



Assessment of positive functioning in clinical psychology: Theoretical and practical issues

Stephen Joseph ^{a,*}, Alex Wood ^b

^a Centre for Trauma, Resilience, and Growth, School of Sociology, Social Policy, and Social Work, University of Nottingham, Nottingham NG7 2RD, UK

^b School of Psychological Sciences, University of Manchester, Manchester, M13 9PL, UK

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ABSTRACT

Positive psychology has led to an increasing emphasis on the promotion of positive functioning in clinical psychology research and practice, raising issues of how to assess the positive in clinical setting. Three key considerations are presented. First, existing clinical measures may already be assessing positive functioning, if positive and negative functioning exist on a single continuum (such as on bipolar dimensions from happiness to depression, and from anxiety to relaxation). Second, specific measures of positive functioning (e.g., eudemonic well-being) could be used in conjunction with existing clinical scales. Third, completely different measures would be needed depending on whether well-being is defined as emotional or medical functioning, or as humanistically orientated growth (e.g., authenticity). It is important that clinical psychologists introduce positive functioning into their research and practice in order to widen their armoury of therapeutic interventions, but in doing so researchers and practitioners need also to be aware that they are shifting the agenda of clinical psychology. As such, progress in clinical psychology moving toward the adoption of positive functioning requires reflection on epistemological foundations.

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1. Introduction

Traditionally the profession of clinical psychology has been interested in the alleviation of human suffering. Studies of positive psychological functioning have been far outweighed by those concerned with psychological distress and dysfunction. But since

Martin Seligman (1999; Seligman & Csikszentmihalyi, 2000) introduced the positive psychology perspective there has been an increasing emphasis on the promotion of positive functioning (Duckworth, Steen, & Seligman, 2005; Linley & Joseph, 2004; Linley, Joseph, Harrington, & Wood, 2006). Clinical psychologists have been quick to recognise the applicability of this new perspective and a variety of psychometric instruments are now available which clinical psychologists can add to their armoury of assessment. In this paper, we aim to address the main challenges facing clinical psychologists. In

* Corresponding author. Tel.: +44 (0) 115 9515410.

E-mail address: Stephen.Joseph@Nottingham.ac.uk (S. Joseph).

particular we wish to focus on: (1) how the inclusion of positive functioning assessment within clinical psychology practice and research needs to be guided by theory that informs the relation between psychopathology and positive functioning, and (2) how the inclusion of positive functioning has implications for the development of clinical psychology and whether it will continue to be as strongly influenced by the medical model as the profession has been in the past.

Although the focus on positive functioning has attracted increased attention in the past few years, it has a longer history dating back to William James' writings on *healthy mindedness* (James, 1902), and in more recent times to work in humanistic psychology and Rogers' emphasis on *fully functioning* (Rogers, 1959), Maslow's concept of *self-actualization* (Maslow, 1954), Jahoda's positive definitions of mental health (Jahoda, 1958), and to work in the field of stress and coping such as Antonovsky's (1987) introduction of the term *salutogenesis* to describe the processes of healthy and optimal functioning, and Hollister's (1965) concept of *Strens* to describe stress that serves to strengthen the person in some way, to the modern concepts of posttraumatic growth (Tedeschi, Park, & Calhoun, 1998) and growth following adversity (Joseph & Linley, 2005). Thus the notion of positive functioning is not new, but it has never been fully integrated with clinical psychology. Traditionally, clinical psychology has been concerned with the assessment, for research and clinical purposes, of various forms of distress and dysfunction. While this seems understandable given the practitioner goals and research agenda of clinical psychology, it inevitably casts only a narrow spotlight on human experience.

There are two reasons why it is important for clinical psychology to adopt measures of positive functioning. First, clinical psychology has always been concerned with well-being but having adopted the language of psychiatry it has inadvertently restricted itself to a narrow definition of well-being which in practice is the absence of distress and dysfunction. Thus, the adoption of positive functioning serves to expand the remit of the field of clinical psychology in such a way as to broaden its field of enquiry consistent with the original aims of the field. Second, by adopting positive functioning as a goal there is the possibility that we are able to increase our ability to predict and treat distress and dysfunction as evidence suggests that well-being serves a preventative function against future psychopathology and relapse (e.g., Fredrickson, 1998, 2001; Garland, Fredrickson, Kring, Johnson, Meyer, & Penn, 2010-this issue; Watson and Naragon-Gainey, 2010-this issue; Wood & Joseph, 2010), and that the absence of positive characteristics such as gratitude predicts impaired well-being even after controlling for the presence of negative characteristics such as neuroticism (Wood & Joseph, 2010; Wood, Maltby, Gillett, Linley, & Joseph, 2008), and other clinical characteristics such as anxiety, anger, depression, self-consciousness, and vulnerability (Wood, Joseph & Maltby, 2008; Wood, Joseph & Maltby, 2009; see Wood et al., 2010-this issue).

Indeed, many of the problem areas in which clinical psychologists work are directly applicable to understanding positive functioning and as such clinical psychologists may already be working to increase the positive but without its explicit measurement this simply goes unnoticed. On the other hand, there may be areas of clinical practice which inadvertently serve to thwart positive functioning but without evidence this too remains unknown. There is a need therefore to begin to routinely include measures of positive functioning in ongoing research and practice in order to: (1) ascertain the extent to which clinical psychology is already engaged in the practice of increasing positive functioning; (2) develop new approaches which actively serve to promote well-being; and (3) increase the ability to treat distress and dysfunction. As personality and social psychologists working within clinical psychology contexts we are often called upon by our colleagues to advise on measurement issues related to positive functioning. While there are many extant instruments with which to

assess aspects of positive functioning, and their relevance to assessment and diagnosis in clinical psychology has been discussed (e.g., Keyes & Lopez, 2002), it is our view that measurement within positive clinical psychology needs to be guided by a deeper understanding of the epistemological issues underpinning positive functioning, and how these issues relate to current practice. Any therapy is underpinned by meta-theoretical assumptions (Joseph & Linley, 2006a; Wood & Joseph, 2007), and reflection on these assumptions is needed to make informed choice of measurement instruments. As already noted, clinical psychology has largely adopted the language of psychiatry, and thus grounded itself in the medical model and illness ideology, so how can it now begin to integrate issues of positive functioning in a theoretically coherent way?

2. Theoretically informed measurement

It is important to adopt the perspective that it is worthwhile to enquire about the range of functioning and to choose measurement tools that are able to capture the range and diversity of human experience relevant to the particular clinical or research context. Although at first glance it seems relatively straightforward for clinical psychology to introduce measures of positive functioning alongside existing measures of psychopathology in order to develop these new strands of research and practice, the inclusion of positive functioning assessment within clinical psychology practice and research needs to be guided by theory which informs the relation between psychopathology and positive functioning.

The choice of measurement starts with our conception of the phenomena under investigation (Maddux, Gosselin, & Winstead, 2005; Maddux et al., 2004). For example, one of the most basic of all issues is whether we adopt taxonomic or dimensional understandings (Beach & Amir, 2003). In general, clinical psychology, following in the footsteps of psychiatry, has adopted a taxonomic approach, although over the past decade a dimensional approach has found increasing favour even in areas such as the study of psychosis (e.g., Peters, Joseph, & Garety, 1999), and posttraumatic stress disorder (e.g., Anthony, Lonigan, & Hecht, 1999; Joseph, Williams, & Yule, 1997). This is of fundamental concern as of course a taxonomic approach grounded in a medical ideology is by definition not concerned with well-being, simply the presence or absence of disorder. The dimensional approach, while not necessarily interested in positive functioning, is at least consistent with its inclusion as a focus of clinical research and practice.

There are three main categories of measures that can be used in clinical research and practice.

- First, many existing measures that are widely used in clinical psychology may already be capturing elements of positive functioning. Focusing on positive functioning may therefore be a matter of re-interpretation of existing measures.
- Second, there are a large number of existing measures of positive functioning that are not widely used in clinical psychology but which could be readily assimilated into ongoing research programs and used alongside existing measures.
- Third, there are measures of positive functioning that would require a shift in focus of mainstream clinical psychology to accommodate a different theoretical perspective.

Each of these three categories of measures will be reviewed below.

2.1. Reinterpreting existing measures

It is possible that measures already used by clinical psychologists provide indices of positive functioning, although this is currently unacknowledged due to the existing conceptualizations of those measures. This first approach therefore is to examine and reinterpret existing measures in order to understand their construct validity in relation to positive functioning. The suggestion that existing measures

of psychopathology may already assess positive functioning arises from the theoretical understanding that positive and negative functioning are not separate dimensions, but rather that they exist on the same continuum. There are two versions of the continuum approach, first, a “weak” version, which sees positive and negative functioning to be separate continuums, but both to be subsumed by a higher order well-being continuum; and, second, a “strong” version which sees affective states to exist on continuums. The weak version is widely accepted, although the strong version is a matter of continued debate.

2.1.1. Higher order approaches – “weak” version

The concept of subjective well-being provides a hierarchically organized conception of subjective well-being. At the highest level of the hierarchy is a latent well-being variable which is a continuum ranging from extreme low to extreme high well-being. At the next level of the hierarchy are positive affect, negative affect, and high satisfaction with life. Each of these three variables can be broken down further at the next level of the hierarchy, with positive affect comprising such variables as happiness, relaxation, excitement, and interest; negative affect comprising such variables as stress, anxiety, hostility, fear, and shame; and satisfaction with life comprising variables that represent cognitive evaluations about the self, world, and future. There has been much debate as to whether certain aspects of the lower parts of the hierarchy are separate (such as whether positive and negative affect are genuinely separate dimensions, e.g., Russell & Carroll, 1999; Watson, this issue). However, the independence of the variables composing the lower levels of the hierarchy is not relevant to the primary issue, which is that there is now consensus in the emotion literature that at the highest level of the hierarchy the SWB construct varies on a single continuum from low positive affect, high negative affect, and low satisfaction with life, to high positive affect, low negative affect, and high satisfaction with life (Diener, 1984; Diener, Suh, Lucas, & Smith, 1999). The relevance of this research to clinical psychology is that it suggests that many of the existing measures that are used (e.g., those measuring anxiety, depression, quality of life, stress, negative automatic cognitions) also influence positive functioning through the higher order SWB construct. An appreciation of the hierarchal nature of SWB may help

integrate clinical work better within personality literature, and provide an alternative theoretical framework for the practice of clinical psychology to that of the medical model which is currently dominant in clinical psychology (Maddux et al., 2004).

2.1.2. Lower order approaches – “strong version”

The strong version of the continuum approach suggests that certain (or all) of the lower down level of SWB are continuums ranging from positive to negative functioning. Perhaps least controversially, is the view that the cognitive evaluations are often continuous. For example, various locus of control scales exist which conceptualize the perception of control along a single dimension of externality to internality (e.g., Berrenberg, 1987), or several attributional continuums, i.e., internality versus externality, controllability to uncontrollability; temporary to long lived; and personal versus universal (Peterson & Seligman, 1984). Thus a depressed person who fails an exam may make the attribution “I am stupid”; – uncontrollable, internal, and long lived. A happy person, on the other hand, may make the attribution “the teacher didn’t cover the material”; – a cause that is uncontrollable, external, and short lived (at least presuming the teacher is not representative of the faculty). Thus in this conception, the cognitive style of well-being operates on three dimensions, each of which is a continuum.

More controversially, is evidence that the major affective disorders studied by clinical psychologists exist on separate dimensions. This arises from the circumplex model of emotions (see Fig. 1), in which there are two broad orthogonal dimensions of unpleasant–pleasant emotions, and deactivation – activation, respectively (Russell & Barrett, 1998). Although these are conceptually useful dimensions in emotion research, their direct application to clinical psychology research and practice is limited. However, these two dimensions do approximate to the clinical dimensions of what we refer to as the depression – happiness, and anxiety–relaxation, continuums.

In clinical practice and research the two most widely assessed affective states are depression and anxiety. Numerous measures exist with which to assess these states (Santor, Gregus, & Welch, 2006). Mainstream clinical psychology generally regards these are separate dimensions to positive functioning. But the strong version would propose that depressive and anxious states are continuous with

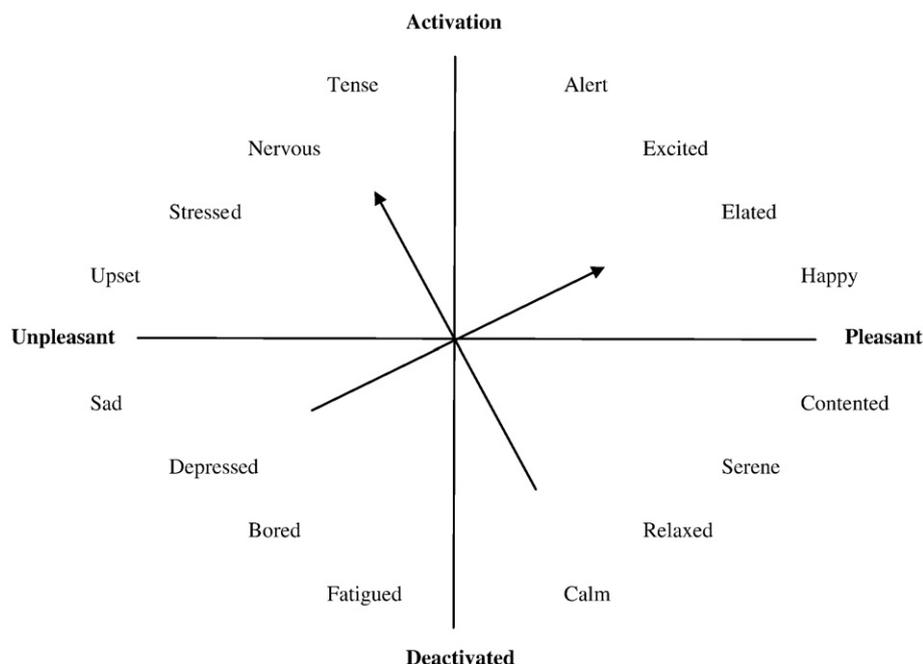


Fig. 1. Circumplex of emotions (arrows show the Depression–Happiness, and anxiety–Relaxation continuums).

happiness and relaxation states, respectively, and form two separate continuums. Factor analysis of items tapping all four quadrants of the circumplex model yields two factors which largely correspond with this conception. For example, Warr (1990) obtained data from 1686 employed men and women who were interviewed at home in 75 locations throughout the United Kingdom and asked to complete questionnaires containing 3 items from each of the four quadrants (quadrant 1 – tense, uneasy, worried; quadrant 2 – cheerful, enthusiastic, optimistic; quadrant 3 – depressed, gloomy, miserable; quadrant 4 – calm, contented, relaxed) in response to the question “Thinking of the past few weeks, how much of the time has your job made you feel each of the following? Responses were: never, occasionally, some of the time, much of the time, most of the time, all of the time; and answers scored from 1 to 6 respectively. Non-job related well-being was also assessed using these items, but preceded with the question, “in the past few weeks, how much of the time in your life outside your job have you felt each of the following? Warr (1990) noted that previous research that has demonstrated the separation of responses into positive and negative item groupings as opposed to the existence of two bipolar continuums most likely reflects the operation of acquiescent response set which serves to reduce the strength of correlation between negative and positive scale items and increase the strength of correlation within the negative and positive item groupings.

Depressive and anxious states are usually conceptualised in clinical research and practice as separate dimensions (Endler, Cox, Parker, & Bagby, 1992; Feldman, 1993; Watson et al., 1995), but not as dimensions that are continuous with happiness and relaxation. As such, practitioners and researchers do not tend to choose measures which adopt the strong approach. For example, one of the most prominent measures is the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Scores on the BDI have a potential range of 0 to 63. A score of 63 indicates intense depressive experience. A score of zero on the BDI indicates the absence of depressive experiences, as would be expected given its exclusive pathological wording, but a score of zero does not indicate the presence of positive functioning. For two people scoring zero, one could be high on positive functioning, the other low. By itself the BDI does not provide a measure of positive functioning.

But this is not the case with all extant measures of depressive or anxious states. For example, in contrast, the Centre for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), which along with the BDI is one of the five most widely used scales in both basic science and treatment outcome research (Santor et al., 2006), appears to represent a depression to happiness continuum. The CES-D has very strong psychometric properties, converging with the Beck Depression Inventory (BDI) ($r=.81$) and Zung measure of depression ($r=.90$), and showing a high accuracy in correctly identifying depression amongst acute depressives (99% sensitivity), alcoholics (93% sensitivity, 83% specificity), and schizophrenics (93% sensitivity, 86% specificity) (Weissman, Sholomskas, Pottenger, Prusoff, & Locke, 1977), but, unlike the BDI, it is also able to assess the presence of happiness. In addition to rating the frequency of 16 negative items (e.g., “I felt sad”, “I felt I could not shake the blues even with help from my family or friends”; “I thought my life had been a failure”), participants also rate the frequency of four positively worded items (“I felt happy”; “I enjoyed life”; “I felt that I was just as good as other people”; “I felt hopeful about the future”). These items appear to represent the presence of happiness (Joseph, 2006a). The normal coding of the CES-D involves reverse coding the positive items and totaling all items to form a single score ranging from 0 to 60 (Radloff, 1977). Joseph (2006a) argues that a score of zero does not represent the absence of depression, but rather the presence of well-being. For a score of zero to occur, a person would have to give all of the negative items the lowest possible score (“rarely or none of the time”), and all of the positive items the highest possible score (“most or all of the time”). For such a person it would be misleading to state that they have indicated an absence of depression;

such an individual has clearly indicated the presence of a high level of well-being. Thus the CES-D, as conventionally coded, ranges from a negative pole (depression), through a true zero-point, to happiness, and therefore might equally well be called the *Centre for Epidemiological Studies Happiness Scale* (Joseph, 2006a). As well as having face validity, confirmatory factor analysis has shown that after statistically controlling for positive and negative wording of items, the CES-D measures a single continuum of depression/happiness (Wood et al., 2010). While the highest end of the scale represents what we might refer to as depression, and the lower end, happiness, the point here is that this is a continuum and that while these are appropriate labels for the end points, dimensionally speaking, happiness and depression are synonymous, i.e., simply different terms used to describe the same phenomena as observed through two different lens.

We have focused on depression to exemplify the argument for the strong version, but it applies equally well to anxiety. For example, Spielberger's State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983), like the CES-D, consists of an equal balance of positively and negatively worded items, and therefore provides in practice a measure of the anxiety-relaxation continuum. But, as with the CES-D, it is rarely used in this positive psychological way, and the research literature on anxiety, as with depression, does not distinguish between studies using such continuous measures, and those which do not. However, some research has now begun to take these ideas forward, such as Fowler and Christakis (2009) who used the CES-D coded as a measure of happiness in the Framingham heart study. As most research and practice does not adopt the strong approach, the continuums of depression to happiness, and anxiety to relaxation (as might be being assessed by the CES-D and STAI, respectively) has traditionally not been a consideration in choosing which measure of depressive or anxious state to use. However, with the shift to positive functioning, this does become an additional and important consideration.

Our discussion above highlights those measures that we are most familiar with in our own research. It is not meant as exhaustive. Other popular measures which may also inadvertently provide a measure of positive functioning are the Hospital Anxiety and Depression Scales (HADS; Zigmond & Snaith, 1983) and the General Health Questionnaire (GHQ; Goldberg & Williams, 1988). The HADS is a widely used measure of anxiety and depression but contains a balanced number of negatively (“I feel as if I'm slowed down”, “I feel tense or wound up”) and positively (e.g., “I feel cheerful”, “I can sit at ease and feel relaxed”) worded items, which are rated for frequency, so that what goes unnoticed in scoring the HADS is that low scores represent more than simply the absence of anxiety and depression but an endorsement that the person feels cheerful and relaxed. Similarly, the GHQ, depending on which version is employed, contains several positively worded items (e.g., “been feeling reasonably happy, all things considered”) to which the person can endorse “more so than usual” so that lower scores also represent a high level of positive functioning. The need now is to identify other areas of clinical psychology and other extant measures where reconceptualisation is possible, in order to give researchers and practitioners an informed choice, and to begin to go back to the evidence base to examine whether what we know is related to the choice of measure.

2.1.3. Implications

It has been considered axiomatic in the positive psychology movement that only a small amount of previous research has focused on positive relative to negative functioning (e.g., Gable & Haidt, 2005; Myers, 2000). Whilst it may be true that research is somewhat overbalanced, and it is certainly true that the *focus* has been towards negative functioning, there may be huge amount of work into depression and anxiety that directly elucidates happiness and relaxation – as at the core, they are the same concepts. The first implication of the continuum approach is to highlight the unnecessary

duplication of effort. The positive psychology movement appears exclusively focused on topics such as happiness and relaxation, and much of the research starts from scratch, on the assumption there is no research base to draw upon. The continuum approach suggests that this attitude disregards the huge amount of relevant work emerging from clinical psychology, and that there may already be a substantial literature relevant to understanding positive functioning within clinical psychology.

In particular, reconceptualizing happiness and depression, and anxiety and relaxation as two single continuums has a number of implications for clinical psychology. Most notably, research using existing measures such as the CES-D, STAI, or the HADS may already be assessing happiness and relaxation. In planning research designs into happiness and relaxation, previous research with these three scales can be guiding. We suggest that it could be worthwhile for researchers to reanalyze existing data sets from the positive psychology perspective. For example, what would we learn if we examined the literature using the CES-D from the lens of happiness as opposed to depression?

A second implication of the continuum approach is that therapies that are effective for depression and anxiety may also be effective for increasing happiness and relaxation. Of course, it is possible that different therapies would be needed even if depression/happiness and anxiety/relaxation were continuums, if there was a non-linear relationship where different therapies worked better at different places on the continuum. However, the continuum approach at least raises the possibility that the same therapies would work for both improving positive and negative functioning, a possibility that seems notably lacking from many areas of current research. For example, the current approach within positive psychology appears to be to design specific interventions for happiness (Duckworth et al., 2005; Seligman, Steen, Park, & Peterson, 2005), apparently on the assumption that positive functioning is fundamentally different from negative functioning. Thus new interventions are developed to change the positive are considered in isolation to interventions to change negative functioning. The new positive interventions have generally not been compared to existing clinical interventions. The one study that has shown promising results that positive psychotherapy leads to improvement and to more remission from depression than treatment as usual and treatment as usual with medication (Seligman, Rashid, & Parks, 2006). However, this was a single small study, in which participants were either randomized to a positive intervention, or “treatment as usual”, also compared with a non-randomized group which received medication. Drop out ranged from 13% to 40%, and final Ns ranged from 9 to 12.

The widely advocated gratitude interventions (see Wood et al., 2010–this issue) have never been compared to existing techniques from clinical psychology such as CBT, raising the possibility that they are grossly inferior. Notably, this has been done even when the gratitude therapies have been used to target depression. Whilst seeming strange from continuum approach, it is perfectly understandable from a perspective where positive and negative functioning are separate concepts; comparing “positive” and “negative” functioning therapies would be mixing the proverbial apples and oranges. However, this approach is regrettable as any claims for the efficacy of new approaches should be compared to gold standards in existing research. Additionally, this arbitrary separation prevents the possibility that aspects of positive therapies can be added to existing therapies for dysfunction. For example, it may be that adding a gratitude intervention to an existing CBT programs may have additional benefits than either approach alone (Geraghty, Wood, & Hyland, 2010, 2010; see Wood et al., 2010–this issue).

2.2. Replacement and adjunct measures

As we have seen a number of existing and widely used clinical measures inadvertently tap into the positive. However, while this

means that we can reappraise the extant literature using these scales and begin to incorporate positive psychology relatively easily into clinical psychology, these older scales lack the psychometric refinement of some of the newer scales which have been specifically developed within positive psychology.

2.2.1. Positive clinical psychology measures

Many of the newer positive psychology measures are as limited as the older clinical scales because of their singular focus on the positive. Indeed, the very emergence of positive psychology can be seen as a reaction to clinical psychology. As clinical psychology adopted the taxonomic approach inherent in medical ideology, positive psychology inevitably adopted the other side of the taxonomy, and as a consequence serves to condone the medical model insofar as it restricts itself to the plus side of human experience (Joseph & Linley, 2006b). If, however, clinical psychology had adopted the dimensional approach inherent in humanistic psychology, there would then have been no need for positive psychology and its newer applications such as coaching psychology (Joseph, 2006b; Joseph & Linley, 2006b).

Thus, relatively few measures have been developed which are designed to appeal specifically to the needs of clinical psychologists interested in psychopathology but who wish to incorporate the positive psychology approach. One example of a dedicated positive clinical psychology measure is the Depression–Happiness Scale (Joseph & Lewis, 1998). The Depression–Happiness Scale (DHS) was developed in response to the specific need for a statistically bipolar measure. It consists of 25 items, 13 of which are negatively worded (e.g., I felt sad) and 12 positively worded (e.g., I felt happy) (Joseph & Lewis, 1998). Psychometric analyses support the one component structure, internal consistency reliability, and convergent validity of the DHS (see, Joseph, Lewis, & Olsen, 1996). For clinical use, a short 6 item version is recommended (Joseph, Linley, Harwood, Lewis, & McCollam, 2004). The DHS was developed from as a tool for use in clinical research as an alternative to extant unipolar measures of either depression or happiness. In our view, it is the development of measures which integrate the needs of mainstream clinical psychology with the positive psychology perspective which promises to be the most useful avenue for psychometric development in the coming years.

2.2.2. Subjective well-being and psychological well-being

Various measures of positive functioning exist which researchers and practitioners may wish to include alongside traditional assessment tools, or alongside some of the newer measures assessing the full continuum of well-being (Lyubomirsky and Lepper, 1999; Tennant et al., 2007). Positive psychology has opened up new understandings of what constitutes well-being and optimal functioning that go beyond traditional measurement. Most notably, it has become clear that there is an important distinction to be made between psychological well-being (PWB) and subjective well-being (SWB) (Waterman, 1993). Both SWB and PWB have relevance for clinical psychology, but traditionally the focus of clinical psychology has been on SWB, rather than PWB.

PWB and SWB are derived from two general philosophical perspectives, the eudemonic and the hedonic approach, respectively (see, Ryan & Deci, 2001). SWB is often conceptualised as involving high positive affect, low negative affect, and high satisfaction with life (Diener, 1984; Diener et al., 1985). In contrast, PWB reflects engagement with the existential challenges of life (see, Ryan & Deci, 2001), and is often operationalized as involving autonomy, self-acceptance, environmental mastery, purpose in life, positive relationships with others, and personal growth (Ryff & Keyes, 1995; Ryff and Singer, 1996), although other conceptions also exist (Kashdan, Biswas-Diener, & King, 2008). PWB and SWB are empirically separable, with exploratory factor analyses showing the PWB and SWB forming separate factors, and that the two factor structure is invariant across age, sample, gender, and ethnicity (Linley, Maltby, Wood, Osborne, & Hurling, 2009). A two factor structure has also been

shown to fit the data better than a one factor model (Keyes, Shmotkin, & Ryff, 2002; Compton et al., 1996; Ryff & Keyes, 1995), and SWB and PWB may have different biological correlates (Ryff et al., 2006).

PWB is of relevance for clinical psychology and deserves increased attention, first, although the factors are empirically separable, they are highly correlated. Latent correlations between the PWB and SWB factors have previously been reported as, $r = .76$ (Linley et al., 2009) and $r = .84$ (Keyes et al., 2002). Correlations of this magnitude are ordinarily taken to indicate equivalence. Such findings suggest that perhaps some of the more medically orientated models of dysfunction should be changed to incorporate the findings that low SWB (often representing psychopathology) normally goes together with low PWB. This suggests that a large component of disorder may involve a low level of existential functioning, represented within PWB, as would be predicted by various humanistic and existential perspectives (e.g., Rogers, 1959; Yalom, 1980).

Second, low PWB represents a risk factor for psychiatric illness. Cross-sectionally, PWB is strongly correlated with depression (Ryff, 1989a,b; Ryff & Keyes, 1995; Ryff, Lee, Essex, & Schmutte, 1994). Wood and Joseph (2010) studied the effect of low PWB on the onset of clinical depression in a sample of over 5500 people over a ten year period (using a cohort of people initially aged 55–56). People low in PWB were over seven times more likely to meet clinical cut-offs for depression 10 years later. With very conservative control variables (including initial depression, personality, demographic, economic, and physical health variables) people with low PWB were still more than twice as likely to be depressed 10 year later. This suggests that even if middle aged people with low PWB are not currently meeting the diagnostic criteria for depression, low PWB represents a “time bomb”, which is likely to lead to depression in older age.

Third, interventions have been developed to increase PWB (Fava, Rafanelli, Cazzaro, Conti, & Grandi, 1998; Fava et al., 2005), which seem to be successful for the treatment of the residual effects of affective disorders. More research is needed as to whether these approaches may be successful in treating the disorders themselves, perhaps as a form of adjunct therapy. Given the risk factor of low PWB for later depression, such therapies may have a valuable protective affect.

Forth, whilst people are generally equally high (or low) on PWB and SWB, the robust two factor structure suggests that some people are “off diagonal”, being high on one factor, but low on the other. Only one previous study has examined the consequences of such a well-being profile; Keyes et al. (2002) showed that adults with higher SWB than PWB were more educated, older, with higher levels of openness. Much more clinical research is needed into understanding the consequences of having a pleasant (high SWB) but existentially meaningless (low PWB) life.

Fifth, on a theoretical level, for certain lines of research and therapeutic practice, a focus on PWB over SWB may be more appropriate. For example, in the treatment of PTSD the chief concern is the alleviation of distress (i.e., increase SWB) whereas the new field of posttraumatic growth (PTG) is concerned with increased PWB. A variety of measures have been developed to assess PTG, such as the Changes in Outlook Questionnaire (CiOQ; Joseph, Williams, & Yule, 1993), and the Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996). Thus it may be that researchers and clinicians will now wish to include measures of growth alongside traditional measures of PTSD. Trauma is but one example of where this is possible. More routinely, a variety of other measures are also available with which to assess PWB, most notably Ryff's Psychological Well-Being Scales, and other such measures which tap into constructs such as sense of purpose, meaning in life, autonomy, self-determination, – constructs which have traditionally been ignored as the focus for assessment and outcome evaluation in clinical practice and research.

3. Measures from different perspectives

As already noted, the notion of positive functioning is not new to psychology but dates back to earlier psychologies. As such, a number

of self-report scales have already been developed throughout the history of psychology to measure aspects of positive functioning. For example, a number of psychometric instruments exist based on humanistic conceptualizations of self-actualisation that reflect the theoretical work of both Maslow and Rogers (see, for example, Lefrancois, Leclerc, Dube, Herbert, & Gaulin, 1997; Shostrom, 1966a; Sorochan, 1976). While it is beyond the scope of this review to review this literature extensively, the most widely used of all the self-actualisation measures is the Personal Orientation Inventory (POI) (Shostrom, 1966a). This is a 150-item scale that is composed of the two subscales of time competence and inner directedness. Time competence is a measure of ability to live in the ‘here and now’ (Shostrom, 1966a). A person high in this factor will, characteristically, be less anxious, have less feelings of guilt, have few regrets about the past, and will have goals that are meaningfully tied to current goal pursuits (Shostrom, 1966a). Inner directedness is a measure of reactivity orientation that is basically directed toward the self, such that the person lives in a manner that is relatively autonomous from the influence of others (Shostrom, 1966b). A number of research studies have confirmed the validity of the POI (e.g. Fox, Knapp & Michael, 1968; Shostrom & Knapp, 1967).

From a combined humanistic and social psychological perspective, the Authenticity Scale (Wood, Linley, et al., 2008) was partially designed to be an outcome measure in therapy. Authenticity is conceptualised with a Tripartite Model, involving three components; (1) self-alienation, representing an inconsistent identity and the extent to which a person's self is incongruent with actual experiences and deeply held beliefs; (b) accepting external influence, instead of self-directing; and (3) authentic living, or behaving in ways consistent with beliefs and values (self-alienation and accepting external influence represent inauthenticity, whereas authentic living represents authenticity). This conception integrates views of well-being from person-centred (Rogers, 1959) and psychodynamic (Horney, 1950) world views (seeing psychopathology as involving a divided self), with perspectives from social psychology which focus on the negative consequences of having an inconsistent personality across social roles (e.g., Bettencourt & Sheldon, 2001).

All psychometric measures are developed on the basis of a particular epistemological foundation. Thus, while high scores on such measures as the POI indicate the presence of positive functioning, low scores are indicative of psychopathology but as understood from the perspective of humanistic psychology as opposed to current conceptions of psychopathology as framed by the Diagnostic and Statistical Manual (American Psychiatric Association, 2000). Thus, while such measures are psychometrically valid and continue to be used in a variety of research contexts, their applicability to modern clinical psychology is often seen as limited because of their different epistemological foundations. Modern clinical psychology has generally constructed its research and practice agenda on the basis of cognitive-behavioural constructs grounded in an understanding of psychopathology as defined by the American Psychiatric Association's Diagnostic and Statistical Manual. While this has proved fruitful for the professional development of clinical psychology, what this points to is the complexity involved in including measures of positive functioning that have their roots in alternative epistemological foundations; and also the pressure on alternative therapeutic approaches such as the person-centred approach to be evaluated from the perspective of the medical model as opposed to their own epistemological foundations and measurement constructs (Joseph & Worsley, 2005; Patterson & Joseph, 2007).

As an example of the importance of understanding the epistemological foundations, and the complexities involved, we might return to the new field of PTG. As already mentioned, measures of growth are now often employed as adjunct measures to measures of posttraumatic stress disorder (PTSD). While this might seem sensible to many, particularly if we view PTSD as representing the SWB tradition and growth the PWB tradition, the issue runs deeper theoretically.

PTSD and growth represent two mutually exclusive paradigms, broadly that of the medical model and humanistic psychology, and as such the concept of growth can be taken as representing an alternative paradigm for understanding trauma (Joseph & Linley, 2006a,b,c), drawing as it does on the specific theoretical view that individuals are intrinsically motivated towards growth.

Thus, rather than simply providing an adjunct area of measurement for PTSD research and practice, the field of PTG offers a way of thinking about trauma that replaces PTSD for those who adopt this alternative humanistic epistemological perspective on human suffering (Joseph & Linley, 2005, 2006b).

Likewise, a number of measures approach positive functioning from other paradigms. For example, measures such as the Authenticity Scale described above (Wood, Linley, et al., 2008), the Mindfulness Attention Awareness Scale (MAAS) (Brown & Ryan, 2003), the Self-Determination Scale (Sheldon & Deci, 1996), or the Unconditional Positive Self-Regard Scale (Patterson & Joseph, 2006). These measures are not derived on the basis of DSM constructs, but are derived from their own epistemological base in contemporary humanistic, or modern cognitive and positive psychologies and as such provide alternative ways of conceptualising distress and dysfunction. For example, the Authenticity Scale (Wood, Linley, et al., 2008) is a positive psychological measure based on contemporary person-centred theory in which psychopathology, rather than being conceptualised from the perspective of DSM, is conceptualised as lack of congruence between conscious awareness, inner emotional and cognitive states, and the social environment.

Thus introducing a new set of measurement tools into the everyday vocabulary of clinical psychology with which to assess positive functioning is not a straightforward task, but one that requires thoughtful consideration of how existing theoretical frameworks must either (1) readily assimilate the idea of positive functioning, or (2) change in order to accommodate positive functioning, or (3) be reconceptualised in favour of new theoretical frameworks. There are a number of implications that arise out of this discussion.

4. Implications

The question arises as to whether existing treatments for psychopathology also serve to increase positive functioning. It is likely that many of the current therapies that have been developed for depression, anxiety, and other problems also serve to increase positive functioning. This can readily be investigated for those therapies founded on a theoretical base that already predicts positive functioning as the outcome. An exemplar of this is client-centred therapies with their prediction of movement toward fully functioning. As such what is required is the explicit use of measures which tap into the concept of fully functioning. Other extant therapies whose theoretical base does not lend itself readily to an understanding of positive change may need to make some theoretical accommodation in order to formulate a congruent measurement strategy for the assessment of positive functioning. For therapies grounded in the medical model this may involve some reconceptualisation of existing constructs.

However, it is possible that some current treatments thwart positive functioning. This may be the case for those therapies founded on different epistemological foundations. For example, this has previously been suggested in relation to whether treatments for PTSD inadvertently serve to thwart posttraumatic growth (Joseph & Linley, 2006b). From the perspective of growth theory as an alternative epistemological position to that of the medical model (Joseph & Linley, 2005), PTSD is indicative of emotional processing and thus attempts to alleviate PTSD could halt processing prematurely. Thus, it is necessary to include appropriate measures of positive functioning within existing research outcome research. Third, therapeutic methods consistent with new positive functioning constructs may need to be developed. Much work on mindfulness, or posttraumatic growth, for example, is of this nature.

4.1. Research design

As already noted, understanding that measurement must be based on epistemological foundations has important implications for the design of research into therapy effectiveness. For example, do current CBT based treatments for depression also lead to greater positive functioning? Do CBT treatments for PTSD lead to greater perceived benefits? Such questions are easily approached by using one of the measures of depression such as the CES-D which incorporate happiness in its operational definition; or by adopting a measure of perceived benefits alongside measures of PTSD. This is consistent with the epistemological position of the research question. Such a research question lends itself relatively easy to incorporation with existing clinical single case design, or waiting list comparison research trial.

However, a more complex question such as whether CBT based treatments are superior to humanistic approaches in the facilitation of positive functioning needs to recognise the different epistemological approaches of the two therapeutic methods. In this case it would be theoretically consistent with cognitive theory to assess well-being as operationally defined as happiness as measured by the CES-D and consistent with humanistic theory to assess well-being as operationally defined as self-actualisation as measured by the POI. The ideal trial would therefore include outcome measures consistent with the epistemological foundations of both forms of therapy in order to answer the question of which therapy is more effective in relation to well-being. If one therapy is truly superior, then this ought to be reflected on both measures. Rarely, however, is this done and trials tend to evaluate from one epistemological approach only, for example comparing cognitive and person-centred forms of therapy for the alleviation of depression. While results show that both cognitive-behavioural and person centred therapies are equally effective for depression (e.g., Ward et al., 2000), what we don't know is how they compare on the facilitation of personal growth. In one of the only studies to compare CBT and humanistic therapies on multiple dimensions Shechtman and Pastor (2005) showed differences in observer rated client behaviour during therapy (with CBT being higher on cognitive exploration, and humanistic higher on affective exploration and insight). Both therapies were equal on the overall outcome measures (academic improvement), although the studies raises the possibility that both therapies would be superior on some outcomes, if those outcomes reflect the aims and theoretical basis of the therapy.

4.2. Pluralism

Positive functioning is a higher order construct that can be understood from a variety of theoretical perspectives, and thus operational defined in very different ways. There is no intrinsic superiority to the definition of positive functioning as a lower score on the CES-D as opposed to a higher score on the POI. Both are measures of positive functioning but developed from different epistemological perspectives. Thus, a further implication is to adopt a more pluralistic approach to outcome measurement than is currently the case. While clinical psychology has largely adopted the DSM as a framework with which to understand psychopathology, no such single framework has so far been widely adopted for positive functioning. We do not think that such a unitary framework for understanding positive functioning is desirable, but rather encourage the development of a pluralistic approach in which the different epistemological bases that inform measurement are equally valid, thus allowing for a more sophisticated armoury of measures to be developed, and for it to be more widely understood that empirical research is always from an epistemological perspective.

While psychometric work is to be encouraged it would be a mistake, we believe, for positive functioning research to rely exclusively on self-report, and there is a need also for the development of standardised interview schedules with which to assess positive functioning.

Interviews and self-reports are both limited and we should also seek to develop more behaviourally based methods of positive functioning although we foresee this as the most difficult area to progress as unlike traditional indicators of functioning, such as days of illness, visits to the physician, positive functioning tends to be subjective and hard to operationalize at a behaviour level, but some attempts have been made, such as money donated to charity, engagement in community work.

5. Conclusion

The above discussion has been concerned with therapy outcome research and clinical assessment as this is a main concern. Research, however, must also continue to investigate what psychological processes lead to reduced psychopathology. It is here that the greatest contribution is likely, as research has begun to show measures of positive functioning to be strong predictors of outcome and to provide incremental validity over and above existing constructs. It is important that practitioners begin to introduce positive functioning into their practice in order to widen their armoury of therapeutic interventions and theoretical frameworks. By introducing positive functioning, practitioners are also shifting the agenda for the client in such a way as to change the meaning of therapy for the client so that it can be less likely to pathologise and label. Expectations also shift in terms of what to expect from therapy and when a desired outcome is reached.

Finally, in this article we have sketched out the territory of debate and the questions that clinical research must now address as they begin to adopt the idea of positive functioning. First, it is important to choose measures compatible with existing ways of working to test out the extent to which existing ways of working already serve to increase positive functioning. Second, we need to choose measures compatible with alternative conceptions of positive functioning when this is appropriate. The main message, however, is that progress in clinical psychology moving toward the adoption of positive functioning must be steered by a reflections on its epistemological foundations, and the different ways in which positive functioning relate to the current concerns of clinical psychologists.

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