



Murphy, David and Demetriou, Evangelia and Joseph, Stephen (2015) A cross-sectional study to explore the mediating effect of intrinsic aspiration on the association between unconditional positive self-regard and posttraumatic growth. *Person Centered and Experiential Psychotherapies*, 14 (3). pp. 201-213. ISSN 1477-9757

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A cross sectional study to explore the mediating effect of intrinsic aspiration on the association between unconditional positive self-regard and posttraumatic growth.

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Abstract

Person-centered psychotherapy is based on the growth paradigm of psychological distress. Person-centered therapy is, therefore, ideally placed to facilitate posttraumatic growth. There were two aims of this study. The first was to explore the association between unconditional positive self-regard and the construct of posttraumatic growth. The second was to explore the mediating effect of intrinsic aspirations on the association between unconditional positive self-regard and posttraumatic growth. A cross sectional correlation design was used to ask a sample of Cypriot origin participants ($N=99$) to complete the Unconditional Positive Self-Regard Scale (UPSR), Intrinsic Aspirations subscale of the Aspirations Index and Post Traumatic Growth Inventory (PTGI). Findings showed that unconditional positive self-regard was significantly positively correlated with posttraumatic growth and that the association between unconditional positive self-regard and posttraumatic growth was successfully partially mediated by intrinsic aspirations. This is the first study to test for the mechanisms by which unconditional positive self-regard predicts posttraumatic growth. The findings also support a link between the phenomenon of posttraumatic growth and person-centered theory at a construct level. Implications for person-centered therapy are discussed and suggestions for further research are proposed.

Introduction

The concept of trauma has become increasingly apparent in the trauma literature. A number of studies in the area of person-centered psychotherapy (Brice, 2011; Murphy, 2009; Rutherford, 2007), person-centered experiential psychotherapy (Tickle & Murphy, 2014; Vanaerschot, 2013) and focusing therapy (Coffeng, 2011; Rappaport, 2011; Scharwachter, 2011) have researched the applicability of person-centered and experiential (PCE) therapies for trauma survivors. Consequently, PCE psychotherapies appear to be gaining a solid base of empirical support for the potential effectiveness in this area. Whilst PCE therapies have been less concerned with identifying specific diagnostic categories in clients, the apparent effectiveness of PCE therapies in response to trauma might be explained by a potentially distinct advantage of PCE therapies over non-PCE therapies for trauma survivors. Where non-PCE therapies focus their efforts and determine effectiveness by the reduction of symptoms, PCE therapies focus on their potential to not only reduce symptoms support psychological growth following adversity (Joseph, 2004). Hence, PCE therapies offer a theoretical account and therapeutic rationale for the full range of responses to traumatic events, from severe symptoms of distress through lasting structural personality change in a constructive direction.

Within the field of trauma research, there has been increasing interest in the concept of growth (Joseph & Butler, 2010). The term used to describe the phenomenon of people's experience of growth following traumatic events is *posttraumatic growth* (Tedeschi & Calhoun, 1995). The construct posttraumatic growth is now a well-documented and extensively researched phenomenon (for a comprehensive review of theoretical constructs relating to posttraumatic growth see Joseph & Linley, 2006). However, notwithstanding the centrality of growth processes within person-centered theory, the construct of *posttraumatic*

growth is not yet at all well documented in the PCE literature. Some exceptions to this include the work of Joseph (2004; 2005), Joseph and Linley (2005; 2006), and Murphy and Joseph (2013). These authors have proposed that person-centered psychology is well positioned to contribute to the theoretical and practical developments in the field of trauma therapy (Joseph & Murphy, 2012). The concept of posttraumatic growth sits at the intersection of person-centered psychology, trauma psychology and positive psychology, making it a fruitful area for collaboration between PCE therapists, researchers from the wider fields of psychotherapy and positive psychology practice. With this in mind the aim of the current study was to investigate the empirical associations between the person-centered theoretical constructs of unconditional positive self-regard and intrinsic aspirations with the phenomenon of posttraumatic growth.

Posttraumatic stress and person-centered theory

Posttraumatic stress disorder (American Psychiatric Association, 2013) will be a familiar psychiatric diagnostic label to therapists working with trauma survivors. Whilst diagnosis of specific categories of distress has no direct impact on the way therapy is provided by the person-centered therapist, it is nevertheless the case that there is often a common and familiar pattern to distress following exposure to a traumatic events. In the area of traumatic stress this pattern is understood as re-experiencing (in the form of intrusions) and avoidance (either emotional or behavioural) of the traumatic memory, or other reminders of the event itself. Re-experiencing the trauma often involves experiences such as intrusive recollections, dreams, or flashbacks of the event; avoidance of the trauma involves emotional numbing, avoiding feelings associated with the trauma or engaging in avoidant coping behaviors. Irrespective of the use of a diagnostic label by a psychotherapist, sustained re-experiencing and avoidance phenomena are the hallmark of posttraumatic stress responses.

These posttraumatic stress phenomena fit within the person-centered personality theory. For example, when experience and the self-structure are incongruent, defences actively either deny experience from symbolization in awareness or distort experience in the process of symbolization, in order to make it consistent with the existing self-structure (Rogers, 1959). Because a traumatic event presents self-experiences incongruent with the self-structure, traumatic events place the person under threat. When the degree of incongruence between the traumatic experience and self-structure is extreme, and the usual systems for denial and distortion are unable to prevent the accurate symbolization in awareness, there is the risk of breakdown and/or disorganization of the self. This is a severe state of distress that many trauma survivors encounter.

During or following a traumatic event fundamental beliefs and assumptions about the self and environment are seriously conflicted by the perceived 'facts' of the traumatic event that are inconsistent with existing schemas. There are two possible consequences that follow; first there are clearly discriminable self-experiences in awareness, symbolized without distortion or denial, and a breakdown or disorganization in the self-structure occurs. Alternatively, if a total breakdown in the self does not occur, frightening and distressing phenomena, such as intrusive thoughts or flashbacks to the traumatic event, will be experienced. As the self-concept strives for maintenance and enhancement, avoidance behaviors become activated to support the gradual integration of the traumatic event. A pattern of oscillation between the intrusive and avoidance components of posttraumatic stress is consistent with the person-centered theory of personality and behavior, and supports the central role for the processes of denial and distortion in the symbolization of traumatic experience.

Post traumatic growth and person-centered theory

Person-centered theory (Rogers, 1959) provides an adequate framework for understanding the phenomena of posttraumatic stress (Joseph, 2004). The theory also provides a useful framework for conceptualizing posttraumatic growth (Joseph & Linley, 2005; Tedeschi & Calhoun, 1995). There have been a number of attempts to systematically study the phenomenon of posttraumatic growth (Calhoun et al., 2000; Calhoun & Tedeschi, 2004; Cordova et al., 2001) resulting in an extensive literature documenting positive changes following traumatic events (Joseph & Butler, 2010; Joseph & Linley, 2005; Linley & Joseph, 2004). There are a wide range of contributing factors; confidence is shown to be positively correlated to posttraumatic growth (Tedeschi & Calhoun, 2004), social support during or after the traumatic event is also positively correlated to posttraumatic growth (Neimeyer, 2001) although some studies show a negative association (Widows et al., 2005). Research also suggests that individual differences in coping strategies are correlated with posttraumatic growth (Aldwin, 1994).

A model consistent with person-centered and experiential psychotherapy is the organismic valuing process (OVP) theory of posttraumatic growth (Linley & Joseph, 2004). This model is grounded within person-centered theory for actualizing tendency, personality and behavior change, and is consistent with the practice of person-centered psychotherapy. The OVP model of posttraumatic growth suggests that, following a traumatic event the organism, driven by the actualizing tendency, is intrinsically motivated towards *growthful* change. Growth itself is achieved via successful affective-cognitive processing of the trauma related experiences. Affective-cognitive processing leads to the integration of new experiences related to the trauma within the self-structure accompanied by the revision of fundamental assumptions (conditions of worth) about the self and the world (Joseph, Murphy & Regal, 2012). As a consequence of affective-cognitive processing, the trauma experience is

either accommodated or assimilated into the continually evolving self-structure. Within this model, accommodation processes refer to the revision of affective-cognitive schemas in order to ‘accommodate’ new trauma related information. The process of accommodation is also likely to involve a reduction to the number of or intensity in significant conditions of worth within the self-construct. Assimilation refers to the defensive process of denial and distortion in symbolizing new trauma related experience. Symbolization occurs in such a way to enable a fit with pre-trauma affective-cognitive schemas/conditions of worth about the self and the world. In assimilation, conditions of worth are not lessened in the period after the trauma, but may even be strengthened or increased in number. Posttraumatic growth can be considered synonymous with psychological adjustment following a traumatic event; wherein there will have been a significant reduction in conditions of worth and consequently an increase in positive self-regard.

Unconditional positive self-regard

Person-centered theory and posttraumatic growth theory indicate possible association between aspects of personality and posttraumatic growth. There are two ways to conceptualize psychological adjustment within person-centered personality theory that might be important for understanding the process of posttraumatic growth. First, and most frequently referred to, is the degree of congruency between organismic experience and self-concept. A second approach is to consider the degree of unconditional positive self-regard as indicative of psychological adjustment and maturity (Standal, 1954). The latter case is perhaps best understood by the following; when self-experiences are discriminated, and the person has less need for positive regard from significant social others, and has greater unconditionality in self-regard, then more experiences can be symbolized in awareness

without the need for denial or distortion. Such a person is thought to be operating more on the basis of their organismic valuing and not in accord with conditions of worth.

Patterson and Joseph (2006) developed the Unconditional Positive Self-Regard (UPSR) scale to measure the construct using self-report questionnaire. Despite the development of an empirical measure, the construct is under researched within the field of person-centered theory and relatively few studies have been published that report on data collected using the scale. Specifically, to our knowledge, and prior to the publication of this issue, there have been no empirical investigations reporting on the relationship between unconditional positive self-regard and posttraumatic growth. Yet it is theoretically consistent to suggest that unconditional positive self-regard, as a measure of psychological adjustment, will be positively associated with posttraumatic growth following the exposure to a traumatic event. That is to say, if a person experiences more unconditional positive self-regard they will also be more likely to experience posttraumatic growth following a traumatic event. This is because both constructs are indicative of psychological adjustment. However, unconditional positive self-regard also indicates a degree of psychological maturity (Standal, 1954) that can explain the long lasting effects and changes in personality that are also represented in reports of posttraumatic growth and are represented in the accommodation process detailed in the OVP model of posttraumatic growth.

When a person is acting in accord with their organismic valuing, valuing each self-experience as equally acceptable to all other self-experiences, they have low conditions of worth. When a person experiences high unconditional positive self-regard, behaviour will be directed towards the satisfaction of needs that are more consistent with internal values and intrinsic aspirations. This means they will be less inclined to act in accord with conditions of worth. Consequently, it is theoretically plausible to expect that unconditional positive self-

regard will be positively correlated with both posttraumatic growth and that this relationship will be mediated by intrinsic aspirations.

Motivation towards intrinsic aspirations

Motivation and organismic valuing are two central constructs linked to the meta-theory underpinning PCE therapies. Rogers (1951; 1959) hypothesized the notion of an actualizing tendency as the main source of motivation within a person. Organismic valuing is an aspect of the psychologically adjusted person. Rogers (1951; 1959) proposed that the person is capable of determining what it is that is most intrinsically satisfying and constructive for its maintenance or enhancement. Standal (1954) proposed that a person following organismic valuing, as opposed to conditions of worth, as an adult could be considered as psychologically mature; that is to have grown.

When a person is operating on the basis of their organismic valuing as opposed to conditions of worth they will behave in ways more in keeping with their intrinsic aspirations. Measures of intrinsic aspiration (Ryan & Deci, 2000) can be considered a proxy for the organisms' attempt to engage in activities that have an intrinsic value to the person. Accurately identifying and acting upon intrinsic values is considered a sign of psychological adjustment within person-centered theory. Acting in accord with intrinsic aspirations develops and expands existing capabilities (Sansone & Harackiewicz, 2000). According to Deci and Ryan (1985), intrinsic aspiration is linked to and energizes significant growth-oriented behaviours, such as seeking out new challenges, pursuing one's interests and exercising skills. Evidence in support of the claims for intrinsic aspirations can be found in academic achievement (Gottfried et al., 2009), organizational psychology (Tremblay et al.,

2009), eating behaviours (Jutta et al., 2009), reading literacy (Becker et al., 2010) and schizophrenia (Barch et al., 2008). Each shows that being intrinsically motivated and acting in accord with those aspirations is a factor associated with greater satisfaction. However, only a relatively small amount of research has examined the relation between intrinsic motivation and posttraumatic growth (Joseph & Linley, 2005). A recent study explored cancer patients' reports that posttraumatic growth was positively correlated with actual and not perceived increases in achieving intrinsic motivation goals and autobiographic memory recall (Ransom, Sheldon & Jacobsen, 2008), supporting the organismic valuing theory of posttraumatic growth.

Building a theoretically informed evidence base for person-centred trauma work is important for the development of the PCE approach in this area. Developing a more refined understanding of the mechanisms for change in PCE therapies for trauma enables psychotherapy practitioners to carry out therapy with trauma survivors with the knowledge they need to provide evidence informed therapeutic support to their clients. The aim of this exploratory study was to investigate the nature of the associations between unconditional positive self-regard, intrinsic aspirations and posttraumatic growth.

Method

Participants

This study involved participants living in Cyprus ($N = 99$) who were contacted as a convenience sample solely for the purpose of the study. The mean age was 31 years (S.D. 13.9) ranging from 16 to 74 years and 44 (44.4%) respondents were male and 55 (55.6%) were female. All indicated they were Cypriot; the majority (96%) identified as White/Caucasian, 3% identified as black and 1% as other. Ninety one per-cent of responses

indicated their primary language is Greek, 4% indicated English and 5% indicated another language than Greek or English. Thirty three per-cent indicated that the highest level of education completed was graduating from high school, whereas just under a third (31.3%) completed a bachelor's degree. The vast majority of responses indicated that their current household income was less than forty thousand Euros. Most respondents (37.4%) indicated they were married, and only 4% were single parents.

Participants were asked to identify the most traumatic event in their life. The most frequently listed traumatic event was a death (n=33), then health problem (N=21), next was a relationship breakdown (N=18), a psychological breakdown/other mental illness (N=11), accident (N=9), War (N=5) and financial difficulty/bankruptcy (N=2). Each participant completed the measures for posttraumatic stress and posttraumatic growth in relation to their identified most traumatic life event.

Measures

Posttraumatic Growth Inventory (PTGI)

The PTGI (Tedeschi & Calhoun, 1996) is a 21-item self-report scale that measures the positive outcomes reported by individuals who have experienced a traumatic event (Tedeschi & Calhoun, 1996). Each participant rates their responses on a six-point Likert scale, scores range from 0 = "I did not change as a result of the event I described" to 5 = "I changed to a very great degree as a result of the event I described". An example of the questions included is "I appreciate each day". There are five subscales that have been derived through factor analysis: New possibilities, Personal strength, Spiritual Change, Appreciation of Life and Relating to Others. Ratings for the internal consistency range from good to high, with Cronbach's $\alpha = .90$ for the full scale and ranging from .67 to .85 for subscales (Tedeschi &

Calhoun, 1996). In the present study a total score is meaning participants scores could range from 0-105.

Unconditional Positive Self-Regard Scale (UPSR)

The UPSR Scale (Patterson & Joseph, 2006) is a 12-item self-report scale aimed at measuring the self-regard and the unconditionality in positive self-regard. In a validation study calculation of alpha coefficients for the UPSR subscales indicated an acceptable internal consistency reliability for both subscales ($\alpha = .88$ for the self-regard subscale, and $\alpha = .79$ for the conditionality subscale) (Patterson & Joseph, 2006). The scale shows good divergent validity from the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960), construct validity with Rosenberg Self-Esteem Scale (Rosenberg, 1965), Contingencies of Self-Worth Scale (Crocker et al., 2003) and convergent validity with General Health Questionnaire (Goldberg, 1972).

Intrinsic Aspirations

The Aspiration Index (AI) (Kasser & Ryan, 1993) measures extrinsic and intrinsic aspiration. In this study only the 12 items assessing intrinsic aspirations was used. Intrinsic aspirations relate to three domains; personal growth, relatedness and community service, with 4-items asking about each domain. Each item is rated for its importance to the person and their future expectation of attainment. There are several approaches to scoring the intrinsic aspirations scale (Ryan et al., 1999). For the current study the total score for intrinsic aspiration was selected by adding together the importance of aspirations and the future expectation of attaining these aspirations. Each item was therefore rated twice using a 5 point Likert scale, with higher scores indicating greater importance and likelihood. Scores on the total scale can therefore range from 24-120.

Results

Means and descriptive statistics

Table 1 shows descriptive statistics for all measures used in the study.

Insert Table 1 approximately here

Correlation analyses

We predicted that UPSR and PTG would be positively correlated so we used one-tailed significance test to limit the chance of gaining type 1 error. Table 2 shows the one-tailed correlations between unconditional positive self-regard, intrinsic aspirations and posttraumatic stress. As predicted, higher scores on unconditional positive self-regard were statistically significantly associated with higher scores on posttraumatic growth and showed a trend towards statistical significance ($p = .08$) associated with intrinsic aspiration.

Posttraumatic growth and intrinsic aspirations were showing a trend towards being positively significantly correlated at the $p=.06$ level.

Insert Table 2. Approximately here

Mediation analysis

We next tested the potential mediating effect of intrinsic aspirations on the association between unconditional positive self-regard and posttraumatic growth. This is important to develop a better understanding for the mechanisms underlying the association between unconditional positive self-regard and posttraumatic growth. To test for mediation we used a linear regression technique. Posttraumatic growth was set as the dependent variable. Next,

only unconditional positive self-regard was entered into the equation, following this, unconditional positive self-regard and intrinsic aspirations were entered into the equation simultaneously. The significant *beta* coefficient for unconditional positive self-regard predicting change in posttraumatic growth became non-significant when in the presence of intrinsic aspirations. According to the principles of the statistical approach used this indicated that mediation has occurred. However, as the association did not completely disappear we can claim that a intrinsic aspirations have a partial mediation effect on the association between UPSR and PTG.

Insert Table 3. Approximately here

Discussion

In this study the associations between variables relevant to both person-centered theory and posttraumatic growth have been examined. The aim was to understand the association between unconditional positive self-regard and posttraumatic growth and also for the mediating effect of intrinsic aspirations on this association. The study provides supportive construct level evidence for person-centered therapy for facilitating clients' posttraumatic growth. As we predicted, these data showed people that experience greater unconditional positive self-regard are more likely to experience posttraumatic growth following an adverse life event. However, importantly, this association seems to be partially mediated by intrinsic aspirations. So, people that grow following trauma are those that have more unconditional positive self-regard and that follow their intrinsic aspirations. This finding is important for a person-centered psychotherapist as it provides supportive evidence for a theoretical justification for person-centered therapy with trauma survivors. For example, where many

non PCE therapies are focused on reducing specific symptoms associated with posttraumatic stress, it seems from this study that therapies that support a client to follow their intrinsic aspirations will lead to growth in the aftermath of trauma. In fact, although this wasn't tested in the present study, it is feasible that focusing clients on symptom reduction, and thereby steering them away from following intrinsic aspirations, might actually be thwarting the potential for client growth. Therapists will be better off enabling clients to self-direct, to reconnect with the intrinsic values and aspirations and not position themselves as a barrier to that by being focussed on symptoms associated with posttraumatic stress.

Rogers's (1961) concept of the 'good life' can be described as: not distorting experience to fit the self-concept and allowing the self-concept to emerge from experience; to be open to new experience and with low defensiveness (that is low conditions of worth and high UPSR); with increasing trust in their organismic valuing and thereby able to freely choose and follow intrinsic goals and aspirations. Following a trauma many people report making positive life changes and the findings from the present study support this view. Importantly, this point has now been demonstrated using measures that are theoretically consistent with person-centered psychotherapy. Thus a clear link has been demonstrated between person-centered theory and the phenomenon of posttraumatic growth. This suggests that new research in this area is needed to develop our understanding even further on the mechanisms for posttraumatic growth within person-centered therapy.

Another possible line of interest here is the development of posttraumatic growth theory and particularly the OVP model (Linley & Joseph, 2004). The model largely draws on the idea of congruence between self and experience as the sign of posttraumatic growth. However, in this study unconditional positive self-regard is shown to be related. Some questions that emerge from this relate to the role of conditions of worth, and particularly how

conditions of worth relate to the processes of assimilation and accommodation within the OVP theory for posttraumatic growth. Similarly, in the OVP model posttraumatic growth is stated in terms of the integration of the trauma related information into a revised self-structure. However, increases in unconditional positive self-regard now also appear to be related to the experience of posttraumatic growth suggesting the OVP model of posttraumatic growth needs to be revised and updated to take account of this finding.

There are some limitations to the present study. For example, the data collected is from a group of people living on the island of Cyprus and were representative of a broadly white/Caucasian ethnicity. Similarly, the data were collected at a single point in time and therefore allowed only a cross sectional analysis of the data. Further research would benefit from exploring the effect of time on the mediating effect of intrinsic aspirations of unconditional positive self-regard and posttraumatic growth. Further studies should consider using longitudinal research designs that can assess the relation of unconditional positive self-regard prior to a traumatic event and study the association with the likelihood of later posttraumatic growth. Mediating and moderating variables should also be considered as understanding the effects of these is where the greatest insight to the psychotherapy process can be gained.

Conclusion

In this study we have shown that person-centered theoretical constructs are related to the phenomenon of posttraumatic growth. It seems clear from this that person-centered and experiential therapies are well placed for building an evidence base for working with traumatised clients. There are a number of key issues that can be taken forward. First, person-centered and experiential therapies are based on the growth paradigm of psychological distress, so too is the concept of posttraumatic growth. As the field of trauma psychology

moves towards this broader and more inclusive approach to understanding reactions to trauma, person-centered experiential therapists are uniquely positioned to contribute to and lead the way in this field of study. Second, trauma psychology too has a vast empirical literature that offers a great opportunity for those interested in theoretical developments and person-centered and experiential therapists to learn from and engage with. The affective-cognitive processing model (Joseph, Murphy & Regel, 2012) of posttraumatic growth is one such example where trauma psychology, person-centered theory and positive psychology are brought together in a single model accounting for posttraumatic growth and relational helping. We encourage researchers and students to carry out research into aspects of person-centered and experiential theory and relate this to the field of trauma. Third, following in the vein of the development of the counselling for depression (Sanders & Hill, 2014) model in the United Kingdom we propose the development of a similar set of evidence informed competencies for person-centered and experiential therapy for posttraumatic growth to be developed. We suggest that only once the person-centered approach has gained the empirical support recognised by the major funding and policy bodies responsible for identifying empirically supported therapies will the person-centered and experiential therapies be able to claim a place within mainstream statutory healthcare provision and be placed on an equal footing with other empirically supported therapies.

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Tables

Table 1. Descriptive statistics for the all variables used in this study

	N	Min.	Max.	Mean	Std. Dev.	α
Post Traumatic Growth	99	13	104	69.90	22.79	.93
Intrinsic aspiration	99	92	180	149.65	14.92	.91
Unconditional Positive Self Regard	99	30	58	43.28	5.7	.49
Valid N (listwise)	99					

Table 2. Pearson correlation between UPSR, Posttraumatic growth and Intrinsic aspirations ($N=99$).

	UPSR	Posttraumatic growth (PTGI)	Intrinsic aspirations
1. UPSR			
2. Posttraumatic growth (PTGI)	.19*		
3. Intrinsic aspirations (IA index)	.14	.15^	

* $p \leq .05$, ^ $p = .06$ (one-tailed).

Table 3. Regression analysis to test for moderating effect of Intrinsic Aspirations on the association between UPSR and posttraumatic growth

Model		Unstandardized Coefficients		Standardized	t	95% Confidence Interval for β		R^2 Δ Change
		β	Std. Error	Coefficients		Lower	Upper	
1	(Constant)	-1.6	.10		.00	-.197	.197	
	UPSR	.19	.10	.19*	1.93*	-.005	.390	.04*
2	(Constant)	-1.5	.10		.00	-.196	.196	
	UPSR	.18	.10	.18*	1.74	-.024	.374	.02
	Intrinsic aspiration	.13	.10	.13	1.27	-.071	.327	

* $p \leq .05$, ** $p \leq .01$ (two-tailed) ns = not significant.