts” and “more than six angry outbursts per week”, respectively); and this whole process is repeated with each of the remaining goals. In this way, five levels of outcomes are
set for each goal, and given a score of -2 to +2, with higher scores indicating better than expected outcomes. Progress on each of these goals can then be scored at posttreatment or follow-up (ideally, the authors recommend, by an independent rater, Cardillo, 1994) and an average goal attainment score can be calculated. Tables are also provided to determine summary T-scores.

Reliability and validity.

In terms of internal consistency, the average scale intercorrelation has been reported as .30 (Cardillo & Smith, 1994b; Kiresuk & Sherman, 1968), with correlations of .25–.65 between individual GAS scores and the overall GAS score (Mintz & Kiesler, 1982). Test–retest reliability, from end of therapy to 8-week follow up, has been reported as acceptable ($r = .77$, McGaghie & Menges, 1975 cited in Mintz & Kiesler, 1982). Inter-rater reliability on goal attainment scores, where guides are developed, or rated, by independent sources, are generally high: $r = .50–.99$ (Cardillo & Smith, 1994c; Mintz & Kiesler, 1982). In terms of convergent validity, GAS scores have shown significant moderate to high correlations with other indicators of psychological health, such as the Target Complaints Scale ($r = 0.50$) and the Brief Symptom Inventory ($r = 0.38$) in time-limited psychotherapy (Shefler, Canetti & Wiseman, 2001). There is good evidence for the content validity of the GAS, with approximately 85% of goals rated as relevant by independent monitors (Cardillo & Smith, 1994a).

Clinical utility.

Several studies within a mental health context suggest that, “the process of setting goals [with GAS] may itself have a positive effect on treatment outcome” (Smith, 1994, p. 3); with more success in reaching goals, and greater personality adjustment (Mintz & Kiesler, 1982). Clients have also reported being more satisfied with treatment when GAS is used, and saying that they found the process “therapeutic” (Cardillo, 1994; Mintz & Kiesler, 1982).
Comment.

Of the goal measures reviewed, GAS has the strongest evidence for its clinical utility. In addition, its implementation and application is supported by a range of in-depth written guides (e.g., Kiresuk, Smith, et al., 1994). By establishing a range of outcome levels for each goal, the GAS procedure allows for detailed, nuanced, and systematic evaluation of progress. Clinically, the principal limitation of GAS is that the goal setting process is relatively complex (Mintz & Kiesler, 1982) and mental health workers must go through a fairly lengthy period of training before they can apply it (estimated at approximately 14 hours, Kiresuk, Choate, Cardillo, & Larsen, 1994). In addition, given the time required for follow-up ratings (approximately 20 minutes), GAS would not lend itself to session-by-session assessment.

The complexity of the initial goal setting process also means that it is difficult to add, modify, or delete goals as the treatment progresses (Mintz & Kiesler, 1982).

GAS generally shows good psychometric properties. However, internal consistency appears low, suggesting that any total score should be treated with caution. The assumption of equivalent intervals between GAS scores, necessary for parametric testing, has been challenged, on the grounds that the different levels are determined on an idiographic, subjective basis. However, Cardillo and Smith (1994b) argue that this is no more guaranteed than the Likert-type scales used by other outcome measures. Scores on GAS are also limited in that they do not indicate actual levels of functioning; only the extent to which change is greater or less than expected (Cardillo & Smith, 1994a).

Personal Projects Analysis (PPA).

Since its inception, Personal Project Analysis (PPA, Little, 1983; Little, Philips, & Salmela-Aro, 2007) has been used in university counselling services (Salmela-Aro, 1992), as well as group based psychoanalytic and experiential therapies (Salmela-Aro & Nurmi, 2004).
It can be administered through clinical interview, a self-report workbook, or in digital format (Little & Gee, 2007).

In the initial elicitation stage of PPA, clients are invited to list around 15 of their current “projects”. After elicitation, clients are asked to take around 10 of the most meaningful projects and to appraise each one individually on scales ranging from 0-10. The initial appraisal matrix has 17 scales which relate to cognitive ratings, including the “likelihood of success” of each personal project, and 10 further additional scales for affective ratings. Goal progress can be captured specifically with dimensions of: “likelihood of success”, “time adequacy” and “progress”. Scales can be supplemented or removed depending upon the area of clinical focus. In the final, “cross-impact” stage, clients are invited to examine the potential interrelationship between each project by using a matrix to rate the extent to which each project might facilitate or conflict with other projects (Little & Gee, 2007). Further information and free resources (in English) relating to PPA can be found at http://www.brianrlittle.com/Topics/research/personal-projects-analysis/.

Reliability and Validity.

The test–retest reliability of PPA, from the same individuals over a minimum of two periods of time (24 hours and 2 weeks), was shown to be moderate (Little & Coulombe, 2015). A moderate alpha coefficient was obtained for each appraisal dimension across projects (Little, Leccl & Watkinson, 1992); with an internal reliability of .59 for the “likelihood of success” dimension (Klinger & Cox, 2011b). In terms of convergent validity, independent correlations between each of the PPA factors, and clinical concerns like depression, have been found (Little, 2011). For instance, in a metanalysis examining PPA and depressive affect, the PPA dimension of progress had a significant negative association with depression with a mean weighted effect size \( r \) of -.14 (Dowden et al., 2001). Furthermore, in a cross-lagged longitudinal study, the standardised regression coefficient
between depressive symptoms and a combined project appraisal dimension—characterised by high levels of project accomplishment and progress—was between -.50 and -.59 (Salmela-Aro & Nurmi, 1996).

**Clinical utility.**

No evidence for the clinical utility of PPA could be identified.

**Comment.**

Personal Projects Analysis facilitates assessment of goals along a range of dimensions, as well as the relationships between goals. This has the potential to support clinicians in building up an in-depth understanding of the client’s motivational structure. In addition, PPA is a flexible tool with the potential to add dimensions that may be of particular relevance to clients or their contexts. However, for the purposes of outcome monitoring, many of the PPA dimensions may be superfluous. Hence, as with GAS, PPA may be time-consuming to conduct within a psychotherapeutic context, as well as requiring extended training. Furthermore, due to the complex procedures involved in implementing PPA in the clinical encounter, it may not be suitable for clients with cognitive limitations and/or severe mental health difficulties.

**Interview Questionnaire (IntQ).**

The Interview Questionnaire (IntQ), developed by Klinger (1987), was initially used therapeutically to predict alcoholic’s responses to treatment and can be used as the basis for “systematic motivational counseling” (Cox, Klinger & Blount, 1996; Cox & Klinger, 2011b). It asks clients to list and describe all their current concerns on a paper-based form (e.g., “I feel lonely”), then to write a sentence on each one involving an action word before each concern (e.g., “I want to have more friends”). The form is divided into core life areas to ensure a broad range of life concerns are generated, with clients subsequently ranking each action in relation to nine goal constructs (e.g., “commitment”, “time available”). The two
constructs most closely related to goal progress are “probability of success,” and “nearness to goal attainment”. “Probability of success” is rated on a 10-point scale (0-9), with scores closest to “0” representing the lowest levels of success and those closest to “9” representing higher levels of success. “Nearness to goal attainment” is rated in the anticipated number of days, months or years it will take to attain the goal. A change score on this dimension is calculated as the difference in anticipated time to attain the goal between each rating, with progression towards a goal being reflected in a decrease in the anticipated time to goal attainment.

**Reliability and Validity.**

Forty-two alcoholic inpatient clients were tested using the IntQ at one week after intake and again at one month after intake. The test-retest correlation coefficients of the “probability of success” and “nearness to goal attainment” variables were 0.47 and 0.22, respectively. In another reliability study, 12 clients completed the IntQ twice, with a one-month interval. Results showed that around 76% of concerns were reported at both time-points (Church, Klinger & Langenberg, 1984).

Estimates of validity for the IntQ have assumed that concerns are, at some point, translated into observable behaviors and have used diary records to “map” behaviors onto concerns expressed on the IntQ (Church, Klinger & Langenberg, 1984). It was found that approximately 81% of activities undertaken a week after completing the IntQ could be related back to concerns identified by participants. After one month, approximately 56% of activities undertaken could be related back to concerns expressed (Church, Klinger & Langenberg, 1984).

**Clinical utility.**

No evidence for the clinical utility of the IntQ could be identified.
Comment.

Like PPA, the IntQ—and its family of measures (see below)—allows for assessment of goals on a range of dimensions. However, most of these dimensions are superfluous to progress, per se. In addition, as with PPA and GAS, these measures are lengthy to complete—as up to nine dimensions can be rated for each goal—and may not be appropriate for session-by-session use.

A strength of the IntQ and its family of measure is that clients are required to formulate goals by employing action word categories. This has the effect of distinguishing the valence of each goal (e.g., whether it is positive or negative), which can provide useful distinguishing qualitative information around the motivation.

Literature in the systematic motivational counseling field (e.g., Cox & Klinger, 2011a) suggests that the IntQ has now largely been superseded by more recent measures (see below).

Motivational Structure Questionnaire (MSQ)

The Motivational Structure Questionnaire (MSQ, Klinger & Cox, 1986; Cox, Klinger, & Blount, 1991, 1996) is a methodologically-refined, more complex version of the IntQ (Negru, 2011). Like the IntQ, the MSQ measures clients’ motivations to change with regards to particular goals. It has been mainly used in similar contexts to the IntQ—as the basis for systematic motivational counseling work with clients struggling with alcohol use—though it has also been adapted for other environments, such as the workplace (Roberson & Sluss, 2011). The MSQ has been therapeutically used with non-English speaking populations, including Czech (Man, Stuchlíková, & Klinger, 1998) and German clients (Grothenrath & Schneider, 1996 as cited in de Jong-Meyer, 2004).

The MSQ is completed in a similar manner to the IntQ, although the “nearness to goal attainment” and “probability of success” dimensions from the IntQ are named “goal distance”
and “chances of success” respectively. In addition, on the MSQ, clients rate “chances of success” on a 0 (almost no chance – a 0-9% chance) to 9 (almost certain – at least 90% sure) scale. Estimates suggest that the MSQ can take one to two, or more, hours to complete (Klinger & Cox, 2011).

In contrast to the IntQ, a computer program - the Statistical Package for the Social Sciences (SPSS) - can be used to score the MSQ; scoring algorithms are available on request (see https://pubs.niaaa.nih.gov/publications/assessingalcohol/instrumentpdfs/43_msq.pdf for more details). A motivational profile is created for each client, which depicts the respondent’s motivational structure (the manner through which they strive for goals to resolve their concerns).

The MSQ is available in five languages: English, German, Czech, Dutch and Norwegian.

**Reliability and validity.**

Internal consistency for the MSQ scales are generally good, with .83 for both “goal distance” and “chances of success” (Klinger & Cox, 2011b). However, test–retest stability across a one month period was lower: .22 and .47 respectively for “goal distance” and “chances of success” (Klinger & Cox, 2011b). In terms of convergent validity, “goal distance” shows a correlation of .47 with the Beck Depression Inventory, and .39 with the Beck Anxiety Inventory (Baumann, 2011). Scores on these scales have been found to be independent of personality dimensions (Klinger & Cox, 2011b). In a test of construct validity, participants were slower to respond on a Stroop task (which asks participants to identify the color of words rather than the words themselves) to words related to their current concerns, as compared with unrelated, neutral words (Klinger & Cox, 2011b). This suggests that participants’ self-identified concerns on the MSQ did, indeed, reflect the issues that were, at a less conscious level, occupying their attention.
Man, Stuchlíková, & Klinger (1998) demonstrated how the MSQ was able to distinguish clinical differences in motivational structure between 26 patients diagnosed with alcoholism compared to 30 demographically controlled university students. Specifically, the clinical group listed 40% less goals and showed smaller than average commitment to their goals.

**Clinical utility.**

Client feedback on the helpfulness, difficulty, and clarity of the German version of the MSQ suggests that it is feasible and acceptable to clients, with 61.9% finding the measure generally helpful and 74.1% finding it feasible (Grothenrath & Schneider, 1996, cited in de Jong-Meyer, 2004). Clients’ suggested that the measure provided clarity around goals and concerns, and improved their motivation.

**Comment.**

The MSQ can be scored electronically, and may require less practitioner training than the IntQ. In addition, this means that it can be undertaken as a “take home” exercise, which may increase the efficiency of the psychotherapy and reduce the clinicians’ influence on the goals.

**Personal Concerns Inventory (PCI).**

The Personal Concerns Inventory (PCI; Cox & Klinger, 2000) is a simpler, more user-friendly version of the MSQ. The PCI is administered and completed in a similar manner to the IntQ and MSQ. It takes approximately one hour to complete as it tends to elicit fewer concerns than the IntQ and MSQ. All concerns and goals generated through the PCI are rated on 0–10 scales, rather than separate multi-level scoring systems (Cox & Klinger, 2011a). The dimensions most closely related to goal progress are “How long will it take to attain this goal” (cf. “goal distance”) and, “How likely am I to attain it, if I do my best” (cf. “chance of success”).
As with the IntQ and MSQ, the PCI has primarily been used therapeutically with clients struggling with drug or alcohol use, although it has also been used with Finnish adolescents in school-based group interventions to understand more about their education-related personal goals (Salmela-Aro, Mutanen, Koivisto & Vuori, 2009). It has also been adapted for use with offender populations through the addition of two life areas (a) concerns they have with their offending behaviour and (b) current living arrangements (the PCI-OA; Sellen, McMurray, Cox, Theodosi, & Klinger, 2006; McMurray, Sellen, & Campbell, 2011). The items relating to drug or alcohol use in the PCI have been changed to refer to offending behavior.

**Reliability and validity.**

The internal consistency for “goal distance” and “chances of success” were .48 and .04 respectively in a sample of heavy alcohol drinkers who were not receiving treatment (Cox, Pothos & Hosier, 2007). In a separate study of Iranian students, the internal consistencies for the same scales were .78 and .82 respectively (Fadardi, Azad & Nemati, 2011).

**Clinical utility.**

McMurray, Cox, Witham and Hedges (2013) found that clients randomized to PCI interview after initial assessment plus treatment as usual (TAU) had a median session attendance of 88.3% over 12 weeks, compared to 66.7% attendance over the same period for clients receiving TAU only. In the same study, mean treatment engagement scores—as measured using the Treatment Engagement Rating scale (TER; Drieschner & Boomsma, 2008)—were higher in the PCI group compared to those receiving TAU only (6.64 and 2.94 respectively).

**Comment.**

Despite the PCI being a briefer measure than its predecessors, it is still complex and time-consuming to complete. There is more evidence for the clinical utility of the PCI, as
compared with the IntQ and MSQ. The more user-friendly terms for goal progress on the PCI, compared to the IntQ and MSQ, may also enhance its utility as a tool for routine outcome monitoring.

**Personal Aspirations and Concerns Inventory (PACI).**

The Personal Aspirations and Concerns Inventory (PACI) is a modified version of the PCI, with several changes that make the measure more explicitly oriented towards positive, “approach” goals (Cox, Klinger, & Fadardi, 2006; Cox & Klinger, 2011a). At the start of the process, respondents are asked to consider positive aspirations and goals as well as concerns, to write down “important goals” in each area of life, and then to specifically rate their “goals” on 14 dimensions. This is an expansion from the 10 dimensions of the PCI, with the items on goal success and goal distance retained.

The PACI has also been adapted for work with offender populations, the Personal Aspiration and Concerns Inventory for Offenders (PACI-O; Nekovarova, 2016; Campbell, Sellen & McMurray, 2010), with the adaptations in line with those of the PCI-OA (see above). There is little evidence of the use of the PACI outside of forensic settings and substance abuse work.

**Reliability and validity.**

Internal consistency for the probability of success and goal distance items for the PACI ranged from .58 to .66 respectively (Cox & Klinger, 2011a). For the same scale, test-retest stability ranged from .52 to .67.

**Clinical utility.**

Sellen, Gobbett, & Campbell (2013) carried out a pilot randomized controlled trial comparing the use of the PACI-O against treatment as usual for 37 adult male sexual offenders participating in a cognitive skills program. The PACI-O did not lead to statistically significant improvements in treatment engagement over time, but results were in the
predicted direction, with small to moderate effect sizes on two separate outcome indicators \((ds = 0.16 \text{ and } 0.36)\).

**Comment.**

Of the four measures developed within systematic motivational counseling, the PACI is most explicitly oriented to work with goals. It is also the briefest of these measures, with emerging evidence of psychometric reliability.

**Strivings List and Striving Assessment Scales (SAS).**

Therapeutically, the Striving Assessment Scale (SAS) has been used in both individual and CBT programs for veterans suffering from Posttraumatic Stress Disorder (PTSD; Kashdan, Breen & Julian, 2010), as well as in motivational interventions for those with co-morbid schizophrenia and alcohol use disorders (Carey, Leontieva, Dimmock, Maisto & Batki, 2007).

Personal Strivings are captured through *Strivings Lists*, whereby up to 15 personal strivings are generated by the client. Each striving can then be rated on up to 15 dimensions using Striving Assessment Scales (SAS; Emmons, 1986). The dimensions most closely related to goal progress and outcomes are “probability of success” (“In the future, how likely is it that you will be successful in the striving?”) and “probability if no action” (“How likely is it that you will be successful in the striving if you do not take action?”). Both dimensions are rated on 10-point scales ranging from 0 (*no chance of success*) to 9 (*at least 90% chance of success*).

**Reliability and validity.**

For “probability of success” and “probability if no action”, test–retest reliability coefficients after one month were .68 and .84, respectively. After three months these coefficients were .55 and .67 respectively (Emmons, 1986). There is also some evidence of
the stability of the strivings themselves over time, with 82% of strivings remaining the same (or closely worded variations) one year later (Emmons, 1986).

**Clinical utility.**

No evidence for the clinical utility of the SAS could be identified.

**Comment.**

Unlike the IntQ family of measures, the SAS does not pre-define the areas in which clients are asked to identify goals. In addition, the SAS makes it explicit that not all dimensions need to be rated for each striving: practitioners can select particular dimensions to rate based on their clinical judgement, making it a flexible tool for therapeutic work. This flexibility means that SAS has more potential to be adapted for use in session-by-session outcome monitoring if a small number of scales are used, or as a more in-depth measure of strivings during therapeutic assessment.

**Goal-Based Outcomes (GBOs) tool.**

The GBOs tool is an 11 point scale for rating a client’s progress on their chosen therapeutic goals (Law, 2011). Whilst it is most often used in therapeutic work with children and young people, it can also be used therapeutically in adult settings, and with people with learning disabilities (Law & Jacob, 2013). In work with children and young people, the GBOs tool can also capture clinician and parent/carer goals. The GBOs tool is used across a range of child and adolescent mental health settings, including school-based counseling services (e.g., Law & Wolpert, 2014; Pender et al., 2013; Rupani et al., 2014).

Written goal-based outcomes are usually recorded at the beginning of therapeutic work in a practitioner-completed paper workbook, or using an electronic system, through collaborative dialogue with the client. Once goals have been set and recorded on the GBOs record sheet, their progress is then rated on a scale of 0 (not met at all) to 10 (fully met), with a midway anchor point of 5. The GBOs tool can be used to capture goal progress at two
distinct time points: the beginning (T1) and end of therapy (T2), or on a session-by-session basis. Here, goal progress can be monitored using the *goal progress chart*. This allows each goal to be rated on up to 12 occasions per-sheet and can be used as a visual tool by joining up each subsequent rating with a straight line. A separate goal progress chart should be completed for each goal (Law & Jacob, 2013).

The tool has been translated into Japanese, Norwegian, and Portuguese. More information on GBOs, as a PDF version of the tool, can be found at: [www.goals-in-therapy.com](http://www.goals-in-therapy.com)

**Reliability and validity.**

The internal consistency of goal progress, as measured using the GBOs tool, has been found to be acceptable, with a Cronbach’s alpha of .71 and .73 for T1 and T2 respectively (Edbrooke-Childs et al., 2015). Research has also found that progress on goals—as measured using the GBOs tool—is moderately correlated ($r = .4$) with improvements in emotional symptoms when measured using the practitioner version of the Children’s Global Assessment Scale (CGAS; Shaffer et al., 1983; Wolpert *et al*., 2012).

**Clinical utility.**

Preliminary evidence suggests that children and young people perceive the GBOs tool positively (Bromley & Westwood, 2013), with 85% of young people agreeing with the statement “Goal scales helped [me] to show others how [I] was feeling and where [I] needed help” and 92% saying that they “liked having the chance to choose their own goals” (Pender *et al*., 2013). In the same study, 69% of young people agreed that “working towards goals helped [me] stay on track”.

**Comment.**

The GBOs instrument is a suitable session-by-session measure due to its brevity, easiness to complete, and acceptable psychometric properties. The progress rating scale is
straightforward and can easily be interpreted by both clinicians and clients. An additional benefit of the GBOs instrument, compared to other measures, is the ability to use it as a visual tool, meaning it may be more engaging for clients. The simplicity of the goal-generation procedure, however, may mean that the goals identified reflect only the most immediate, conscious concerns. Further research investigating the reliability and validity of GBOs would be welcomed.

Goals Form.

The Goals Form was developed as a simple, easy to complete idiographic outcome measure for psychotherapy. It was first used in a pilot pre-/post-intervention study of “pluralistic therapy”: a collaborative, integrative approach (Cooper, 2014). The form asks clients, in collaboration with their psychotherapist, to identify up to seven goals for therapy—typically at a first assessment session—and then to rate them on a 1 (not at all achieved) to 7 (completely achieved) Likert-type scale. The agreed goals are then typed onto a digital copy of the form and printed off, such that clients are able to rate the same goals at regular intervals, ideally every session. Over the course of psychotherapy, clients have the opportunity to delete, add or modify goals; and the electronic copy of the Goals Form is revised accordingly. Change over the course of psychotherapy is calculated by averaging differences between first to last scores on each goal, with new or modified goals treated as additional goals. The form is freely available in English and can be downloaded, with instructions for use and scoring, from https://www.researchgate.net/publication/286928866_Goals_Form. The Goals Form has been used in a multisite trial of pluralistic therapy for depression (Cooper et al., 2015).

Reliability and validity.

At pilot evaluation, between-client internal consistency at baseline assessment, using clients’ first three goals, was .68 (Cooper, 2014). The median within-client internal
reliability, using clients’ initial set of goals, was .84; with 88.2% of clients having a Cronbach’s alpha of .70 or higher. Test-retest reliability, comparing mean goal scores from assessment to first session was .74 (Cooper, 2014). In terms of convergent validity, mean Goals Form scores showed large correlations with the CORE-OM at baseline ($r = -.66$, $p = .008$) (Cooper, 2014). The Goals Form proved sensitive to change from baseline to end of therapy, with a Cohen’s $d$ of 1.55 (Cooper et al., 2015).

**Clinical utility.**

At the end of psychotherapy, clients gave the Goals Form an average rating of 4.2 ($SD = 1.2$) on a 1 (*very unhelpful*) to 5 (*very helpful*) scale of clinical utility ($n = 17$) (Cooper et al., 2015). Qualitative analysis of post-therapy interview data indicates that clients found the regular assessment of goals, through the Goals Form, “acceptable or of positive benefit for the counselling” (Cooper, 2014). A more recent study of goal-oriented practices in a collaborative, integrative psychotherapy found that 15 of 22 clients (68.2%) found the use of the Goals Form helpful (di Malta, Cooper & Oddli, 2018).

**Comment.**

Preliminary evidence indicates that the Goals Form is psychometrically and clinically acceptable, and can be used on a session-by-session basis. Further research is needed, however, on its psychometric properties. As with the GBOs tools, the simplicity of the goal generation procedure may mean that goals are more superficial, and less comprehensive, as compared with more sophisticated measures.

**Discussion**

Our systematic search identified nine idiographic, self-report goal measures that have been used in psychotherapy, four of which came from the same family of instruments. This substantially extends the findings of both Sales and Alves (2016) and Hurn et al. (2006), which identified just one goal-based idiographic outcome measure for psychotherapy: GAS.
Our review may have failed to identify measures published outside of the English language. In addition, although we included unpublished materials, we may have overlooked measures for which there was limited public documentation or which we failed to identify with our search terms.

The use of these self-report goal measures in psychotherapy provides therapists with a means of monitoring outcomes that is tailored to the individual client, and that may capitalize on the benefits associated with goal setting and goal monitoring. Evidence of clinical utility in our review, where available, generally supported the positive benefits that goal measures could have in supporting therapeutic progress. However, an essential area for further research in this field is to examine, in more detail, whether the benefits of goal setting and goal monitoring, as identified in the psychological literature do, indeed, transfer to psychotherapy. Controlled studies, with and without the use of goal measures (such as scaled up versions of Sellen, Gobbett, & Campbell’s (2013) trial), would be a robust means of assessing this. Controlled studies comparing the use of goal-focused idiographic measures against nomothetic measures, and also against problem-focused idiographic measures, could further develop our understanding of how particular types of measure might contribute to outcomes.

In our review, we found three relatively discrete categories of idiographic goal-focused measures. In relation to supporting client progress, each of these had particular strengths and limitations. First were those multidimensional tools that invited clients to establish goals through relatively structured procedures, and then to rate them on a range of dimensions (PPA, IntQ, MSQ, PCI, PACI, and SAS). These instruments had primarily evolved from the fields of psychological research and assessment. Hence, as well as allowing for the setting and monitoring of goals, they may provide support for therapeutic assessment processes: providing clinicians with an opportunity to develop in-depth understandings of
clients’ motivational structures. This may be particularly helpful in “motivation-based therapies”—such as the methods of levels (Mansell, Carey, & Tai, 2013), and Egan’s (2013) problem-management approach, as well as systematic motivational counseling (Cox & Klinger, 2011b)—which are oriented around an understanding of client’s goals and purposes, and the relationships between them. However, given “real world” constraints in terms of time and resources, the degree of training required for the use of these measures, as well as the time that they take at assessment and follow-up, may make them less suited to general psychotherapeutic practice—particularly on a session-by-session basis. In addition, the relative complexity of the goal generation and rating process may make them unsuitable for clients with severe cognitive limitations (Hamann et al., 2009; Jacob et al., 2018). Nevertheless, to some extent, these issues could be mitigated for by using briefer versions of these measures, such as the PACI, and by scaling down the dimensions at follow-up assessment to only those related to goal progress.

A second set of goal measures were the two brief rating forms: the Goals Form and the GBOs tools. These had a relatively simple and unsystematic goal setting process, and just one dimension for rating goal progress. These measures had been specifically designed for use in session-by-session outcome monitoring, and seemed relatively well-suited to this purpose. However, the unsystematic nature of the goal-setting processes here may mean that the goals identified do not cover all of clients’ major concerns, or those that are at a deeper, less conscious, level. Of relevance here is research which shows that the correlation between “self-attributed” motives (as identified through self-completed questionnaires) and “implicit” motives (as identified through, for instance, projective tests) is small (a correlation of .09, Spangler, 1992). This suggests that an important priority for further research is to assess the extent to which goals identified through such brief forms correspond to those identified through the more systematic goal measures, as well as through tools that are intended to
capture unconscious goals and motivations, such as the Thematic Apperception Test (Murray, 1943).

The third category of measures, consisting of just one instrument, was goal attainment scaling. This combines an in-depth goal setting process with a specific rating of progress against that goal and, uniquely, invites clients to consider, and set, expected levels of outcomes. In terms of clinical assessment, this means that GAS may produce a very well-specified understanding of clients’ goals, and the particular criteria that they, themselves, consider success or failure. As with the multidimensional measures, however, the time consuming nature of GAS—both in terms of specialist training and its use in sessions—makes it less suited to session-by-session outcome monitoring in general psychotherapeutic practice.

Several other dimensions of goal measure emerged in our review. First, some measures could be completed digitally, while others could not. The capacity to digitally complete measures is likely to be advantageous as it can enhance efficiency: allowing clients to complete measures before the session, and potentially reducing the amount of training needed for therapists. Second, some measures provided clients with a pre-defined list of areas to focus on before generating goals, while others did not. Although this process may be more time-consuming, it may facilitate the development of a more comprehensive list of goals. Third, some measures allowed for the revision and resetting of goals, while others did not. Given evidence that clients like to be able to revisit and revise goals (di Malta, Cooper, & Oddli, 2018), this former process may be preferable, though it raises important challenges regarding the rating of goal progress over the course of therapy: particularly if a “total” score is to be calculated (Sales & Alves, 2016).

Although this review focused exclusively on goal measures that have been used in psychotherapy, we also came across a range of goal measures used in psychological research
and health services that could be adapted for this domain. Measures within the former context included The Goal Questionnaire (Zaleski, 1987), The Therapy Goal Assessment Procedure (Elliot & Church, 2002), the Individualized Outcome Measure (Pesola et al., 2015), and the Outcomes of Problems of Users of Services (Hunter et al., 2004). The two measures used within the latter context were the Patient Goal Priority Questionnaire (Åsenlöf, Denison, & Lindberg, 2004) and the Idiographic Functional Status Assessment (Rapkin et al., 1994).

Consistent with Hurn, Kneeborn, and Cropley (2006), we found evidence that scores on goal-focused measures generally, though not always, showed good temporal stability, and converged with other measures of psychological wellbeing and distress. This suggests that, in terms of supporting client progress, they can function as robust and meaningful feedback instruments. However, given the limited evidence of internal reliability across goals, a “total” goal progress score should be treated with caution. It is also important to note that much of the psychometric evidence in this review comes from the use of measures within an assessment context, rather than in routine outcome monitoring. Hence, findings of psychometric quality should be treated with caution.

With respect to functioning as population-level indicator of outcomes, idiographic measures have been criticized on the grounds that, as each client has a unique set of indicators, it is not possible to compare outcomes across clients, treatments, or services (Elliott et al., 2016). In addition, as therapists are usually involved in the goal setting process, goal measures may be more vulnerable to “gaming”: with therapists, for instance, setting easy treatment goals to “evidence” better outcomes for their service (Law & Jacob, 2013). In our study, we found some evidence that idiographic goal measures might be able to function as population-level indicators of outcomes, in that they tended to converge with more established, nomothetic measures of wellbeing and distress. However, more robust
evidence of criterion validity is needed before goal-based measures could be relied upon to perform this function. In particular, evidence which shows that variations in goal attainment, across services or treatment, converge with variations in outcomes on nomothetic measures, and with diagnostic assessment procedures. This is a priority for future research.

As with Sales and Alves (2016), therefore, we recommend that, at the present time, goal measures should only be used in association with one or more well-established nomothetic scales—particularly where there is a desire to evaluate outcomes at the population level. At the individual level, such combining would also help to offset some other important current limitations of goal measures: the absence of clinical cut offs, the lack of population norms against which clients’ scores can be compared, and difficulties contextualizing clients’ problems along established psychological and psychiatric dimensions. Nomothetic measures would also help to ensure that problems outside of the clients’ awareness could be identified and, where relevant, addressed. Combining the use of these measures in this way would also help to build up evidence on the convergent validity of goal measures.

In summary, our review indicates that therapists, and researchers, have access to a range of goal measures, with evidence that they are psychometrically acceptable indicators of goal progress. More than this, and consistent with the psychological research, there is emerging evidence of clinical utility: that they can support the process and outcomes of therapeutic work. Currently, the evidence cannot substantiate the use of goal measures alone—particularly where there is a need for service- or treatment-level outcome evaluation—but they can be considered an essential complement to nomothetic measures: helping to ensure that the treatment is most fitted to the individual client. Without the use of idiographic measures, clinicians, and patients, cannot track whether or not the treatment is meeting the client’s specific, individual needs. Goal measures can fill that gap and help psychotherapists “create a new therapy for each patient” (Yalom, 2001, p.33).
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