

Assessment of well-being in the clinic: Using the state version of the short Scale of General Well-Being as a clinical outcome measure

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Abstract

Objective: Interest in the concept of well-being within clinical and applied psychology settings has increased, highlighting a need to develop appropriate measures. The aim was to adapt and test the validity of the 14-item Scale of General Well-Being (14-SGWB) originally developed by Longo et al. (2018), as a clinical outcome measure.

Method: Study 1 is a psychometric study with 543 non-clinical participants, the wording of the 14-SGWB was adapted, and tested for reliability and convergent validity. Study 2 investigated the adapted version with 125 clients over 10 therapy sessions, examining sensitivity, and reliable change cut-off.

Results: The final 14-SGWB-clinical tool has a single component structure, good convergent validity, and can assess reliable and clinically significant change.

Conclusion: Measures that assess positive psychological change are important for the future development of clinical and applied psychology. The 14-SGWB-ct offers researchers a measure to extend evaluations of interventions to the effects on well-being.

KEYWORDS

growth, measurement, outcome assessment, positive psychology, well-being

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1 | INTRODUCTION

Over the past two decades, positive psychology has become a topic of serious scholarship. This has been followed by interest in positive psychology from applied psychologists, including from the field of clinical psychology where it has begun to attract attention from researchers and practitioners. Evidence has developed within the clinical psychology literature showing the predictive value of using positive psychology exercises within clinical psychology treatments (e.g., Rashid, 2009; Sin & Lyubomirsky, 2009), and that greater positive mental well-being is related to lesser subsequent psychopathology (e.g., Keyes et al., 2010; Lamers et al., 2015; Layous et al., 2014; Trompeter et al., 2017; Wood & Joseph, 2010). As such, it is recognized that an understanding of positive psychology may be helpfully integrated into clinical psychology theory and practice. However, the majority of research inspired by positive psychology has only used positive psychology derived interventions to treat traditionally understood problems such as depression, anxiety, and trauma. There is, however, another way in which positive psychology can be influential in the practice of clinical psychology, and that is in the shift of its focus for assessment and treatment itself.

Traditionally, clinical psychologists are concerned with symptom reduction and helping to alleviate psychological distress, but their focus has not been to explicitly facilitate well-being. Greater well-being may be an inadvertent effect of many clinical interventions, but as it has not been the subject of research, it is not known if this is the case. Research is needed to show if traditional interventions lead to increased well-being. As well as investigating traditional practices and their effect on well-being, it has also been suggested that clinical psychology could expand its remit such that the promotion of well-being becomes a central aim. This would involve accommodating new ways of thinking and practices. Those advocating such a positive psychological approach suggest the possibility for therapists to be concerned not only with the alleviation of distress and dysfunction but also with the promotion of well-being (Joseph & Lewis, 1998).

As the field of positive psychology has developed, it has begun to influence clinical practice such that some practitioners now also see the facilitation of positive psychological functioning as within their role (e.g., Maddux & Lopez, 2015; Rashid, 2015). This leaves a gap within a field of clinical practice in which many are influenced by these newer ideas from positive psychology that focus on human potentiality (Danitz et al., 2018), but lack the appropriate tools for measurement. Whether it is to investigate traditional interventions and their effect on well-being, or to evaluate new practices specifically designed to facilitate well-being, there is a need for measurement tools appropriate to clinical settings. Our aim is to develop a new psychometric tool with which clinicians will be able to assess well-being.

The majority of measurement tools available to clinical psychologists and researchers measure dysfunction, observable deficits, and are designed to only assess symptom reduction (e.g., Corcoran & Fischer, 2000; Pavlo et al., 2018). For example, one widely used measure in clinical services is the Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM; Evans et al., 2000). The CORE-OM is a useful tool underpinning practice-based studies (Holmqvist et al., 2015), but it was designed before the development of positive psychology, and as such fails to assess well-being. Similarly, widely used measures of depression and anxiety tend to provide scoring systems in which the lowest score possible on an instrument represents the absence of a condition, rather than the presence of any positive state (Joseph & Wood, 2010). Typically, measurement tools used in clinical practice are limited to assessing distress and dysfunction and their reduction over time, but not whether the patient experiences an increase in well-being over time.

Well-being is an aspirational term used within western culture, and more specifically within the field of positive psychology, to describe a state of physical and emotional attunement that is a desirable objective (Goodman et al., 2018). Various definitions and assessment tools now exist within positive psychology (e.g., Gillett-Swan, 2015; Linton et al., 2016). The multifactorial nature of well-being has been well established over several decades. In brief, one early influential model was Bradburn's (1969) hedonic balance model. This was a measure of emotional states, both positive and negative. Later, Diener's (1984) tripartite model of subjective well-being (SWB)

included life satisfaction as a cognitive component of well-being alongside positive and negative emotional states. These early models were rooted in a hedonic philosophy in contrast to Ryff's (1989) model of psychological well-being (PWB), which described six eudaimonic factors found within humanistic and existential philosophy, that is, autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Almost 10 years later, Keyes (1998) combined the SWB and Ryff's PWB, and added the component of social well-being. More recently, Seligman (2011) proposed a new model with five components of well-being: Positive Emotions, Engagement, Relationships, Meaning and Accomplishment. As such, it is recognized that individual well-being consists of several facets, representing a balance between eudaimonic and hedonic well-being, which need to be explicitly considered in any assessment tool (see Maddux, 2018).

One of the most widely used measures derived from positive psychology is the Warwick Edinburgh Mental Well-Being Scale (WEMWBS; Tennant et al., 2007). Originally developed as a population measure of well-being, it has been adopted as a clinical measure within some settings. The WEMWBS was, however, not developed to reflect any defined theoretical system, thus while it usefully combines some eudaimonic and hedonic factors into a single overall score for well-being, it is limited in the extent to which it is fully representative of the multifactorial nature of well-being.

More recently, Longo et al. (2017), following a rigorous and systematic review on well-being, identified fourteen distinct and recurring constructs in the well-being literature—happiness, vitality, calmness, optimism, involvement, self-awareness, self-acceptance, self-worth, competence, development, purpose, significance, congruence, and connection. The process of item identification and development was more thorough than for the WEMWBS and all other existing tools for the assessment of well-being. Longo et al. (2017) provide an integrative hierarchical model to show that although these fourteen well-being domains do form lower-order factors, these factors are strongly influenced by a higher-order general factor of well-being. As no existing psychometric tools in the positive psychology literature assessed all fourteen of these constructs identified by Longo et al. (2017), having each offered only a partial assessment, these fourteen constructs formed the framework for a new multi-dimensional tool: the Scales of General Wellbeing (SGWB). The SGWB provided the most comprehensive up to date definition of well-being, in the form of a 65-item SGWB measure. Each of the subscales can be used independently or used together to collate a single score for well-being. However, the 65-item scale creates a relatively lengthy and time consuming tool for participants to complete, which would not lend itself for use in a clinical setting, where outcomes are often measured on a session by session basis.

Subsequently, Longo et al. (2018) conducted a factor analysis of the original 65-items, developing a short 14-item version (14-SGWB) by identifying one item from each of the 14 subscales within the original scale. The 14-item scale correlated very highly with the 65-item version. This tool meets the requirements of a clinical scale and provides a quick and easy way to assess a person's well-being. The 14-SGWB is a more user-friendly measurement of well-being that stems from what Longo et al. (2018, p. 33) describe as a "comprehensive operational definition of well-being". The 14-SGWB offers a valuable tool for positive psychology research but, because of its comprehensive assessment, it also promises to be of interest to clinical psychologists. Each of the fourteen constructs of the 14-SGWB offers therapists a positive psychological way to frame the goals of therapy. For some clinicians, positive psychology provides new tools to assess change in a way that is simply more consistent with the goals of therapy than existing clinical measures, but for others it may offer a new way of thinking altogether (Joseph & Wood, 2010). There is now a need for clinical psychologists to introduce positive psychological assessment tools into their practice. The 14-SGWB seems to offer an ideal framework for clinical practice by those interested in investigating positive psychological changes that occur in therapy.

However, the 14-SGWB assesses trait well-being rather than state well-being and therefore may be limited in its clinical use where the need is to assess change over relatively short periods. Any measure of well-being used clinically must be able to demonstrate evidence of clinical change over relatively short periods, typical of clinical interventions. While there are various tools developed by positive psychologists, there is no single measure of positive psychological functioning developed with this consideration in mind. In addition, while we might expect

those seeking clinical help to experience lower levels of well-being, it would be useful for clinical services to understand at what point a reduction in well-being becomes clinically significant. As such, the assessment of well-being can inform the goals and progress of therapy, and be part of the initial clinical assessment. In this way, the introduction of well-being measurement into clinical services can help to influence the development of clinical psychology as a profession that is less reliant on an illness ideology (Maddux & Lopez, 2015).

Our objectives are to develop and validate a clinical version of the 14-SGWB to be used as an outcome assessment tool. In the first study, participant instructions for the 14-SGWB are amended to produce a state version which is tested for validity and reliability. This involved a simple change to the instructions given to participants from asking them to rate items in relation to their "life overall" to the "past week." The second study was to test the use of the adapted scale within a clinical setting; the amended clinical version (14-SGWB-clinical tool [SGWB-ct]) is administered to 125 clients undertaking person centred therapy as an outcome tool to assess its ability to track change over time.

2 | STUDY ONE

The original 14-SGWB (Longo et al., 2018) is a trait measure. As such, its use as a clinical outcome tool may be limited. Clinical measurement must be able to evaluate change over relatively short periods of time (Hayes & Hadorn, 1992; West et al., 2011). Thus, the objectives were to develop a state version of the 14-SGWB by rewording the instructions to participants, and to establish its scoring procedure, internal consistency reliability, and convergent validity. Although the longer version of the SGWB consists of 14 separate subscales, each of which can be used either as a separate assessment tool, or together as part of a detailed assessment of well-being, the short 14-SGWB was developed to provide a single brief overall score for well-being. As such, the first objective of the study was to confirm the one factor structure of the 14-SGWB after its participant instructions have been modified to assess state rather than trait well-being. Second, having established that the adapted state version of the 14-SGWB can be scored as a single factor, we wished to test for internal-consistency reliability. Third, to establish convergent validity we hypothesized that higher scores on the new adapted state version of the 14-SGWB would be associated with higher scores on the WEMWBS (Tennant et al., 2007), and the Authenticity Scale (AS; Wood, et al., 2008). The WEMWBS is now becoming increasingly dated in terms of its conceptualization, as it was not deliberately designed to assess the full range of hedonic and eudaimonic components. Nevertheless, as it is one of the most widely used and well validated measures of well-being currently in use, it was deemed an appropriate tool that allowed us to test for convergent validity. In terms of convergent validity, we would also expect there to be associations with personality. Previous research has shown that people who identify themselves as more authentic, demonstrate more positive signs of well-being (Taris, 2014) and that authenticity is one of the strongest personality correlates of well-being (Wood et al., 2008).

2.1 | Method

2.1.1 | Participants and procedure

A questionnaire was available electronically using the Bristol Online Survey Tool (2018). The link to participate was advertised through a database of 3000 customers of a UK coffee shop, and an additional 500 members of a community mental health forum, based in England. A normative sample was selected to replicate the original validation study conducted by Longo et al. (2018). In total, 543 people took part in the survey, (69 males, 473 females, 1 person identifying as transgender, ranging between 18 and 82 years of age; mean age = 40.98, $SD = 11.95$), representing a response rate of 16% of those on the original database and community forum. Ethical approval was granted by the university research ethics committee.

2.1.2 | Measures

All participants completed an amended version of the 14-SGWB, as described below, along with the AS, and the WEMWBS.

Amended version of the 14-SGWB

The 14-SGWB consists of 14-items (e.g., "I feel close and connected to the people around me"), each assessing a different aspect of well-being which respondents rate on a 5-point Likert-type scale (i.e., 1 = *not at all true* to 5 = *very true*). Total scores on the 14-SGWB have possible range of 14–70, with higher scores indicating greater well-being (Longo et al., 2018). To amend the 14-SGWB for clinical use the instructions to participants were changed such that the scale was concerned with state rather than trait well-being; that is, the instructions for participants as used by Longo et al. (2018) read as:

Below you'll find fourteen statements about your experiences. Please indicate how true each statement is regarding the EXPERIENCES IN YOUR LIFE OVERALL. There are no right or wrong answers. Please, choose the answer that best reflects your experience rather than what you think your experience should be.

In asking participants to think about their experiences in life overall, Longo et al. (2018) were assessing well-being as a trait. To produce a state version we amended the participant instructions to read:

Below you'll find fourteen statements about your experiences. Please indicate how true each statement is regarding the EXPERIENCES OVER THE PAST WEEK. There are no right or wrong answers. Please, choose the answer that best reflects your experience rather than what you think your experience should be.

Apart from the changes in wording to the instructions given to participants, no other changes were made to the 14-SGWB (see Appendix 1). Originally, Longo et al. (2018) tested the reliability of the shortened version of the scale using McDonald's omega hierarchical (ω_h) coefficient. The result, 0.86, confirmed a high level of inter-relationship between the items.

2.1.3 | Authenticity scale

The AS (Wood et al., 2008) is a 12-item tool designed to measure authenticity. Each item is rated on a 7-point Likert scale, and items coded such that scores on the total scale have a possible range of 12–84, with higher scores indicating lower self-alienation, the ability to resist the influence of others, and live life in a way that feels true to the person themselves.

The WEMWBS (Tennant et al., 2007) is a 14-item tool designed to assess well-being. Each item is rated on a 5-point Likert scale, such that scores on the total scale have a possible range of 14–70, with higher scores indicating greater well-being.

2.2 | Data analysis plan

Before pooling, the data were cleaned and inspected for normality in distribution using Excel. The confirmatory factor analysis (CFA) was performed using LISREL v10.2 to evaluate the fit for the hypothesized one factor model.

Reliability was retested using "R" to calculate McDonald's omega hierarchical (ω_h) coefficient, Cronbach's alpha was also calculated using SPSS v22 as this would be required within Study 2. Finally, the associations between scores on the measures were tested using Pearson correlation, again using SPSS v22.

2.3 | Results

The 14 items of the amended 14-SGWB state version were subjected to CFA, using LISREL v10.2 to test the fit of its proposed one factor structure. The Comparative Fit Index (CFI) was calculated at 0.82, and the Standardized Root Mean square Residual (SRMR) at 0.07, within parameters of cut off for good fit.

The (ω_h) is a hierarchical coefficient that accounts for the proportion of variance between the scores, which can be accounted for by a factor. To provide a comparison with Longo et al.'s (2018) original analysis on the shortened scale, reliability was also tested using McDonald's omega hierarchical (ω_h) coefficient using statistical software R; it was found to be marginally higher at 0.93, confirming a high level of inter-relationship between the scale items. Cronbach's alpha for the 14-SGWB state version was 0.91, showing high internal consistency reliability. Cronbach's alpha was also calculated for the other scales. For the AS it was 0.70 and for the WEMWBS it was 0.92. Cronbach's alpha was calculated as it would be used in Study 2 as a necessary component in the reliable change formula.

Finally, to test for convergent validity, correlation analysis was carried out to investigate the association between the 14-SGWB state version (mean = 49.08, $SD = 9.78$) and the AS (mean = 59.59, $SD = 9.44$) and the WEMWBS (mean = 48.11, $SD = 9.22$). It was found that higher scores on the 14-SGWB state version were associated with higher scores on the WEMWBS ($r = .86, p < .001$) and the AS ($r = .56, p < .001$).

2.4 | Discussion

In summary, our results show that the amended state version of the 14-SGWB can be scored to yield a single score for overall well-being. Internal consistency reliability was high. There was convergent validity as a measure of well-being and positive association as predicted with the personality dimension of authenticity. Having validated the amended scale as a state measure of well-being with a general population sample, we were concerned to establish its use with clients in a clinical setting as a clinical tool.

3 | STUDY TWO

The objective was to assess the use of the amended state version of 14-item SGWB as a clinical tool (SGWB-ct) with clients undergoing person centred therapy. Any outcome tool in therapy must be able to show change over relatively short periods as clients change in meaningful ways over weeks and months in therapy. In Study 2, the SGWB-ct was included as part of the ongoing assessment protocol in a research clinic to test for reliable change and to develop a clinical cut-off score.

The reliable change index (RCI) score was calculated and incorporated into this study as a method of estimating clinically significant change in the clinical sample, when the SGWB-ct is a principal outcome measure. We followed the procedures described by Jacobson and Truax (1991) to assess the clinical significance of change. First, the RCI was calculated allowing the identification of cases where significant change occurred, by using the standard error of the measure to estimate the range of chance variation. Secondly, using the data collected from Study 1 as a normative sample, clinical well-being status relative to the normative reference group was determined, and the effect size was calculated for each participant.

3.1 | Method

3.1.1 | Participants and procedure

One hundred and twenty-five participants completed the SGWB-ct on two occasions over a minimum of 10 weekly therapy sessions. These were active clients attending weekly person centred therapy sessions at a research clinic based in an English city.

The research clinic is staffed by student psychotherapists who are completing training placements during the final stage of their Master's Degree course. Access to the clinic is through self-referral, or guided self-referrals from a variety of primary and secondary mental healthcare teams across the city. The majority of clients sampled (87%) were able to identify themselves as experiencing at least one of the 15 identifiable problems or concerns in the CORE Therapy Assessment Form (V2; Evans et al., 2000); depression was experienced by 55% of the clients, anxiety 58%, trauma 35%, bereavement 12%, psychosis 2%, addiction 12%, and personality disorder 10%. The sample consisted of 45 males (36%), 70 females (56%) and 10 who identified as another gender (8%).

Following an initial brief telephone assessment, potential clients attend a structured intake interview. During this time, the research procedures of the clinic are explained, full written informed consent is sought, baseline measures are taken, and the client's Personal Questionnaire (PQ) (Elliott et al., 2016) is formulated. Once accepted to the clinic, the client is allocated to a therapist. The majority of clients attend up to 10 weekly sessions, although for some, therapy may be extended for a further ten sessions. Outcome measures are administered to clients at intake, sessions 1, 3, 5, 10, and if appropriate, 15 and 20. Our research, however, was only concerned with clients' progress over the first 10 sessions of therapy.

Ethical approval was granted by the university research ethics committee. Using these clinical data, we examined clinically significant change on the SGWB-ct. This was achieved by adopting the two-tiered analysis designed by Jacobson and Truax (1991). This test, commonly used within behavioral sciences, was designed to provide a calculation of "true change" in self report measures.

3.1.2 | Measures

14-item SGWB-clinical tool

For the purpose of this study we introduced the amended version of the 14-SGWB as described in Study 1 to conduct a pilot study into its clinical use.

Personal Questionnaire

The PQ is an individualized outcome measure, originating from work done by Shapiro (1961), who wished to create a measure that could identify specific changes in clients, whilst also allowing researchers to understand comparative changes between client groups (Elliott, R. et al., 2016). The PQ is based on the premise that each client has a unique set of problems and experiences that are specific to them and that traditional research methods using nomothetic standardized outcome measures, therefore, overlook each client's individuality. In response, the PQ asks clients to generate their own list of problem areas that are then rated for severity, and which provides an idiographic measure with which to assess the outcome of therapy. When tested the PQ shows good internal and temporal consistency reliability, results also correlate strongly with nomothetic outcome measures (Elliott et al., 2016). Longitudinally, the PQ is deemed sensitive enough to detect client change on a session by session basis, but also over an entire course of therapy. During the semi-structured intake interview, participants discuss the issues that have brought them to therapy. These are listed by the interviewer, ranked in order by the client and rated on a Likert-type scale, according to how much each issue has been of concern to the client over the last 7 days. The client is then asked to complete this measure during session 1, 5, 10, 15, and 20. The results are tallied using a mean score.

3.2 | Data analysis plan

The data were cleaned before pooling using Excel. A CFA was completed using LISREL v.10.2 on the SGWB-ct at time points one and two, evaluating the fit of the data to the hypothesized one factor model. Internal consistency reliability was tested using Cronbach's alpha using SPSS v22 at both time points. The PQ was analyzed, again using SPSS v22 to compare the responsiveness of the two outcome measures between the same time points. Focusing on the SGWB-ct, the RCI and the clinically significant change threshold was defined. Finally, effect sizes were calculated and the data was grouped accordingly using EXCEL (Table 1).

3.3 | Results

Table 2 shows mean scores for the SGWB-ct at two time points over 10 weekly sessions of therapy. Cronbach's alpha coefficients were calculated for points one and two.

The mean score on the SGWB-ct increased over the ten sessions from 31.02 to 37.32, which is a mean percentage change of 20.31%. As such, the SGWB-ct seems able to track changes over a comparatively short period. The mean percentage change on the PQ for this sample was comparatively less, showing a decrease from 5.10 to 4.47, a percentage change of 12.35%.

The CFA was repeated at both time points one and two for Study 2. The CFI at time point 1 was 0.83, at time point 2 this increased to 0.86 moving from moderate to good fit. The SRMR at time point 1 was 0.07, reducing to 0.06 by time point 2, both are within the parameters of cut off for good fit. The results of the CFA indicate that the SGWB is the only possible latent variable in the construct of the SGWB-ct.

The RCI was calculated by using the following process. First, the SEM was calculated as $SEM = s\sqrt{1-r_{xx}}$, where s and r_{xx} are the SD and reliability estimate (Cronbach's alpha) from the normative sample. Following this, the SE of the difference (Sdiff) was calculated using the squared SEM, $Sdiff = \sqrt{2(SEM \times SEM)}$. The reliable change was calculated by multiplying the SEM by the following Z-scores: 1.04 (70% confidence interval CI), 1.28 (80% CI), 1.64 (90% CI), and 1.96 (95% CI).

For this study, to be considered reliable using a 95% CI, change would need to show an increase of at least 8 points or more for the SGWB-ct between time points one and three. Although 69% of clients recorded an improvement in their well-being scores over ten sessions (see Table 3), according to the RCI, 38.71% of the sample recorded change large enough for it to be deemed reliable. When comparing the data for this sample and the data collected for the SGWB-ct in study one, it was possible to calculate a clinical cut off score for the measure.

Using Jacobson's clinical cut off score formula (method c; using both clinical and normative data) we were able to compute a cut off score of 39. This allows samples to be sorted according to their scores (see Table 2), into those scoring below 39, and classified as being within a "clinical" population, and those scoring 39 and above being within the "normal" population. To achieve clinically significant change a client must demonstrate an increase in well-being of 8 points or more, the pre-therapy score must be below the clinical cut off score (<39) and the time two score must show an increase of >8 and be >39, and therefore within the normal range of scores. Table 3 shows a summary of the findings. Overall, 86 participants (68.80%) showed an increase in well-being scores over the ten sessions. Of these, 48 (38.70%) demonstrated reliable change improvement, 32 (25.60%) of the participants recorded clinically significant reliable improvement, 66.67% (32 participants) who recorded reliable change also achieved clinically reliable change.

It was also noted that 32 clients showed a decline in their well-being scores over the ten sessions, but of these only 7 participants (5.60%) showed reliable change in their decline and 2 participants (1.60%) showed a clinically reliable decline.

The RCI is a useful tool for understanding degrees of therapeutic change. However, it is limited by its conservative nature, in that it does not consider changes that are reported as being significant by individuals, but

TABLE 1 Inter-item and inter-total correlation for 14 SGWB-S Scale items

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	TOTAL
1															0.69**
2	0.53**														0.63**
3	0.50**	0.44**													0.62**
4	0.58**	0.43**	0.53**												0.72**
5	0.32**	0.31**	0.32**	0.38**											0.57**
6	0.37**	0.31**	0.39**	0.43**	0.41**										0.67**
7	0.35**	0.28**	0.33**	0.39**	0.34**	0.57**									0.63**
8	0.52**	0.48**	0.46**	0.54**	0.38**	0.51**	0.61**								0.79**
9	0.32**	0.27**	0.23**	0.35**	0.33**	0.31**	0.33**	0.49**							0.57**
10	0.35**	0.35**	0.30**	0.37**	0.33**	0.38**	0.36**	0.47**	0.49**						0.62**
11	0.43**	0.33**	0.30**	0.46**	0.37**	0.45**	0.38**	0.46**	0.40**	0.54**					0.70**
12	0.37**	0.30**	0.26**	0.42**	0.35**	0.37**	0.37**	0.43**	0.39**	0.44**	0.71**				0.66**
13	0.39**	0.30**	0.30**	0.41**	0.33**	0.38**	0.42**	0.44**	0.42**	0.42**	0.55**	0.63**			0.65**
14	0.46**	0.35**	0.31**	0.40**	0.33**	0.26**	0.40**	0.45**	0.25**	0.27**	0.37**	0.38**	0.43**		0.60**

** Correlation is significant at the 0.01 level 2-tailed.

TABLE 2 Descriptive statistics for the 14-item SGWB-S and the PQ over two time points

Measure	Mean	SD	Min	Max	Cronbach's alpha
SGWB Time One (session 1)	31.02	9.31	14.00	58.00	.76
SGWB Time Two (session 10)	37.32	12.93	13.00	70.00	.95
PQ Time One (session 1)	5.10	1.20	3.00	7.00	
PQ Time Two (session 10)	4.47	1.32	1.00	6.15	

Abbreviations: PQ, Personal Questionnaire; SGWB, Scales of General Wellbeing.

are deemed as insignificant by the statistical model (Eisen et al., 2007). The effect size was also calculated, the results of which can be seen in Table 4. This is calculated using Cohen's *d*, which involves subtracting the SGWB-ct score at time 2 from time 1 and dividing this by the *SD* of the normative sample. The results depict values that represent ranges of clinical significance, whereby scores between 0.20 and 0.50 are deemed to show mild change, above 0.50 shows moderate change and above 0.80 shows large and significant change. Examining the overall effect size of the mean scores at time point one and three the total effect size was calculated as 0.63, which is classified as moderate.

3.4 | Discussion

Previous clinical studies have tended to consider reliable and clinically significant change using traditional measures of symptom reduction, whereas in the present study it has been shown that it is also possible to detect reliable and clinically significant changes in well-being. From our sample of 125 clients, 32 (25.60%) demonstrated reliable and clinically significant change in well-being over 10 therapy sessions. As it is unusual to assess well-being as an outcome in therapy, we were not sure what to expect but found these results encouraging in showing that such change is possible over the relatively short time period these data were gathered. The time period represents what clients typically receive in the research clinic where the study was conducted and also representative of the time frame of therapy available to most clinical psychology clients. As such, it was important that we were able to show that the new tool could be used to assess change over this period.

However, it is likely that more extended periods in therapy would be increasingly helpful. Previous studies on therapy dosage have discovered a range of results using traditional outcome measures to monitor how symptoms of psychological distress reduced on a session-by-session basis. Kadera et al. (1996) revealed that up to 50% of clients required at least 13 sessions before they surpassed the benchmark for clinically significant change. More recently, Lambert et al. (2001) suggested that 50% of clients classified as within the clinical range of scores achieved clinically significant change following 21 sessions. Future research on the performance of the SGWB-ct comparing clinically significant change session-by-session should be completed using larger clinical samples.

A small number of cases recorded a decline in well-being over the ten sessions, but such decline was minimal. It is relatively common for some clients to show deterioration in therapy. Some researchers (Lambert & Ogles, 2016; Mohr, 1995) have indicated that up to 10% of clients may deteriorate. It seems likely that such clients may have experienced other life events during this time, but it is possible that decline was due to therapy itself in some way. While this was not a focus for our research, we would strongly encourage future research to take into account when the client is showing signs of deterioration. While such investigation is beyond the scope of the present study, we plan that it may become the focus of a future qualitative investigation of those clients' experiences in therapy.

TABLE 3 Reliable and clinically significant improvement between session one and 10 SGWB scores

	Reliable significant change improvement		Clinically reliable improvement		Recorded improvement (neither clinical nor reliable)		No change		Deterioration	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %
Session 1-10 (n = 125)	48	38.7	32	25.6	86	68.8	7	5.6	32	25.6

Abbreviation: SGWB, Scales of General Wellbeing.

TABLE 4 Effect calculations between session one and 10 SGWB scores

	Positive effect		Substantial positive effect		Moderate effect		Deterioration	
	Count	Row %	Count	Row %	Count	Row %	Count	Row %
Session 1–10 (<i>n</i> = 125)	86	68.8	37	29.6	15	12.0	32	25.6

Abbreviation: SGWB, Scales of General Wellbeing.

4 | GENERAL DISCUSSION

It is our contention that changing the focus of clinical services from remediation to the nurturance of well-being is a worthwhile goal. As such, the development of measures that focus on positive psychological change promise to be important for the future of clinical psychology and psychotherapy. Our aim was to understand if it is possible to track state changes in positive functioning longitudinally, using methodology that does not rely on traditional measures of dysfunction. The WEMWBS is widely used in positive psychology research and practice. In seeking to develop a new clinical tool we thought that it was however, now increasingly dated and theoretically limited in its conceptualization of well-being, and thus chose to use an amended version of the 14-SGWB (SGWB-ct).

In the first study, we provided evidence for internal consistency reliability and convergent validity, as shown by a high correlation between the SGWB-ct and the WEMWBS. Following this we conducted a clinical study in which we introduced the amended version of the SGWB-ct as part of the ongoing assessment battery in a research clinic. The results of study two suggest that the SGWB-ct is a reliable index of clinical change. Overall, the results provide validation to the proposed use of the SGWB-ct.

Scores on the SGWB-ct have a possible range of 14–70, with a score of 39 representing a clinical cut-off; those scoring below 39 classified as being within a “clinical” population, and those scoring 39 and above being within the “normal” population. In this way, unlike other tools for the assessment of well-being, which are only able to offer an assessment of positive psychological functioning, and need to be used in conjunction with more traditional clinical measures, the SGWB-ct can be used to understand and assess a general clinical state as well as movement towards greater positive functioning.

However, there are some limitations and recommendations that we would make for future research. First, we note that study one was limited by the normative sample gender bias, and a lack of control for common method bias. Future studies might seek to test factor structure invariance across gender, ethnicity, socio demographic factors and diagnostic categories. Second, there is also an argument put forward by Clark and Watson (1995) who recommend that early clinical samples should be used, in preference to normative samples for clinical measure validation. However, the CFA results within Study 2 further demonstrated the single factor structure within a clinical sample. Third, it would be helpful to test the convergent validity of the SGWB-ct against more traditional measures of psychopathology and to assess its use with particular clinical populations. To what extent and in what ways can we reconceptualise existing psychological disorders and deficits as an absence of well-being? Fourth, further research is also now needed to test the SGWB-ct's sensitivity to change. Finally, there is a need to investigate whether introducing the assessment of well-being and giving equal attention to positive psychological processes makes clinical services more effective than traditional assessment concerned only with deficit and disorder.

While new research is encouraged to develop our understanding of the assessment and promotion of well-being in clinical settings, the current study represents an advance in the field by marrying the rigour of the conceptualization of well-being from positive psychology with the methodological techniques of psychotherapy change research, producing a new tool that is able to assess positive psychological change over clinically relevant periods. As such, we hope that this work will enable clinicians and researchers to engage with a positive psychological agenda and introduce ideas about the facilitation of well-being into their clinical work and to explore through new research how best to promote well-being therapeutically.

PEER REVIEW

The peer review history for this article is available at <https://publons.com/publon/10.1002/jclp.23166>

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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APPENDIX 1

14-item Scales of General Well-Being (14-SGWB-ct)

Instructions Below you will find 14 statements about your experiences. Please indicate how true each statement is regarding your EXPERIENCES OVER THE PAST WEEK. There are no right or wrong answers. Please choose the answer that best reflects your experience rather than what you think your experience should be.

	Not at all true	A bit true	Somewhat true	Mostly true	Very true
1. I feel happy					
2. I feel energetic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I feel calm	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Continues)

		Not at all true	A bit true	Somewhat true	Mostly true	Very true
4.	I'm optimistic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	In my activities, I feel absorbed by what I am doing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	I'm in touch with how I really feel inside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	I accept most aspects of myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	I feel great about myself	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	I am highly effective at what I do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	I feel I am improving	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	I have a purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	What I do in my life is worthwhile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	What I do is consistent with what I believe I should do	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	I feel close and connected to the people around me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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