Posttraumatic Growth

An investigation into the processes of growth through trauma

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List of Abbreviations

ACP-PTG	Affective-Cognitive Processing Model of Posttraumatic Growth
APA	American Psychiatric Association
ASSIA	Applied Social Sciences Index and Abstracts
BPS	British Psychological Society
CINAHL	Cumulative Index of Nursing and Allied Health Literature
CiON	Changes in Outlook Questionnaire – Negative Changes
CiOP	Changes in Outlook Questionnaire – Positive Changes
CiOQ	Changes in Outlook Questionnaire
DSM	Diagnostic and Statistical Manual of Mental Health Disorders
ERRI	Event Related Rumination Inventory
LEC	Life Events Checklist
NET	Narrative Exposure Therapy
OVT	Organismic Valuing Theory
PRISMA	Preferred Reporting Items for Systematic Review and Meta Analyses
PPD	Personal and Professional Development
Ps	Placement supervisor
PTE	Potentially Traumatic Events
PTG	Posttraumatic Growth
PTGI	Posttraumatic Growth Inventory
PTS	Posttraumatic Stress
PTSD	Posttraumatic Stress Disorder
PTP	Post Trauma Process
RaAS	Refugees and Asylum Seekers
RS	Rumination Style
SAMS	Situationally Accessible Memories

T	Trainee
T1	Time 1
T2	Time 2
UNHCR	United Nations Refugee Agency
UPSR	Unconditional Positive Self Regard
UPSRS	Unconditional Positive Self Regard Scale
USA	United States of America
VAMS	Verbally Accessible Memories
WEMWBS	Warwick-Edinburgh Mental Wellbeing Scale

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Declaration

This thesis has not been submitted for any other degree or to any other institution. This thesis was completed under the supervision of Tom Patterson (Senior Lecturer in Clinical Psychology, and Academic Director for the Doctorate in Clinical Psychology, Coventry University) and Magda Marczak (Lecturer in Clinical Psychology, Coventry University). The final section of my reflective paper includes extracts from a collaborative discourse between myself and my placement supervisor. This takes the form of a reflective conversation, recorded as part of a supervision session. Quotes have been included with informed consent. Apart from the collaborations stated, the content of this thesis is my own work.

Chapter 1: A systematic review of empirical research on posttraumatic growth in refugees and asylum seekers: facilitators, obstacles and interventions, has been prepared with the view to submit to the Journal of Ethnic and Migration Studies. Chapter 2: A mixed-sample follow-up study investigating rumination style, unconditional positive self-regard, posttraumatic growth and wellbeing over time, has been prepared for submission to the Journal of Traumatic Stress.

Summary

Traumatic and adverse life events are startlingly prevalent occurrences, which can have a significant impact on a person's sense of self and wellbeing. Posttraumatic growth (PTG) encompasses growth as an outcome and growth as a process, and can include both negative and positive changes. Understanding factors associated with PTG, and supporting people within this process, is an important area of development, especially given its significance for individuals and communities around the globe.

Chapter 1 is a systematic review of empirical research relating to PTG among refugees and asylum seekers (RaAS). The review seeks to critically appraise evidence relating to facilitators of, and obstacles to, PTG; and emerging evidence relating to interventions that may promote PTG.

Chapter 2 is a quantitative study investigating the relationships between unconditional positive self-regard (UPSR), rumination style (RS), and PTG over time. The paper discusses new findings regarding the relationship between UPSR and RS, together with findings supporting existing research addressing the relationships between RS and PTG, and UPSR and PTG.

Chapter 3 is a reflective account of the overall research process. Parallels are drawn between PTG and learning processes, and this is expanded upon to explore themes relating to transitions and attachment emerging from the literature review. Consideration is given to wider training and clinical contexts.

Overall Word Count: 18,147

Chapter 1: Literature Review

A Systematic Review of Empirical Research on Posttraumatic Growth in Refugees and Asylum Seekers: Facilitators, Obstacles and Interventions

In preparation for submission to the
Journal of Ethnic and Migration Studies
(See Appendix A for author instructions for submission)

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A Systematic Review of Empirical Research on Posttraumatic Growth in Refugees and Asylum Seekers: Facilitators, Obstacles and Interventions

Abstract

Globally, millions of refugees and asylum seekers (RaAS) are displaced each year. Complex and heterogeneous experiences of adversity and trauma place RaAS at high risk of developing mental health problems such as PTSD. At the same time, a small but growing body of evidence indicates that positive changes, in the form of posttraumatic growth (PTG), may also occur in the aftermath of adversity, suggesting that approaches to intervention and support that include a positive psychology perspective may have value for RaAS. The present article aims to critically appraise empirical findings regarding facilitators of, and obstacles to, the development of PTG, amongst RaAS, and to review the emerging evidence relating to interventions that may promote PTG. A systematic data search utilising key terms relating to PTG and RaAS was carried out. Eleven shortlisted articles underwent quality assessment, and were selected for data extraction. Key findings are presented, and the author presents an attachment orientated framework, encompassing the emergent themes, namely meaning making, interpersonal interaction, experience of religion and spirituality, cultural experiences and norms, and concrete opportunities and quality of life. Findings indicate a need to move towards a sequenced, holistic and integrative approach to interventions for RaAS.

Introduction

Refugees and Asylum Seekers: Change in the Face of Adversity

Global Context

The United Nations Refugee Agency (UNHCR) estimates that, globally, there were 21.3 million refugees[1] and asylum seekers[2] (RaAS) in 2015 (UNHCR, 2016). Home office statistics indicate sustained numbers of RaAS entering the UK each year – 38900 in 2015, 22600 in 2010, and 31300 in 2008 (British Refugee Council, 2016) – a situation which is mirrored in countries worldwide. Growing evidence from research is contributing to the development of a theory and practice base, which in turn inform policy and service development in order to meet diverse and complex needs of this heterogeneous group (Murray, Davidson & Scheitzer, 2010; Nakeyar & Frewen, 2016; Yaser et al., 2016).

Displacement: A Three Stage Process

The process of displacement can be broadly described by three stages: pre-flight, flight, and post-flight (including resettlement) (Siriwardhana, Ali, Roberts & Stewart, 2014). Figure 1.1 illustrates the heterogeneous nature of displacement, and that each stage contains the potential for events, or processes, that are experienced as traumatic on an individual, or collective level (Murray et al., 2010; Porter & Haslam, 2005; Robjant, Hussain & Katona, 2009). Furthermore, after resettlement, individuals are faced with longer term

[1] Individuals who are forcibly displaced *outside of their country of origin*, as opposed to those who are displaced within their native country.
[2] Individuals who have made a request for sanctuary in a new country, but have not received a decision from the local government.

processes of acculturation, navigation of new sociocultural norms, and the formation of new relationships and communities (Berry, 2005).

Figure 1.1 – Displacement processes

	Events	Processes
Pre-flight	Persecution; torture; physical and sexual assault; witnessing the death or torture of loved ones; the loss or destruction of homes	Ongoing unrest; poor living conditions; prolonged exposure to events noted in events column
Flight	Separation from offspring, family members, and communities; assault, persecution, ill-health, witnessing death	Sudden or unexpected flight; separation and loss; long and demanding journeys; absence of certainty
Post-flight	Temporary or permanent living conditions: restrictive living conditions (for example detention centres); the possibility of imminent change; uncertainty; addressing immediate and basic needs; poor, crowded, or unexpected living conditions, accustoming to new language and culture; discrimination; ongoing loss and separation	
Resettlement	Daily stresses; the longer term process of acculturation*; navigation of new sociocultural norms; education, employment, health, establishing general quality of life; the formation of new relationships and communities	

* Which may take years, generations, or sometimes centuries with regard to wider cultural group integration (Berry, 2005)

Psychological Implications

Refugee and Asylum Seeker Mental Health

Research suggests that exposure to potentially traumatic events (PTE), in tandem with ongoing disruption to self, others and the world around them, places RaAS at elevated risk of developing mental health problems (Fazel, Wheeler & Danesh, 2005; Miller & Rasmussen, 2010; Murthy, 2016; Robjant

et al., 2009; Rousseau et al., 2011; Tol et al., 2011). Empirical findings from a number of studies support this observation, providing evidence of an increased prevalence of depression, anxiety and posttraumatic stress disorder (PTSD)[3], as well as high levels of comorbid mental health conditions (Fazel et al., 2005; Murray et al., 2010; Tol et al., 2011) among RaAS. Although PTSD is particularly well represented within RaAS literature, evidence suggests that it does not fully represent the post-trauma experience of RaAS (Palic & Elklit, 2011), and this perspective is supported by findings from research focusing on PTG in RaAS.

PTSD: Incidence and Prevalence

Given the current parameters of PTSD[4], it is reasonable to hypothesise that many RaAS may meet the criterion of being exposed to trauma either directly or indirectly (DSM-V, 2015). Reviewing findings from 20 surveys combing data from 6743 adult RaAS, Fazel et al., (2005) report that several tens of thousands of refugees living in western countries experience PTSD, and indicate that RaAS may be ten times more likely to experience PTSD than age matched individuals from the general population. Meta-analysis found a prevalence rate of 30.6% for PTSD (95% confidence interval, 26.3%-35.2%), and 30.8% (95% confidence interval, 26.3%-35.6%) for depression amongst

[3] PTSD is defined as the experience of intrusive symptoms, persistent avoidance of stimuli, negative alterations in cognitions and mood associated, and alterations in arousal and reactivity, associate with a traumatic event. (Diagnostic and Statistical Manual of Mental Disorders (DSM-V), American Psychiatric Association (APA), 2015)

[4] The traumatic event is defined as 'exposure to death, actual or threatened serious injury, or actual or threatened sexual violence' either *directly* to self, *witnessing* it in person, or *indirectly*, *learning* that a close relative or friend was exposed to trauma (DSM-V, APA, 2015)

RaAS (Steel et al., 2009). This contrasts with findings elsewhere that indicate a prevalence rate of between 12% and 91% (Johnson & Thompson, 2006).

Torture, cumulative exposure to PTEs, time since conflict, level of political unrest, and residency status have been identified as the most salient factors impacting on PTSD and depression incidence (Murray et al., 2010), highlighting that a range of variables are implicated in mental health morbidity among RaAS.

The Research Context

There are significant methodological challenges surrounding research into PTG among RaAS, such as the validity and reliability of measures and screening tools. The validity of formal measures across cultures and languages is an area of particular concern (Murray et al., 2010; Palic & Elklit, 2011; Rousseau et al., 2011). Furthermore, there are challenges with regard to the timing, ethical, and contextual use of such tools (Fazel et al., 2005; Rousseau et al., 2011). Critically, there are also conceptual issues relating to the transferability and validity of constructs such as PTSD across cultures, particularly given that many screening tools are developed on the basis of medically recognised symptoms rather than functional impairment, and may not accurately represent the complex experiences of RaAS who have experienced adversity (Palic & Elklit, 2011; Rousseau et al., 2011).

Nonetheless, a number of literature reviews have appeared, drawing upon research exploring the psychological impact of the process of displacement,

which focus on interventions that may be pertinent for RaAS (Cusask et al., 2016; Nicholl and Thompson, 2004; Nickerson et al., 2011). Importantly, a number of considerations pertinent to researching interventions with RaAS have been identified: the transferability of the construct of PTSD, based on DSM guidelines, across cultures; the need to better understand the specific psychological mechanisms at play, including those which are the focus of interventions; and the importance of examining cultural suitability of interventions and the context of treatment delivery.

Evidence Based Interventions

In a review of 160 reports, Tol et al., (2011) identify that the most common 'interventions' for RaAS are basic counselling, community support for vulnerable individuals, child-friendly spaces, and support of community-initiated social support. Furthermore, integrative approaches which address aspects related to trauma processing, alongside social needs, and general quality of life, are recommended (Miller and Rasmussen 2010). However, many services receive funding outside of national mental health and protected systems (Tol et al., 2011). Efforts to establish a robust evidence base, and to develop an evidence informed rationale for commissioning of appropriate services, are therefore paramount.

Research into intervention efficacy with RaAS predominantly focuses on the treatment of mental health difficulties, such as Depression and PTSD, and the reduction of DSM-V defined groups of symptoms (Cusask et al., 2016). However, there is growing evidence that positive changes may also occur in

the aftermath of traumatic events, which may be part of an overall post trauma sequela (Joseph & Linley, 2008). Furthermore, these mechanisms may provide important insight into post trauma processes (PTP), and indications for intervention (Weiss & Berger, 2008)

Posttraumatic Growth

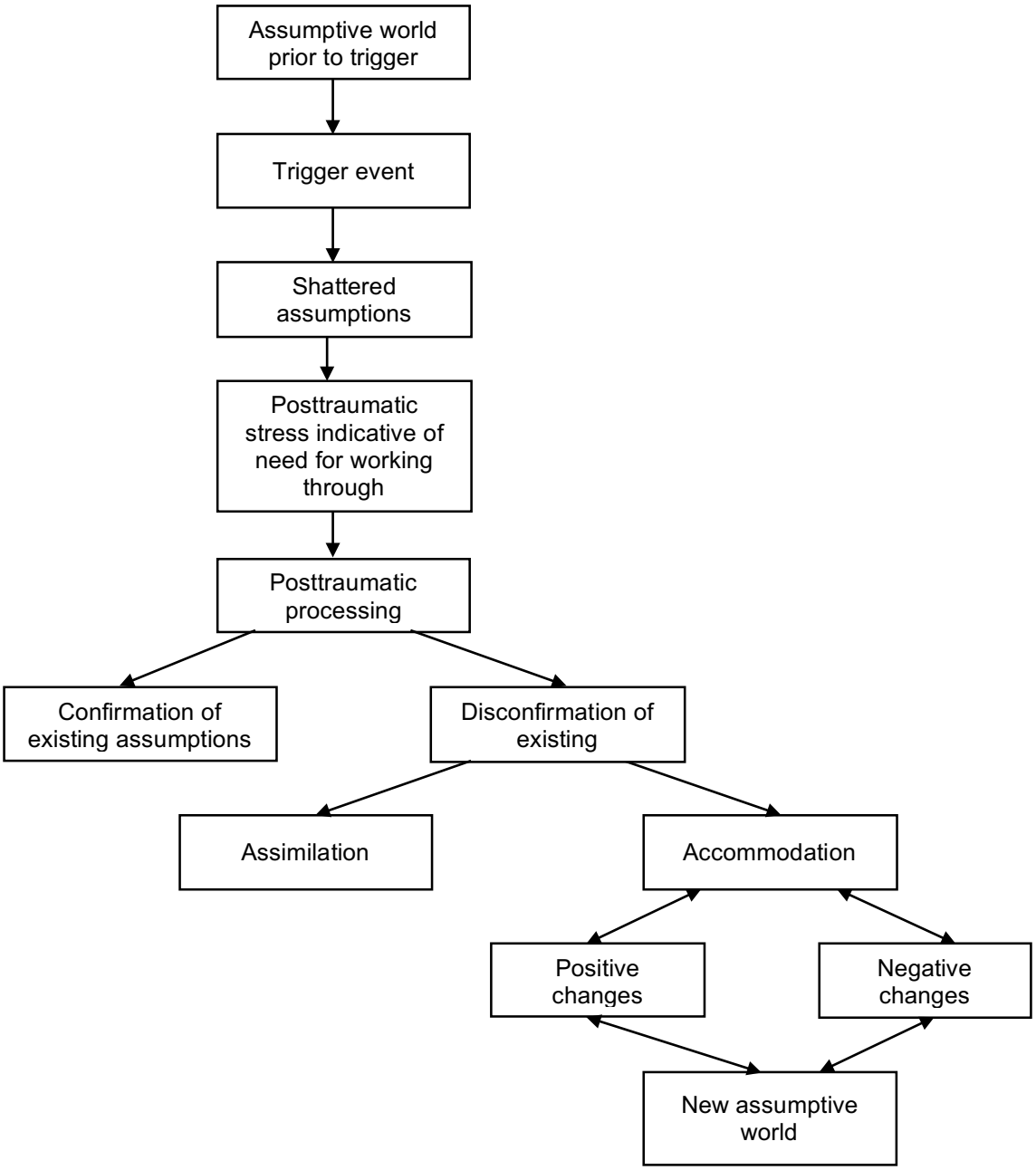
The Origins of Posttraumatic Growth

Over the past two decades, findings from positive psychology research have contributed to an evolving understanding of adverse or traumatic events and processes of change that may occur following trauma, illustrating that such events can be followed not only by posttraumatic stress but also by positive changes in the individual, referred to as posttraumatic growth (PTG) (Tedeschi and Calhoun; 1995). Such growth has been found to occur in a number of domains, including: new possibilities, relating to others, personal strength, appreciation of life, and spiritual change (Tedeschi & Calhoun, 1996), and has been reported across a broad spectrum of trauma-related contexts (Meyerson et al., 2011; Koutrouli, Anagnostopoulos & Pontamianos, 2012).

Traditionally, PTG has been considered to be a post trauma outcome, however, it has also been conceptualised as part of a broader process in which posttraumatic stress (PTS) acts as the catalyst of growth, rather than occurring in contrast to it (Joseph, 2012). The Organismic Valuing Theory model (OVT) (Joseph & Linley, 2005), based on Janoff-Bulman's seminal account of 'shattered assumptions' (1992), provides a framework for

conceptualising the integration of positive and negative features in the aftermath of trauma (Figure 1.2). Fundamentally, it is underpinned by a key tenet of Self-Determination Theory (Ryan & Deci, 2000), that people are intrinsically motivated to process information in a way that 'maximises their psychological wellbeing' (Joseph, 2012, p. 817).

Figure 1.2 – The Organismic Valuing Model of Posttraumatic Growth (Joseph & Linley, 2005)



Experiencing a traumatic incident outside the range of usual human experience can act as an assault on the way in which one views oneself, others, and the world, leading to a breakdown in 'self-structure' (Joseph & Linley, 2005). This structure could be described as a map of self, determined by an individual's past experiences and previously held schemas, and assumptions (Janoff-Bulman, 1994). The challenge to this map of self that may occur during and following adverse experiences, results in the need for cognitive processing of a new experience, so that it can be held within a *coherent map of self* within a person's mind and being (Joseph, Murphy & Regel, 2012). The OVT model illustrates the processes which may ensue during this PTP, where psychological processes interact, affording information to be *assimilated* within an existing map of self, or alternatively, allowing the existing map of self to adjust in order to *accommodate* the new trauma related information (Janoff-Bulman, 1994; Joseph & Linley, 2008; Joseph et al., 2012). In addition, the model highlights that accommodation can either be in a negative direction (for example, resulting in hopelessness and helplessness), or positive direction (for example, resulting in a coherent sense of self and resilience).

It is important to note that PTG is not the same as resilience. Lepore and Revenson (2006) emphasise the importance of research clearly differentiating between PTG and resilience, which is described as comprising of three facets: recovery, resistance and reconfiguration. Although the reconfiguration facet shares similarities with PTG, research indicates that 'resilience' denotes a distinct trajectory; as such it is often described as a personality characteristic,

or protective factor (Bonanno, 2004). A significant body of research has investigated the role of resilience in the mental health of RaAS (Siriwardhana et al., 2014), but the focus of the present review is specifically on PTG, rather than resilience.

PTG and Displaced People

Existing reviews have considered a broad spectrum of topics regarding RaAS and trauma: refugees and mental health (Murray et al., 2010; Porter & Haslam, 2005; Robjant et al., 2009; Steel et al., 2009); psychosocial aspects of populations affected by humanitarian emergencies (Murthy, 2016); resilience among African migrants (Babatunde-Sowole et al., 2016); and resilience in young refugees (Sleipen et al., 2016).

One recent review published by Chan et al., (2016) has examined emerging themes within PTG literature pertinent to RaAS. However, the paper presents limited discussion of research relating to PTG among RaAS directly, citing the relatively scarce literature base. The review examines factors that facilitate PTG as an *outcome*. However, it does not consider research relating to PTG as a *process* (Joseph et al., 2012). It also discusses future directions for research but does not focus on themes pertinent to the development of evidence based interventions.

Furthermore, the review does not report evidence of having conducted a systematic literature search, and notably does not draw on qualitative literature identified by the author of the present review. However, the review

recommends that future research should include: consideration of *the influence of resettlement experience on experience of PTG*; *the longitudinal sequela of PTG*; the impact of *cultural factors and acculturation on the development of PTG*; the impact of discrimination on PTG; and consideration of *how communities respond collectively* to traumatic situations and the impact of this on individual experiences of PTG (Chan et al., 2016).

Rationale for Review

In light of the current global context, further synthesis of evidence is needed to inform a theory-based understanding of the processes at play, and to contribute to the development of evidence-informed interventions that facilitate timely, and culturally appropriate services for RaAS (Miller & Rasmssen, 2010; Rousseau et al., 2011; Tol et al., 2011). This is particularly pertinent given questions that have been raised regarding prevalence, the validity, and transferability of medicalised constructs, and interventions with this heterogeneous population (Palic & Elklit, 2011; Rousseau et al., 2011).

Murthy (2016) argues that 'there is need for greater understanding of the factors leading to emotional problems and factors that promote growth' within RaAS populations (p. 281). To date, no systematic literature review has examined the existing empirical evidence on PTG in RaAS, and the factors that promote growth in the context of displacement. In line with this, the present review seeks to *systematically* review existing *empirical literature* relating to PTG and RaAS. In contrast to previous literature reviews in this area, such as Chan (2016), the present review will examine the existing

empirical evidence, relating to factors that influence PTG (both the *process* of growth and PTG as an *outcome*) in RaAS, with a particular focus on facilitators of and *obstacles* to PTG. Finally, the present review will also critically appraise evidence relating to *interventions* that aim to promote PTG.

Aim

The aim of the present review is to critically appraise the existing empirical evidence on factors relevant to PTG as either a process or an outcome amongst RaAS. The review aims to answer the following questions:

- What are the facilitating factors of PTG in RaAS?
- What are the obstacles to PTG in RaAS?
- What does existing evidence tell us about psychological interventions that may promote PTG among RaAS?

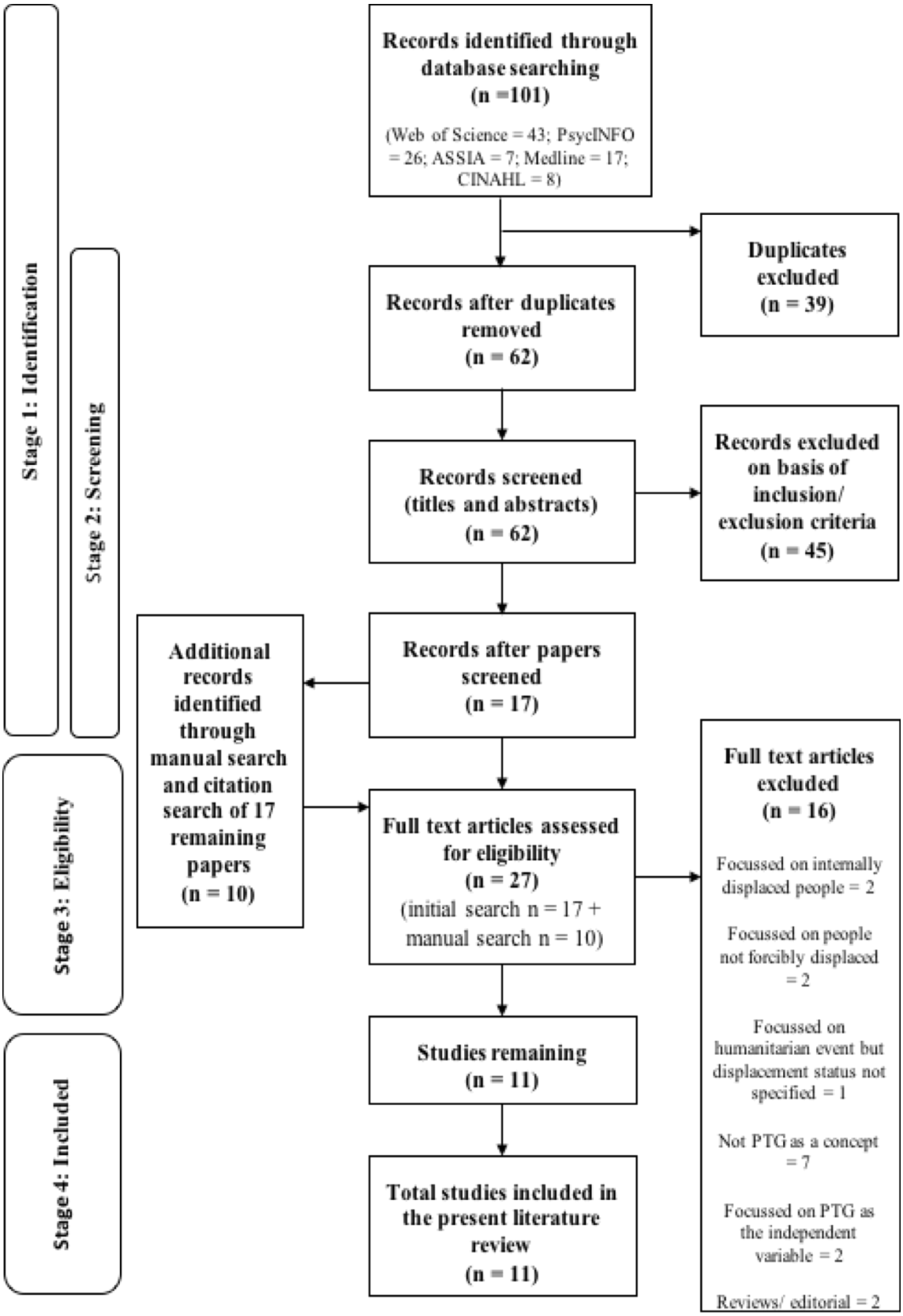
Methods

Search Strategy

Search Procedure

The search procedure (shown in Figure 1.3) was conducted in accordance with Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher, Liberati, Tetzlaff, Altman & The PRISMA Group, 2009). A systematic data search was carried out, utilising key terms pertaining to the review aims. Titles and abstracts were screened in accordance with inclusion and exclusion criteria; those of unrelated topics, or not meeting the

Figure 1.3: An adapted PRISMA flow diagram (Moher et al., 2009)



inclusion criteria were excluded. Studies meeting the criteria, and articles for which further clarification was required were shortlisted for full-text screening. A manual citation search of those studies was carried out in order to identify additional papers relevant to the review aims. All articles identified from the manual search, and the shortlisted studies, underwent a full-text screening to assess eligibility for the present review in accordance with the inclusion and exclusion criteria. Eleven studies were retained and were then subjected to a quality appraisal process.

Data Sources and Data Search

A systematic search for relevant studies was performed utilising the following databases: Psych INFO, ASSIA, Web of Knowledge, Medline, CINAHL, and Scopus. Full searches were carried out on three occasions between September 2016 and January 2017; the final search took place on 14 January 2017.

Key Terms

The key search terms related to the key review concepts: posttraumatic growth ('posttraumatic growth' OR 'post traumatic growth' OR 'post-traumatic growth' OR 'stress related growth' OR 'stress-related growth' OR 'adversarial growth' OR 'growth following adversity'), AND forcibly displaced people ('asylum*' OR 'refuge*' OR 'migr*' OR 'immigr*' OR 'transien*' OR 'displace*').

Inclusion and Exclusion Criteria

Table 1.1 shows the inclusion and exclusion criteria, against which each article was assessed. Within the selected papers there were three papers which studied a sample consisting of both first and second generation displaced people (Hussain & Bhushan, 2011; 2013; Nguyen, Bellehumeur & Malette, 2014), and one paper containing both externally and internally displaced persons (Kroo & Nagy, 2011).

Table 1.1 Exclusion and Inclusion Criteria

Inclusion criteria	Exclusion criteria
• Studies which focus on the concept of PTG, or factors impacting on PTG ("posttraumatic growth" OR "post traumatic growth" OR "post-traumatic growth" OR "stress related growth" OR "stress-related growth" OR "adversarial growth" OR "growth following adversity") • Studies which focus on people that have been forcibly displaced from their country of origin ("asylum*" OR "refuge*" OR "migr*" OR "immigr*" OR "transien*" OR "displace*") • Studies using adult samples, or where the sample consists primarily of adults (16 years old or older) • Empirical articles employing a qualitative, quantitative or mixed design • Peer-reviewed articles • Articles written in English	• Studies which focus primarily on people who have been internally displaced within their country of origin • Studies which focus primarily on people whom have not been forcibly displaced • Studies which focus on a humanitarian event, but for which the people under investigation are of unknown displacement status • Studies which focus on vicarious trauma • Papers where the main focus of the study is on scale development • Studies using samples which consist primarily of people under 16 years of age • Studies which do not discuss or measure the concept of PTG as accepted for the present review • Studies which focus on PTG as the independent variable • Review or editorial articles

Given that all four studies included participants that met the review inclusion criteria (i.e. externally displaced), and in light of the relatively small body of existing literature on PTG in RaAS, it was deemed appropriate to retain these studies, despite the fact that they also included either second generation RaAS or internally displaced participants. In addition, each of these articles provided a valuable perspective on key themes arising within the literature, including the longitudinal experience of displaced people, the nature of their experiences, the conceptualisation of PTG, and the impact of displacement in terms of trauma and PTG.

Quality Assessment

Quality Assessment Procedure

The eleven selected papers underwent a quality assessment process utilising a quality assessment checklist developed by Caldwell, Henshaw and Taylor (2005) (Appendix B), selected due to its development for use across articles employing qualitative, quantitative and mixed methods designs. The checklist contains 18 items, which were scored on a 2-point scale, (0 if criteria were not met, or unknown; 1 if criteria were partially met; 2 if criteria were fully met) (minimum total score = 0; maximum total score = 36). Percentage scores were calculated to allow for comparison.

Quality assessment of the eleven selected papers (nine qualitative articles, seven quantitative articles) was conducted by the principal investigator. The reliability of the assessment was addressed by the inclusion of a second assessor who independently carried out quality assessment of five randomly

selected papers. Inter-rater reliability of the five selected papers was assessed using Cohen's kappa, demonstrating good inter-rater reliability (k = .827, p = .001) (Altman, 1999) (Table 1.2).

Table 1.2 Summary of quality assessment results and inter-rater reliability

Author, date	**Method**	**Quality score**
Ai, A. L., Tice, T. N., Whitsett, D. D., Ischisaka, T., & Chim, M. (2007)	Quantitative	27
Copping, A., Shakespeare-Finch, J., & Paton, D. (2010)	Qualitative	29
Gregory, J. L., & Prana, H. (2013)	Quantitative	17 (k = .913, p<0.001)
Hijazi, A. M., Lumley, M. A., Ziadni, M. S., Haddad, L., Rapport, L. J., & Arnetz, B. B. (2014)	Quantitative	32
Hussain, D., & Bhushan, B. (2011)	Quantitative	28
Hussain, D. & Bhushan, B. (2013)	Qualitative	30 (k = .778, p<0.001)
Kim, H. K., & Lee, O. J. (2009)	Qualitative	18
Kroo, A., & Nagy, H. (2011)	Quantitative	23 (k = .913, p<0.01)
Nguyen, T. T., Bellehumeur, C. R., Malette, J. (2014)	Qualitative	27 (k = .617, p<0.01)
Powell, S., Rosner, R., Burtollo, W., Tedeschi, R. G., Calhoun, L. G. (2003)	Quantitative	30
Teodorescu, D. S., Siqveland, J., Heir, T., Hauff, E., Wentzel-Larsen, T., Lien, L. (2012).	Quantitative	31 (k = .723, p<0.001)
		Overall: k = .827, p<.001

Quality Assessment Results

Quality assessment revealed that nine out of eleven papers scored above 50 percent, with the remaining two papers having lower quality ratings at 50 percent or below (Gregory & Prana, 2013) (Kim & Lee, 2009). The strengths and weaknesses of these two papers, summarised in Appendix C, were considered and discussed with supervisors. A decision was taken to retain both studies for review, in part because there were a number of strengths in both the design and findings of each study, but also in light of considerations regarding the hard-to-reach and unique nature of the participants that had been the focus of the two studies.

Data Extraction

The general characteristics of each study, and study findings relevant to the review aims are reported in tables of studies (Tables 1.3 and 1.4).

Table 1.3 – Table of Qualitative Studies

Authors, year, study title, and aims	Study characteristics	Key findings		
		Facilitators of growth	Obstacles of growth	Evidence pertaining to interventions
Copping, A., Shakespeare-Finch, J., & Paton, D. (2010), Australia. *Towards a culturally appropriate mental health system: Sudanese-Australians' experiences with trauma.* To explore the cultural influences that play a role in the experience and outcomes of life crises in forced migrants from Sudan.	Grounded Theory study. Fifteen Sudanese-Australian participants (seven females, eight males), aged 19-49 years, recruited via snowballing sampling, through the Migrant Resource Centre of Northern Tasmania. 13 enrolled in an education facility, and two employed; all expressed an affiliation with Christianity. Face to face interviews utilising a narrative, episodic interview procedure based on own experience, with minimal prompts.	Overarching emerging themes: support, religion, strength, and new possibilities. The value of support is discussed both in terms of refugees receiving and giving support: self-disclosure is discussed as a method of distress management, for example at times of experiencing intrusive rumination and flashbacks; sharing stories with others about similar events is described as cathartic; the value of a collective community, who 'stand together' is recognised; and cultural differences with regard to people within advisory roles. The role of belief and faith in God is described with regard to sense making ('everything has its time'), and coping ('God will be there'). Strength, hope and determination are cited as coping mechanisms ('if you are determined on something you can make it happen'; 'I'm not doing to give up'). Openness to, and appreciation of, new possibilities are identified as a means of benefitting from adversity; suggestive of meaning making ('if you have a way to go to school...'; 'my education gives me another focus').	Obstacles to new opportunities (for example, education) are identified as a limitation of engaging with 'new possibilities'. 'Many participants commented on the difference between the counselling paradigm in Australia and the one they are used to, specifically in advice-seeking.' It is discussed that 'the absence of advice provision in Australian services was seen as negligent'. 'Social work here is just listen to people, you don't advices, just talk'.	Recognition of cultural and religious norms by professionals. Availability of holistic interventions. Utilisation of collective culture with regard to intervention and meaning making, for example, opportunity for community run elements, story sharing, in-group advice giving.

Hussain, D., & Bhushan, B. (2013), India. *Posttraumatic growth experiences among Tibetan refugees: a qualitative investigation.* To explore qualitatively PTG experiences among Tibetan refugees residing in Dharmshala, Himachal Pradesh, India.	IPA study. Twelve Tibetan refugees (four females, eight males) aged 25-46 years, from diverse backgrounds. Snowball sampling. Seven born in Tibet; five 'born and raised in exile'. Eight have college education, four have high school education; eight are married, four are single. Recruitment made based on language proficiency (Hindi or English). All had experience of multiple traumatic events. Semi structured interviews utilising open ended and non-directive questions; 60-120 minutes, plus notes taken.	Overarching emerging themes: positive changes in outlook towards the world and people, realisation of personal strengths, and experience of more meaningful relationships. Changes in outlook: acceptance of events, and understanding events in line with Buddhist beliefs; responsibility for own life; compassion for others, and alignment with Buddhist beliefs ('by helping others in their suffering, I am healing my own sufferings also'); optimism, hope, and sense making ('we are enjoying freedom here'). Personal strength: self-resilience, community survival, and seeing self as a survivor; establishing self as a survivor; finding meaningful engagements. Meaningful relationships: the value of family bonding and community bonding – having a common history and a shared struggle.	Loss and separation from family is identified to exacerbate trauma, and have a 'pathological' impact on family dynamics, adversely affecting individuals. 'Identity crisis' – described as not being able to locate oneself within any country; feeling as though one never had a home.	Narrative building interventions. Aligning Buddhist beliefs with trauma experiences. Advocating support seeking. Support provision. Seeking support.

Kim, H. K., & Lee, O. J. (2009), South Korea. *A phenomenological study on the experience of North Korean refugees.* To explore the experiences of North Korean refugees living in South Korea using a phenomenological approach.	Exploratory, phenomenological study. Five North Korean participants (three females, two males), aged 20 – 39 years, recruited via self-help meetings and English-tuition meetings. Two university students, two housewives, one pre-medicine student. Time in South Korea: six months to six years. Data collection over eleven months via in depth interviews (1.5-2 hours) (5-10 times per participant), and personal records from participants (travel diaries, a book, email correspondence, family interviews).	Overarching emerging themes: personal factors, religious factors, social factors and mental health factors. PTG suggested to occur as a result of 'positive coping resources' after considerable trauma and post-migration distress. 3-months 'training' to help refugees adjust to life in South Korea reported to give relief and new hope. The presence of re-evaluating reasons for leaving. Sharing experiences about North Korea reported as cathartic. Individuals drew on personal factors (for example, conscious attempts to detach from North Korea – more commonly used during early stages of migration), social factors (for example, seeking to repair disintegrated family relationships by sending money, calling, offering ways of escaping; instrumental and emotional support from South Koreans), religious factors (religion as a means of adjustment), and mental health factors (for example, connectedness - 'a connection with South Korean's was seen as an important recovery factor').	'Training' experienced as helpful, but also as highlighting overwhelming differences between cultures. Acculturation stress: distress of living in a place where the dominant dialect and culture is different, denial of self-identity, the competitiveness of the new society, and difficulty trusting and understanding South Koreans. Fear of being caught and returned to North Korea. 'Discrimination' – experienced as a 'form of rejection of political, ideological, and cultural views'. Feelings of: regret; loneliness, alienation. Thinking about: distance from family; distance from homeland. Experiencing disconnectedness from South Koreans, regardless of attempts to connect.	Clinicians to be aware that many of the participants' memories and emotions related to pre-migration psychological trauma and post-migration distress remain, as does their vulnerability to additional stress and depression. Suggestion for 'eco-systemic', and empowering models.

Nguyen, T. T., Bellehumeur, C. R., & Malette, J. (2014), Canada. *Faith in God and posttraumatic growth: a qualitative study among Vietnamese catholic immigrants.* To explore the role of faith with regard to PTG among Vietnamese immigrants; to investigate what factors facilitated participants to grow after adversity.	Exploratory, phenomenological study. Eight Vietnamese immigrants (four females, four males), aged 20-56 years, living in Ottawa, Canada. Six first generation immigrants, and two second generation immigrants. Time in Canada: 15+ years. One educated to PhD level, six to BA level, and one to college degree level. Recruited on a basis of ability to read, write and communicate in English. Face-to-face, semi-structured interviews. Back-to-back translation method. Audio-taped, translated and transcribed directly from Vietnamese to English. Pilot study previously employed. Validity checks of clusters and emerging themes reported.	Themes asserted which outline the trauma sequelae; themes 3 to 6 pertain to facilitators of growth. Theme 3: 'Unknown ground and confusion'. Meaning making regarding experience of suffering, and things becoming bearable. Theme 4: 'Faith in God'. Faith in God as a resource ('protecting me', 'faith helps me to see things positively', 'God's grace... made me happy', 'faith is my inner resource'), as a motivation ('God is my desire to give back to people'), and as part of growth ('I learnt to trust God'). Theme 5: 'Acceptance and transformation'. Acceptance of adversity, and recognition of positive change as a result ('experiencing crisis allowed me to learn'). Theme 6: 'Components of PTG'. Identification of positive changes, including role of faith. ('interpreting and re-interpreting, visiting and revisiting the events in light of faith'; 'I struggled to learn a new language, yet I determined to keep going, to live my life since I have purpose'). Value of being able to revisit place of trauma with regard to negative symptomology ('ten years later, I still had nightmares. It stopped happening when I was able to revisit Vietnam'). Value of community ('I lived not only for myself but for people around me; this gives me meaning').	Themes asserted which outline the trauma sequelae; themes 1 to 3 pertain to obstacles of growth. Theme 1: 'Turmoil and chaos'. Theme 2: 'Psycho-somatic spiritual reactions': spiritual crisis; impact of impression of 'God's absence' – 'showed in my feeling stressed, attacked, that I had lost control'; uncertainty about the future; uncertainty about competence ('I am not up to other people's level'), and cultural integration ('lack of social cues'); feeling unmotivated, and not having a 'concrete plan'. Theme 3: 'unknown ground and confusion'. 'Spiritual and identity crisis': 'Discordance between ideology and reality'. An 'inconsistent God image'/ 'uncaring God image'/ 'feeling angry at God'. 'I feel that I am in the middle with no place to belong on any side'. 'A crisis occurred in my faith, as it became separated from life'. Struggling with the concept that 'knowledge of faith and reality could not coexist'. Cognitive challenges to pre-existing schemas.	The value for one participant of revisiting the place of the trauma they experienced was reported ('ten years later, I still had nightmares. It stopped happening when I was able to revisit).

Table 1.4 – Table of Quantitative Studies

Study title, authors, date and aims	Study characteristics (design, sampling, data collection)	Variables and measures PTG Other	Statistical analysis	Key findings Summary
Ai, A. L., Tice, T. N., Whitsett, D. D., Ishisaka, T., & Chim, M. (2007), USA. *Posttraumatic symptoms and growth of Kosovar war refugees: the influence of hope and cognitive coping.* To examine the influence of specific psychological factors on post-war adaptive outcomes, and the coexistence of PTG and PTSD, in Kosovar refugees.	Longitudinal, 10-month follow-up study. 50 Kosovar refugees (23 females, 27 males), aged 17-69, resettled in Washington State in 2000. Average education completed is 11 years; 96% of participants are Muslim; 74% married.	The Stress Related Growth Scale (SRGS; Park, Cohen & Murch, 1996): a 50-item scale assessing PTG. The PTSD Symptom Scale (PPS; Foa, Riggs, Dancu & Rothbaum, 1993): a 17-item scale assessing PTSD symptoms. Coping Scale (Wills, 1996): a 27-item multidimensional rating scale assessing coping. Hope Scale (Snyder et al., 1991): a 12-item scale assessing dispositional hope. Communal Traumatic Events Inventory (Weine et al., 1995): a checklist designed for research on refugees from the Bosnian War, adapted with case workers advice.	Descriptive statistics Correlation	Average war trauma severity score for Kosovar refugees was high at 15. No sig. correlation between demographic variables (gender, age, education) and PTG (r=-.069, p=n.s (negative weak relationship); r=.133, p=n.s (positive weak relationship); r=.147, p=n.s (positive weak relationship) (respectively)), or PTSD (r=.169, p=n.s (positive weak relationship); r=.150, p=n.s (positive weak relationship); r=-.222, p=n.s (negative weak relationship) (respectively)). Nor PTSD and PTG (r=-014, p=n.s) (negative weak relationship). PTSD symptom severity scores were sig. related to trauma score (r=.32, p<.05; positive weak relationship), cognitive coping (r=.55, p<.001; positive medium strength relationship), and avoidant coping (r=.55, p<.001; positive medium strength relationship). Hope and cognitive coping were sig. positively associated with PTG (r=.330, p<.05 (positive weak relationship); r=.362, p<.05 (positive weak relationship), respectively). Avoidant coping had a 'trend' towards a weak negative relationship with PTG (-.294, p=.09).

Gregory, J. L. & Prana, H. (2013), Liberia. *Posttraumatic growth in Cote D'Ivoire refugees using the Companion Recovery Model.* To examine whether the Companion Recovery Model (CRM) enhances PTG in Ivorian refugees displaced in Liberia.	Longitudinal, pre/ post intervention study. 50 Ivorian refugees – with attrition of one (29 females, 20 males), aged 18-56 years. All reported leaving their home under imminent threat of death.	Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996): a 21-item scale evaluating five dimensions of positive changes attributed to the struggle with trauma (PTG) – relating to others, new possibilities, personal strength, spiritual change, and appreciation of life.	T-test	Post-test scores were sig. dif. from the pre-test scores (overall statistics not reported). Extrapolated from tables** (SD not reported): Greatest increase for men reported on 'new possibilities' subscale (pre-test score: 14.73, post-test score: 21.11) ($t(18) = 1.73$, $p < .001$) and 'personal strengths' subscale (pre-test score: 11.58, post-test score: 18.26) ($t(18) = 1.73$, $p < .001$). Overall PTGI scores for males were higher than for females. Greatest increase for females reported on 'personal strengths' subscale (pre-test score: 11.54, post-test score: 16.46) ($t(27) = 1.70$, $p < .001$) and 'relating to others' subscale: (pre-test score: 29.14, post-test score: 32.5) ($t(27) = 1.70$, $p < .001$). Subscale scores for 'Relating to others' were high for both males and females prior to the intervention (pre-test).
Hijazi, A. M. et al., (2014), USA. *Brief Narrative Exposure Therapy for posttraumatic stress in Iraqi refugees: a preliminary*	Longitudinal, randomised controlled trial. 63 adult Iraqi refugees (35 females, 28 males), average age 48.2 years, recruited	Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996). World Health Organisation's Wellbeing Index (WHO-5; Bech, 1998) Arabic translation: assesses positive mood, vitality and interest during 2 weeks. The Harvard Trauma Questionnaire (HTQ; (Mollica, McDonald, Massagli & Silove, 2004): a questionnaire previously translated into	T-tests Between- and within-condition	No sig. dif. between groups on any demographic or baseline outcome measures suggesting successful randomisation. Sig. time effects for well-being at 2 and 4 months ($p = .045$ and $p = .001$), indicating an increase in wellbeing overall within the sample. Sig. condition by time interactions for both PTG and wellbeing at 2-month ($ES = .48$, $p<.05$; $ES = .56$, $p<.05$, respectively) and 4-month ($ES = .83$, $p<.001$;

randomised clinical trial. To examine the effect of a brief version of Narrative Exposure Therapy (NET) on positive indicators (PTG and wellbeing) and negative symptoms (PTS, depressive and somatic), at baseline, 2-month follow-up, and 4-month follow-up.	through community agencies for refugees. 66% married; most participants Chaldean, a Christian minority group. All reported that they had been exposed to a violent or traumatic event related to being a refugee, and being currently 'bothered by the event'. Time in USA: average of 2.3 years.	Arabic and used with Iraqi refugees. Part A reports occurrence of 42 traumatic incidents; Part D uses 16-items to assess PTSD symptoms (as per DSM-IV). Additional items developed to measure other culturally relevant PTSD symptoms. The Beck Depression Inventory-II (Beck, Steer, & Brown, 1996), Arabic translation: a 21-item scale assessing symptoms consistent with depression. The Patient Health Questionnaire (PHQ-15; Kroenke, Spitzer & Williams, 2002): a 15-item measure of wellbeing and depression. Overall: "How did your physical and emotional symptoms change as a result of the treatment" (very much worse, much worse, minimally worse, o change, minimally improved, much improved, very much improved)	analysis (repeated measures ANOVA and paired t-tests)	*ES* = .54, *p*<.05, respectively) follow-ups, suggesting brief NET increased PTG and wellbeing more than control condition, with between-condition effect sizes that were medium to large in magnitude. Within-conditions brief NET led to sig. increase in PTG at 4-months (*d* = .52, *p*<.01), and in well-being at 2-months (*d* = .65, *p*<.01) and 4-months (*d* = 0.92, *p*<.001). Brief NET reduced PTS symptoms (*ES* = .48, *p*<.05), and depression symptoms (*ES* = .46, *p*<.05) compared to control but only at 2 months; depression symptoms of control group decreased from 2 to 4 months (*d* = -.53, *p*<.01).
Hussain, D., & Bhushan, B. (2011), India. *Posttraumatic stress and growth among Tibetan refugees: the mediating role of Cognitive-*	Cross-sectional study. 226 Tibetan refugees (113 females, 113 males), with mean age 43.96 years,	Refugee Trauma Inventory (RTEI; Hussain & Bushan, 2009): a 26-item scale designed for measuring refugee-specific trauma. Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2001, 2002): a 36-item scale designed to measure cognitive strategies that characterise the participant's style of responding to stressful events. Comprises nine distinct subscales: self-blame,	T-test	Females scored sig. higher than males on all factors of traumatic experiences (survival trauma: *t** = 12.16, *p*<.001; ethnic concern: *t** = 11.46, *p*<.001; deprivation/ uncertainty: *t** = 4.27, *p*<.001; total trauma score: *t** = 11.05, *p*<.001), all factors of PTS (intrusion: *t** = 8.86, *p*<.001; avoidance: *t** = 5.51, *p*<.001; IES-total score: *t** = 7.4, *p*<.001), and total PTGI (*t** = 5.29, *p*<.001).

Emotional Regulation strategies. To examine posttraumatic stress (PTS), PTG, and the mediating effect of cognitive-emotional regulation strategies, among Tibetan refugees	purposively selected from Dharmashala, Himachal Pradesh, India, based on language proficiency and willingness to participate. 110 born in Tibet (first generation), and 116 born and bought up as 'refugees' in India (second generation).	other-blame, rumination, catastrophizing, putting into perspective, positive refocusing, positive reappraisal, acceptance, and planning. Impact of Event Scale (IES; Horowitz, Wilner, & Alvarez, 1979): a 15-item scale designed to evaluate the experiences of avoidance and intrusive symptoms which are indicators of the intensity of PTS. Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996): a 21-item scale evaluating five dimensions of positive changes attributed to the struggle with trauma (PTG) – relating to others, new possibilities, personal strength, spiritual change, and appreciation of life.	Regression Mediation	PTGI: First generation (G1) scored sig. higher than second generation (G2) on the 'personal strength' (t^* = 7.53, p<.001), and 'spiritual change' (t^* = 17.12, p<.001) subscales; G2 scored sig. higher than G1 on the 'new possibilities' subscale (t^* = 7.82, p<.001). No sig. dif. Identified for scoring on the 'relating with others', 'appreciation of life' subscales, or the total PTGI score. Trauma experiences sig. predicted PTS (β = .528, p<.001) and PTG (ΔR^2 = .198, β = .588, p<.001). PTS and PTG were positively correlated (r = .633, p<.01) (positive medium relationship). As individual strategies – 'positive refocusing', 'refocus on planning', 'putting into perspective' and 'catastrophising' – each partially mediated the relationship between trauma total score and PTG total score; higher scores on each of these subscales were each related to higher scores on PTG total.
Kroo, A. & Nagy, H. (2011). Hungary. *Posttraumatic growth among traumatised Somali refugees in Hungary.* To examine specific	53 Somali refugees (9 females, 44 males) (44 aged 18-29 years, and nine aged 30+ years), living in Hungarian reception centres. Participants of	Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996). "Please share with us significant changes in your life as a result of your experiences" Extent of satisfaction with living conditions and social support was assessed on a 5-point Likert scale ranging from 0 (not at all) to 4 (totally)	T-test/ ANOVA Correlation	Mean total PTGI score = 68.92; mean total for females = 58.6, and for males = 71; however, not stat. dif. No sig. relationship between family distance/ separation and PTGI (sig. levels not reported). Total PTGI showed a sig. positive correlation with – satisfaction with social support (r = .297, p<.05); hope (r = .483, p<.01); negative religious coping (r = .434, p<.01), and religiosity (r = .296, p<.05). Positive religious coping was only sig. correlated

predictors and correlates of posttraumatic adjustment and growth among a sample of Somali refugees in Hungary.	a diverse group of educational standards. Participants considered 'traumatised refugees' (pp443). Measures were translated from English into Somali, and back-translated into English and compared with the original.	Dichotomous (yes/no) questions regarding information about family members, contact with family members, and separation and distance from family members. Adult Trait Hope Scale (ATHS; Snyder et al., 1991): a 12-item scale evaluating three subscales– agency, pathway, and distractor items. Life Orientation Test – Revised Version (LOT-R; Scheider, Carver & Bridges, 1994): a 10-item scale evaluating dispositional optimism. A 5-item scale was constructed for the study based on previous research assessing self-perception of religiosity, and presence of religious change. The Brief Religious Coping Scale (Pargament, Smith, Koenig & Perez, 1998): a 14-item scale evaluating aspects relating to two subscales: positive coping and negative coping. "Do you feel you are able to make some kind of sense of your past experiences?"	Independent samples t-test	with one of the PTGI subscales ('relating to others') (r = .298, p<.03). 22.6% participants reported a great deal of change in their religious beliefs, but 54.7% reported that they experienced no change at all. Independent samples t-test showed no sig. difference in PTGI scores between the two groups (sig. levels not reported).

Powell, S., Rosner, R., Butollo, W., Tedeschi, R. G., & Calhoun, L. G. (2003), Sarajevo. *Posttraumatic growth after war: a study with former refugees and displaced people in Sarajevo.* To examine whether PTG could be found among people who had been exposed to particularly severe traumata over a period of several years (1991 to 1995) during the war in former Yugoslavia. To investigate the factor structure of the PTGI for this population.	150 refugee and displaced people from Yugoslavia (75 former refugees; 75 displaced people) now living in Sarajevo, recruited randomly via 16 local councils. Refugees spent more than 12 months, and an average of 4.02 years outside of former Yugoslavia, between 1980 and 1991. Original samples of 97 and 104 persons (respectively) were stratified for gender and age.	Posttraumatic Diagnostic Scale (PDS; Foa, Cashman, Jaycox & Perry, 1997): Part 3: a 17-item scale assessing the symptoms of PTSD. The Checklist for War Related Experiences (CWE; Powell, Rosner, Kruessman, & Butollo, 1998): 49 items assessing exposure to traumatic events. Sociodemographic information: gender, age and education. Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996): a 21-item scale evaluating five dimensions of positive changes attributed to the struggle with trauma (PTG) – relating to others, new possibilities, personal strength, spiritual change, and appreciation of life. Items were adapted for the sample to reference changes 'since April 1992' or 'in comparison with the period before the war'. The adapted instrument underwent three cycles of translation, pilot administration, adaptation and back-translated.	Mann Whitney U T-tests/ ANOVA Exploratory Principal Component Analysis Correlation	Participants within the former refugee group were sig. more well educated than those in the displaced people group (U = 1739.5, p=.05, r = not reported). No sig. dif. between PDS scores between the groups. Former refugees experienced sig. fewer traumatic events than displaced people (two-tailed t-test: t(132.64) = -2.72, p<.005). Women had experienced sig. fewer traumatic events than men (two-tailed t-test: t(105.56) = -4.02, p<.001). Former refugees reported sig. more growth (m = 48.54, SD = 23.00), than displaced persons (m = 40.16, SD = 22.90) (t(134) = 2.2127, p<.05). No sig. gender dif. with relation to PTGI scores. No sig. differences according to age. Three factors were produced which related to three broad categories of PTG (Tedeschi & Calhoun, 1995), rather than the existing five scale factors. The three emergent factors were: 'changes in self/ positive life attitude', 'changed philosophy of life', and 'a changed sense of relating to others'. Total PTGI score was not related to PDS (r = .001, p=n.s), however, the first factor ('changes in self/ positive life attitude') was sig. negatively correlated with PDS (r = -.197, p<.05 (negative weak relationship)) (contrary to the hypothesis). 'Relating to others' was sig. related to traumatic event score (r = .334, p<.01 (positive weak relationship)). Traumatic events with sig. correlated with PTS symptoms (r = .334, p<.01 (positive weak relationship)).

Teodorescu, D., et al., (2012), Norway. *Posttraumatic growth, depressive symptoms, posttaumatic stress symptoms, post-migration stressors and quality of life in multi-traumatised psychiatric outpatients with a refugee background in Norway.* To examine the presence and level of PTG, posttraumatic stress symptoms, depressive symptoms, post-migration stressors and quality of life.	55 refugees with permanent residency in Norway (23 females, 32 males), aged 21-61 years, recruited from four outpatient departments from South-Eastern Norway. Participants had sufficient spoken and written English to partake in the measures. A majority of patients were experiencing problems related to pre-migration traumata or post-migration acculturation difficulties.	The Life Events Checklist (LEC): a 17-item measure of potentially traumatic events. The Clinician Administered PTSD Scale (CAPS) The Structural Clinical Interview for DSM-IV TR PTSD Module (SCID-PTSD): a clinical structured interview for the diagnosis of PTSD. The MINI International Neuropsychiatric Interview 5.0.0 (MINI): assesses 25 axis DSM-IV disorders, one axis II disorder, suicidal risk. The Impact of Event Scale Revised version (IES-R). The Hopkins Symptom Check List-Depression Scale (HSC-25-Depression). The Posttraumatic Growth Inventory – Short Form (PTGI-SF) The World Health Organisation Quality of Life-Brief Scale (WHOQOL-Brief): assesses four domains (physical health, psychological health, social relationships, environmental quality of life), and two general items (quality of life and overall general health). Social network: 'how many good friends do you have'.	Descriptive	The mean PTGI-SF was 22.6 (*SD* = 10.1); and equivalent to 47.4 on the PTGI 21-item questionnaire; the mean scoring for individual items related to between 'small and medium' growth – suggesting a relatively low amount of PTG for this population. The average number of good friends was 3.0 (ranging from 0 to 11); 25.9% had no friends. Unemployment rates for the sample were reported as 'high' at 59.6%.
			Bivariate correlations	No sig. relationship between PTG and demographic variables (age, gender, unemployment) (age: *r*=-.231, *p*=n.s; gender: *r*=.193, *p*=n.s; unemployment: *r*=-.252, *p*=n.s). Negative medium sig. correlations between PTG and PTS (*r* = -.352, *p*<.01), depression (*r*= -465, *p*<.001), and weak social network (*r* = -.486, *p*<.001). Positive medium sig. correlations between PTG and all the quality of life domains: physical (*r* = .508, *p*<.001), psychological (*r* = .582, *p*<.001), social (*r* = .411, *p*<.01), environmental *(r* = .489, *p*<.001), overall QoL (*r* = .467, *p*<.001), and overall health (*r* = .415, *p*<.01).

*Authors did not provide degrees of freedom
**Data not clearly reported

Results

Facilitators of PTG

Factors Relating to Displacement and Resettlement

Across the studies reviewed, factors relating to individual trauma experience, as well as trauma sequelae, have been found to facilitate PTG. In a study of Tibetan refugees living in India, trauma experience significantly predicted PTG (r = .588, p<.001) (Hussain & Bhushan, 2011). In the same sample PTS was positively correlated with PTG (r = .633, p<.01) (Hussain & Bhushan, 2011). However, two studies investigating refugees and displaced people from Kosovo, reported no significant relationship between PTSD symptoms and PTG (Ai, Tice, Whitsett, Ischisaka & Chim, 2007; Powell, Rosner, Burtollo, Tedeschi & Calhoun, 2003). Furthermore, subscale scores relating to 'changes in self/ positive life attitude' were negatively correlated with PTS (r = -.197, p<.05) (Powell et al., 2003).

Within a Norwegian sample of psychiatric outpatients with a refugee background living in Norway, overall health (r = .415, p<.01), satisfaction with living environment (r = .489, p<.001), and overall quality of life (r = .467, p<.001), were positively correlated with PTG (Teodorescu et al., 2012). Kim and Lee (2009), describe that the use of a 'training programme', to help North Korean refugees adjust to life within South Korea, provided, to some degree, a sense of relief and hope.

Intrapersonal Factors

Meaning making: RaAS engaging in a process of meaning making, is discussed as a significant facilitator of PTG in several papers. Nguyen et al., (2014), report that one Vietnamese immigrant in Canada, described that engaging in a process of 'interpreting and re-interpreting', facilitated reaching a point of construing that 'experiencing crisis allowed me to learn' (p. 147). Nguyen et al., (2014) present a wider phased process in which earlier phases indicate that individuals experienced 'turmoil and chaos', and 'unknown ground and confusion' (p. 144; 146). The findings from this study suggest that making sense of cognitive material over time, and engaging with both distressing and transformative concepts both appear to contribute to the development of PTG.

Studying Tibetan refugees in India, Hussain and Bhushan (2011) report that participants conceptualised themselves as having 'survived for more than two generations in exile, and [that] they had every reason to be optimistic' (Hussain & Bhushan, 2013, p. 211), furthermore, one participant described that 'a free life as refugee is better than a life without freedom in my own country' (p. 211). Hijazi et al., (2014), report that a brief narrative approach aimed at helping displaced people integrate their traumatic experiences into their larger life narratives, had a positive significant impact on PTG at 4-months post-intervention in a sample of Iraqi refugees living in the USA (d = 0.52, $p < 0.01$).

New possibilities: Openness to new possibilities is described as an outcome of growth, and as a facilitator of the process of PTG. Pertinent to this, Copping, Shakespeare-Finch and Paton (2010), describe openness and appreciation of new possibilities among Sudanese refugees in Australia, such as valuing the opportunity to receive formal education. Meanwhile, Nguyen et al., (2014) discuss openness to learning a new language and a sense of having a purpose for a Vietnamese immigrant in Canada, 'I struggled to learn a new language, yet I determined to keep going, to live my life since I have a purpose' (p. 148). In a similar vein, in their study of North Korean refugees in South Korea, Hussain and Bhushan (2013), describe the process of establishing oneself as a survivor, and openness to finding new possibilities with *meaningful engagements*.

Personal strength and coping strategies: The role of 'personal strength' and survivorship as a facilitator of growth is discussed both in qualitative and quantitative findings across the studies reviewed (Hussain & Bhushan, 2011, 2013). A number of examples from qualitative studies serve to illustrate this theme. Copping et al, (2010) point to the importance of being determined, as illustrated by the following quote from one refugee: 'if you are determined on something you can make it happen' (Copping et al., 2010, p. 57). A number of other studies identify refugees having hope as contributing to survivorship and growth: 'this is actually what gives me hope and what makes me overcome things, not giving up, because if you give up it means you are defeated, there's nothing else' (p. 57). Kroo & Nagy (2011) studying Somali refugees in Hungary, found that hope was positively correlated with PTG (r =

.483, $p<.01$), whilst it also appeared as a theme in other qualitative studies (Hussain & Bhushan, 2013).

Several studies indicate that cognitive coping strategies, including positive refocusing, refocusing on planning, and putting things into perspective acted as facilitators of PTG (Ai et al., 2007; Hussain & Bhushan, 2011; Kim & Lee, 2009). Furthermore, Kim and Lee (2009), described that a personal factor used by North Korean refugees in South Korea, particularly during the early stages of resettlement, was a 'conscious effort to detach from being a North Korean' (p. 87).

Interpersonal Factors

Sharing stories and connectivity: A number of studies identified talking about one's experiences with others as being an important facilitator of PTG (Copping et al., 2010; Kim & Lee, 2009). Discussing Sudanese refugees in Australia, Copping et al., (2010) report that participants utilised self-disclosure to friends as a means of ameliorating distress at times of experiencing intrusive rumination or flashbacks. In addition, 'sharing stories about similar events' and having a sense of a collective community that 'stand together' was identified as important in this sample (p. 56).

Meaningful relationships, family bonding, sharing a common history, and being part of a shared struggle were identified as helpful factors for Tibetan refugees living in India (Hussain and Bhushan, 2013). Nguyen et al., (2014) describe the importance of community with regard to individual's finding a

sense of meaning, and purpose, during their resettlement, 'I live not only for myself but also for people around me; this gives me meaning' (p. 150). Furthermore, the church community was also recognised as 'a place where participants felt a sense of belonging, where they came to worship and reach out to others' (Nguyen et al., 2014, p. 150). Finally, Kim and Lee (2009), described that having a sense of connectedness with South Koreans was an important factor for North Korean refugees settling within South Korea.

In quantitative studies, interpersonal factors were also found to be associated with PTG. For example, the 'social relationships' subscale, was found to be positively related to PTG (r = .486, p<.001), in a psychiatric outpatient sample from refugee backgrounds in Norway (Teodorescu et al., 2012). Elsewhere, Powell et al., (2003) found that the 'relating to other' subscale of the PTGI was significantly related to the traumatic event score in former refugees and displaced people from Yugoslavia (r = .334, p<.01).

***Giving support*:** Supporting others was identified as an important interpersonal factor contributing to PTG (Copping et al., 2010; Hussain & Bhushan, 2013). For example, one Tibetan participant living in India described 'by helping others in their suffering, I am healing my own sufferings also' (Hussain & Bhushan, 2013, p. 211). In addition, Kim and Lee (2009) describe that seeking to repair prior relationships with disintegrated family members, or offering support to people remaining in North Korea, were important factors for North Korean refugees living in South Korea.

Receiving support: Satisfaction with social support has been shown to be positively correlated with PTG ($r = .297$, $p < 0.05$) (Kroo & Nagy, 2011). Presenting findings of a longitudinal study with Côte d'Ivoire refugees in Liberia, Gregory and Prana (2013) report that the Companion Recovery Model, which integrates peer-counselling concepts alongside a 10-model programme aimed at reducing symptoms of PTS, is facilitative of PTG, in both males and females. The provision of 'instrumental or emotional support from South Koreans' (Kim & Lee, 2009, p. 87) was identified as an important social recovery factor for North Korean refugees. Elsewhere, differences in helping and advisory styles within different cultures was highlighted as an important differentiating factor. For example, Copping et al., (2010) discuss the contrast between the experience of Sudanese 'community elders' who are traditionally sought for wisdom and advice, and Australian professionals, who one participant described as 'just listen to people, you don't advise, just talk, you help them to help themselves, they have to take decision for themselves, but in Africa they try to tell them decisions' (p. 56).

Factors Relating to Philosophy of Life and Religion

Research by Kroo and Nagy (2011) found that religiosity was positively and significantly associated with PTG ($r = .296$, $p<0.05$) in a sample of Somali refugees living in Hungary. Furthermore, evidence from a number of studies suggests that being able to make sense of events 'in line with' existing beliefs may facilitate PTG (Copping et al., 2010). Hussain and Bhushan (2013) describe the process for Tibetan refugees living in India, of accepting and understanding events, and aligning changes in life, with Buddhist beliefs.

Suffering is described as having ‘a purifying quality [that] provides the learning experience that helps go beyond it, perhaps into higher dimensions of life’ (p. 214). Similarly, Nguyen et al., (2014) describe the process of Vietnamese catholic immigrants ‘visiting and re-visiting the events in light of faith’, and using faith in God as a means of understanding events (p. 148). They found that faith encouraged perseverance, creativity, gratitude and contentment. The same study also explored the wider facilitative nature of the process of grappling with the disparity between existing beliefs, and current experiences, and attempting to make sense of these, which they refer to as a process of ‘psycho-somatic-spiritual reactions’ or ‘spiritual crisis’ as part of an overall sense-making process (Nguyen et al., 2014, p.145).

‘Faith in God’ and spirituality was also found to be a resource which facilitates growth and enables a positive perspective during displacement. Nguyen and colleagues cite participant descriptions such as: ‘faith is my inner resource’, that ‘I felt God was protecting me’, and that faith ‘helps me to see things positively’ (Nguyen et al., 2014, p. 146). Elsewhere, in a sample of Somali refugees in Hungary, Kroo and Nagy (2011), report that negative religious coping (for example, ‘wondered what I did for God to punish me’, ‘questioned God’s love for me’) was significantly associated with PTG (r = .434, p<0.01), whereas positive religious coping (for example, ‘looked for a stronger connection with God’, ‘asked for forgiveness for my sins’) was not significantly related to growth. Whilst at first glance, this finding appears divergent from the findings reported by Nguyen and colleagues, one interpretation of a positive association between negative religious coping and PTG could be that it lends

support to the idea of a process of 'spiritual crisis' described by Nguyen et al. (2014) as a part of the PTP that leads to growth. Further research could usefully explore this question further, perhaps employing a longitudinal design to investigate whether, and how the relationship between these variables, varies over time.

Obstacles to PTG

Factors Relating to Displacement and Resettlement

Across the studies reviewed, several aspects of the process of resettlement were identified as obstacles to PTG. In their study, Kim and Lee (2009) found that North Korean participants continued to experience fear regarding being caught and returned to North Korea. Hijazi et al., (2014) suggest that the manner in which a person conceptualises their new country may also impact on the PTG process. The authors describe that conflicting resentment towards the US government from Iraqi refugees may contribute to an ongoing sense of traumatisation, and may negatively influence trauma processing. Elsewhere, more practical obstacles to new possibilities, for example education, housing or employment opportunities, have also been found to have a negative impact on PTG (Copping et al., 2010; Nguyen et al., 2014).

Several studies found that acculturation stress was negatively associated with PTG. Uncertainty with regard to cultural integration, for example a lack of 'cultural cues' was identified as an obstacle for Vietnamese immigrants in Canada (Nguyen et al., 2014). Furthermore, the perceived 'completeness' of a new society, and difficulty 'trusting and understanding South Koreans' (Kim

& Lee, 2009, p. 86), were identified as obstacles for North Korean refugees living in South Korea. Kim and Lee (2009) describe that acculturation stress can furthermore result in denial of 'self-identity' (p. 86). Nguyen et al., (2014) describe a theme of 'unknown ground and confusion' emerging from their study of Vietnamese immigrants in Canada, which was overcome during the process of acculturation. Furthermore, Kim and Lee (2009), describe that 'training' aimed to acclimatise North Korean's to South Korean culture, emphasised difference between the cultures and heightened acculturation stress.

Intrapersonal Factors

Obstacles to establishing a coherent sense of self have been identified as being obstructive to the development of PTG in several studies. Ai et al., (2007) discuss the 'disabling of familiar linguistic and culturally orientated coping strategies' (p. 62) as a barrier to positive change, while Hussain and Bhushan (2013) describe the experience of 'identity crisis' by Tibetan refugees in India, with regard to 'not being able to locate oneself within any country' (p. 212) as an obstacle to growth. Further obstacles to this process, may be avoidant coping strategies (Ai et al., 2007), uncertainty with regard to one's own competence (Nguyen et al., 2014), or perceived discrimination, which was described as a 'form of rejection of political, ideological, and cultural views' (Kim & Lee, 2009, p. 86).

Interpersonal Factors

Focussing on the role of social support, Teodorescu et al., (2012) report a negative correlation between weak social network and PTG (r = -.486, p<.001). Loss and separation from family are described by Hussain & Bhushan (2013) as exacerbating factors of traumatisation. Related to this, distance and disconnection from family, regret, loneliness, and perceived alienation are identified as obstacles to establishing a coherent sense of self, for North Koreans living in South Korea (Kim & Lee, 2009). Furthermore, perceived discrimination from South Koreans, is experienced as a 'form of rejection of political, ideological, and cultural views', and may be experienced as ongoing adversity, or trauma towards one's sense of self (Kim & Lee, 2009).

Interventions

Models and Approaches

Research examined in the present review indicates that having opportunities to establish meaning from experiences is an important facilitator of PTG for RaAS, for example in terms of choices relating to relocation (Kim & Lee, 2009), relationships (Hussain & Bhushan, 2013), and philosophy in life (Nguyen et al., 2014). Hijazi et al., (2014) argue for the use of narrative based interventions, based on research with Iraqi refugees in the USA, which 'may shift people with painful emotional memories from fearful avoidance to courageous confrontation' (p. 320). Findings from a study of Tibetan refugees in India by Hussain & Bhushan, (2011) highlight the role of emotional regulation strategies in mediating the relationship between traumatic

experiences and PTG. Elsewhere, Nguyen et al., (2014) indicate the potential importance of behavioural approaches such as in vivo exposure, providing the example of one Vietnamese participant living in Canada, who described 'ten years later, I still had nightmares. It stopped happening when I was able to revisit Vietnam' (p. 148).

However, there is also evidence that consideration of practical needs alongside psychological needs is relevant in relation to PTP and PTG, for example factors pertaining to quality of life, including physical health and satisfaction with living environment (Teodorescu et al., 2012), as well as social interaction (Copping et al., 2010; Teodorescu et al., 2012), and sense of belonging and integration (Kim & Lee, 2009). Considering Sudanese refugees in Australia, Copping et al., (2010), suggest that a holistic approach to intervention is important.

Social Support

Social support and integration were asserted to have a role in PTP, firstly with regard to providing opportunities for individuals to cognitively re-appraise adverse events by talking about experiences with others, and secondly with regard to the process of acculturation and establishing a sense of coherence with oneself within a new environment. Several approaches to promoting social and community support were advocated within the studies reviewed (Copping et al., 2010; Gregory & Prana, 2013; Hussain & Bhushan, 2013; Teodorescu et al., 2012). Hussain & Bhushan (2011) note the 'collective phenomenon of refugee experience' (p. 733), and the potential for harnessing

this with regard to establishing support structures for RaAS. With regard to Sudanese refugees living in Australia, Copping et al., (2010) discuss that the strong collective culture could be utilised in the form of community run, story sharing, and in-group advice giving, initiatives. While Hussain and Bhushan (2011), discussing Tibetan refugees in India, propose establishing self-help groups, and cultural and religious activities. Furthermore, opportunities for RaAS to act in a helping or support role, was identified as a method of facilitating engagement with meaningful activity (Copping et al., 2010). Gregory and Prana (2013) advocate the use of formalised models of RaAS companionship as a means of intervention, asserting the effectiveness of the Companion Recovery Model with Côte d'Ivoire refugees in Liberia.

Culturally Sensitive Practice

The experience of RaAS with regard to their encounters of help seeking, and receiving support, was considered across the studies reviewed. This is particularly pertinent with regard to RaAS having opportunities to establish an integrated sense of self within a new society, as well as receive culturally sensitive psychological support, which may be facilitative of PTG. Copping et al., (2010) comment on the importance of professionals working within cultural value systems, and note for example, the significance of differences with regard to cultural biases such as 'having control over one's life and recovery' (p. 58). Furthermore, they provide evidence that the manner that support is provided is important for refugees, citing that 'the absence of advice provision in Australian services was seen as negligent' (p. 57) to Vietnamese refugees. For North Koreans in South Korea 'obtaining some form of instrumental or

emotional support from South Koreans' (p. 87), was identified as a 'social recovery factor'.

Furthermore, evidence of practical and perceived barriers which may act as obstacles to seeking support among RaAS, can also be drawn from the research. Recounting the experiences of North Korean refugees, Kim and Lee (2009) describe participants reporting 'difficulty trusting and understanding South Koreans' (p. 86), being overwhelmed by cultural differences, and experiencing differences in dialects which acted as a barrier to communication. Citing experiences of interpersonal interaction during displacement, Nguyen et al., (2014) commented that one Vietnamese immigrant in Canada described 'I remember the terrible fear when witnessing human rudeness' (p. 144), while another described 'I feel like I am in the middle with no place to belong to on any side' (p. 146). As a means of addressing needs such as these, and ameliorating distress, Copping et al., (2010) suggest the provision of advocacy and community development.

Several factors relevant to the provision of culturally sensitive support have been identified from the data, which may also have an impact on PTP and PTG. These include an awareness of the longitudinal picture of trauma: for example the 'need to be aware that memories related to pre-migration psychological trauma and post-migration distress remain, as does vulnerability to additional stress and depression' (Kim & Lee, 2009); recognition of cultural and religious norms by professionals (Copping et al., 2010), including an awareness of cultural norms of help seeking and provision;

and opportunity for making sense of self, including, as necessary, religious beliefs alongside pre-existing frameworks of thinking (Hussain & Bhushan, 2013). Copping et al., (2010) discuss, that in the case of Sudanese refugees living in Australia, some mental health professionals may minimise the role that religious beliefs and practices can play during post-trauma recovery. As such, there is guidance that professionals retain an openness to working alongside the current frame of reference, and the value system of an individual.

Discussion

Limitations of the Present Review

The limitations of the present study should be carefully considered. The number of papers matching the search criteria was low; therefore, the present systematic review draws on empirical data from a small number of studies, across a wide range of contexts. Grey literature was excluded in order to permit a focus on evidence from studies that had been subject to a peer-review process prior to publication, and the quality assurance of only including peer-reviewed studies was considered a strength in this regard. However, it is recognised that the scope of the present review may be limited due to not considering literature from other sources, such as publications of non-governmental organisations or charities that work with RaAS.

A further limitation of the present review is that the quality assessment procedure revealed inconsistencies across the studies, in particular, with

regard to the robustness of study designs and the reporting of study results, for example the format of results sections, and the absence of reporting of effect sizes for key outcome variables (Murray et al., 2010). There was also some inconsistency with regard to the formal measures used to assess the same variable. These limitations should be borne in mind by researchers when designing future studies, in order to facilitate the development of studies with rigorous designs that can contribute to strengthening and further developing the current evidence base.

The present review aimed to synthesise existing findings from empirical research in order to identify facilitators of, and obstacles to, PTG among RaAS populations, and to inform approaches to support interventions. However, given the limited number of studies, and the diverse nature of these studies (both in terms of design and with regard to participant characteristics), the generalisability and transferability of findings of individual studies reviewed here is limited. As such, there is clear rationale for replication studies, in addition to more rigorously designed studies, as previously mentioned. Nonetheless, these studies represent what is currently the best available empirical evidence in the field; as such, they should be drawn upon to inform our understanding of this important clinical and research area. The present review has therefore identified a number of areas where findings across several studies converge, and has drawn conclusions, highlighted clinical implications and made recommendations based on a critical appraisal and synthesis of this evidence.

Clinical Implications

Sense of Self: Facilitating Unique Narratives

Not surprisingly, the meaning that people constructed from their experiences appears to have an important role in PTPs and may influence the development of PTG (Copping et al., 2010; Hussain & Bhushan, 2013; Nguyen et al., 2014). The findings on meaning making reported in the present review – including re-evaluating reasons for leaving one's home country (Kim & Lee, 2009), meaning making with regard to hardship (Hussain & Bhushan, 2013), and sense making with regard to spirituality (Nguyen et al., 2014) – can be categorised into the following components: 1) a person's pre-existing schemas: sense of self, others and the world, including life philosophies 2) the sense that is being made within an ongoing PTP, including acculturation and quality of life, and 3) the relationship and interactions between these components. This is consistent with the processes of assimilation[1] or accommodation[2] proposed in the OVT model (Joseph & Linley, 2005).

Returning to the metaphor of a map of self, which was described in the introduction, the literature reviewed illustrates that a person's pre-existing schema of self may partly determine the level of dissonance which is experienced between this and the new information being presented to it. For example, considering Vietnamese immigrants in Canada, Nguyen et al., (2014) describe a 'spiritual and identity crisis', and 'discordance between ideology and reality' (p. 146), whereas Tibetan refugees describe that,

[1] Processing incoming information to fit with pre-existing schemas
[2] Processing incoming information in a way that results in changes in pre-existing schemas so that meaning made constitutes new and existing information

'suffering is considered a rule rather than an exception' (Hussain and Bhushan, 2013, p. 214). In the latter case, new trauma-related material appears more congruent with pre-existing beliefs. Furthermore, the concept of PTG is discussed in terms of its relevance within differing cultures. Copping et al., (2010) suggest that 'growth occurs *as part of psychosocial development* for the Sudanese people and functions as protection from the protracted hardship they have faced, *rather than as post-crisis personal development*' (p. 57). As such, content that denotes PTG may indeed vary between cultures, offering support for the argument that the concept of PTG may not be fully generalisable across cultures. This is not surprising given that findings suggest that cultural differences exist relating to the manner in which individuals make sense of emotional and psychological experiences (Yaser et al., 2016).

Convergent findings across a number of studies, however, indicate that the psychological processing of traumatic material, may be influenced by a number of other factors, which fall into the four broad categories or themes: 1) interactions with others (Copping et al., 2010; Hussain & Bhushan, 2013; Kim & Lee, 2009; Kroo & Nagy, 2011; Nguyen et al., 2014; Gregory & Prana, 2013; Teodorescu et al., 2012), 2) experience of religion and spirituality (Copping et al., 2010; Hussain & Bhushan, 2013; Kim & Lee, 2009; Kroo & Nagy, 2011; Nguyen et al., 2014), 3) cultural experiences and norms (Copping et al., 2010; Hussain & Bhushan, 2013; Kim & Lee, 2009, Nguyen et al., 2014), and 4) concrete opportunities and quality of life (Copping et al., 2010; Hussain & Bhushan, 2011; Teodorescu et al., 2012).

Interestingly, these themes could be conceptualised in terms of attachment theory, and specifically, the manner in which a sense of 'secure base'[3] is internalised and established through a person's relationships and experiences throughout life (Salzberger-Wittenberg, 2013; Waddell, 2005). Indeed, research has suggested that adult attachment may moderate the extent to which trauma experience associates to PTG (Salo, Qouta & Punamaki, 2005). The present author proposes that the four themes identified may represent *shifting zones of 'secure base'* – signifying facilitators and obstacles of a coherent sense of self, and secure base. Furthermore, these factors may interact and fulfil mediating and moderating relationships with one another, offering a unique perspective with regard to implications for interventions.

Practical Implications

A sequenced, integrative approach: The 'shifting zones of secure base' framework, offers a unique standpoint with regard to implications for interventions and practice; whereby interventions focusing on these factors may either act to facilitate a perceived or actual sense of 'secure base', which subsequently may improve sense of wellbeing and afford PTG, or alternatively, may help to facilitate psychological processing and sense-making with the aim of achieving a more coherent sense of self and wellbeing. This two-pronged approach provides theoretical rationale for a *sequenced, integrative approach* to intervention; where basic needs and daily stressors,

[3] Bowlby described that early parenting initiates a sense of 'secure base' from which a child 'can make sorties into the outside world and to which he can return knowing for sure that he will be welcomed when he gets there, *nourished physically and emotionally, comforted if distressed, reassured if frightened*' (Bowlby, 1988, p. 11).

alongside social interaction, are considered first to establish ecological stability and locating oneself within a place (as evidenced, for example, by Copping et al., 2010; Hussain & Bhushan, 2013; Teodorescu et al., 2012), and *specialised psychological interventions* are made available with regard to psychological processing (such as through NET based approaches for example) for those for whom dissonance continues (Hijazi et al., 2014; Maslow, 1968; Miller & Rasmussen, 2010; Rousseau et al., 2011). Approaches such as teaching cognitive-emotional regulation strategies (Hussain & Bhushan, 2011) may support individuals for whom integration of ecological stability, may be problematic, for example encompassing 'positive refocusing', and 'refocusing on planning'.

Facilitating psychological processing: The results reported in the present review about meaning making (Kim & Lee, 2009; Nguyen et al., 2014) indicate that PTP in the aftermath of trauma can lead to experiences of both stress (PTS) and growth (PTG), and that these may be considered as ongoing processes or as outcomes. A traumatic event may be discrete or prolonged and may be an actually occurring (external) event or an internally perceived event, such as an ongoing sense of threat, or loss (Kim & Lee, 2009). This suggests that it is important to consider the effects of trauma or adversity on the individual over time. The evidence reviewed here appears to lend support to the proposal that PTSD and PTG are not completely separate but rather are both salient features of PTP; at times leading to distress, anguish and turmoil (Kim & Lee, 2009; Nguyen, Bellehumeur & Malette, 2014), and at times to strength, hope and determination (Copping et al., 2010; Hussain &

Bhushan, 2013; Nguyen et al., 2014). This observation is consistent with theoretical attempts to account for the presence of both negative and positive changes in the aftermath of traumatic experiences (Joseph and Linley, 2005).

This points to a need for researchers, clinicians and policy makers to adopt a more psychological and holistic view of PTP experienced by displaced people, rather than a narrow medicalised view that focuses primarily on negative symptomology and symptom reduction (Murray et al., 2010). As such, there is indication that psychological and psychosocial interventions should acknowledge and address negative symptomology, but also promote the psychological process of PTG, for example utilising NET based approaches (Gregory & Prana, 2013; Hijazi et al., 2014). Other researchers have called for an increase in studies seeking to inform best practice treatment, early intervention and health promotion strategies for RaAS (Yaser et al., 2016), and findings from the present review underscore the need for such developments.

Considerations for Professionals

Six themes concerning considerations for professionals are summarised with examples in Figure 1.4.

Figure1.4 – **Summary of Considerations for Professionals and Clinical Interventions**

1	**The longitudinal sequelae of trauma**: caution and sensitivity should be exercised with regard to how topics are approached and contained therapeutically. **Example:** Kim and Lee (2009) describe that 'memories related to pre-migration psychological trauma and post-migration distress remain, as does vulnerability to additional stress and depression' (p. 87).
2	**The heterogeneous nature of the experiences of RaAS:** care should be taken to place emphasis on understanding individual experience and challenges, given the heterogeneous nature of the experiences of RaAS (Murray et al., 2010).
3	**Differences in worldview assumptions**: attention should be given to be sensitive and respectful of individual cognitive experiences within the process of meaning making. **Example**: For people in protracted conflict situations, for example Sudan for the past 50 years, benevolent world views such as 'good things happen to good people' may be absent (Copping et al., 2010, p. 57).
4	**Differences between dominant therapeutic paradigms**: attention should be paid to differences between the dominant therapeutic paradigm of western psychology in contrast to specific RaAS cultures, with regard to the accessibility, acceptability and efficacy of services. **Example:** 'the absence of advice provision in Australian services was seen as negligent' to Vietnamese refugees living in Australia (Copping et al., 2010, p. 57). It may be appropriate to think with individuals about expectations for support, and ways in which this can be addressed.
5	**Ongoing context of resettlement and acculturation**: the ongoing context of resettlement and aculturation should be kept in mind, particularly with regard to establishing a sense of secure base. **Example**: Hijazi et al., (2014) discuss the experience of Iraqi refugees in America, and the cognitive conflicts which may ensue for RaAS living in, and receiving help from, a country which may be perceived as responsible for ongoing unrest and upheaval. Services, and support systems, may be perceived to be firmly positioned within these countries, and as such, seeking support in itself may cause internal conflict, and contribute to the trauma process. This may provide a dilemma for individuals with regard to trust, and loyalty, and may be an obstacle to making sense of the resettlement process and constructing a coherent narrative.
6	**Harnessing cultural and religious values and norms**: cultural and religious values and norms should be acknowledged and validated, including the 'collective phenomenon' of refugee experience. Salient aspects of RaAS culture and communities may be able to be utilised for the benefit of interventions; which may be particularly advantageous for groups for whom socioeconomic status, or language and cultural barriers, present new dimensions for treatment (Palic & Elklit, 2011). **Examples:** The formal use of the Companion Recovery Model employed with Cote D'Ivoire refugees in Liberia (Gregory and Prana, 2013). Informal opportunities for community members to be involved in community-based story-sharing, self-help groups, or religious activities (based on findings from Hussain & Bhushan (2011) studying Tibetan refugees in India).

Recommendations for Future Research

Further longitudinal and culture specific research is widely called for within studies reviewed here (Hijazi et al., 2014; Hussain & Bhushan, 2011; Kroo & Nagy, 2011; Nguyen et al., 2014; Teodorescu et al., 2012). The present review supports that call, as this would serve to provide important insights into post trauma processes over time, and would address significant gaps in the literature in terms of understanding the sequelae of displacement and migration in RaAS from different countries and cultures.

The replication of existing empirical studies as well as the inclusion of more rigorous research designs, as previously mentioned, would serve to strengthen the evidence base and to allow greater confidence in the comparison of findings across cultures (Hijazi et al., 2014). Larger studies would address current research limitations around reliability, generalisability and causality (Gregory & Prana, 2013; Kroo & Nagy, 2011; Powell et al, 2003; Teodorescu et al., 2012).

Furthermore, further research is indicated with regard to the reliability and validity of PTG measures across cultural settings. This may include, investigation with regard to the use of back-translation, developing culturally appropriate and sensitive measures, and the impact of repeating measures within longitudinal studies (Hijazi et al., 2014; Kroo & Nagy, 2011; Powell et al., 2003).

Future studies may also benefit from utilising mixed methods designs, or the use of parallel studies (Hussain & Bhushan, 2011; 2013) – which present qualitative data reported with rigor and depth, alongside robust quantitative data – to provide a coherent and multifaceted perspective of individual experience of PTG processes (Kroo & Nagy, 2011). This would allow for triangulation of findings and observations, which is particularly important given that some of the studies considered in the present review were of relatively low quality.

Conclusion

The present review sought to critically appraise the existing empirical evidence regarding facilitators of, and obstacles to, the development of PTG among RaAS populations, and to review the evidence relating to interventions that may promote PTG. The ability for individuals to engage with a meaning making progress emerged as an important factor in the development or presence of PTG among RaAS, while four themes appear to adequately represent the other factors that have been identified as relevant to PTG in this context, namely: interpersonal interaction; experience of religion and spirituality; cultural experiences and norms; and concrete opportunities and quality of life. The author proposed a framework in which the themes are conceptualized in relation to attachment theory; each theme representing a '*shifting zone of secure base'*.

Findings support a move towards a sequenced and integrative approach to interventions for RaAS, where basic needs, daily stressors, and social integration are addressed first; and specialized psychological interventions are made available for individuals for whom psychological dissonance remains. The value of the collective phenomenon of RaAS experience was discussed in relation to these indications. The data reviewed supports the notion that PTP includes both negative and positive aspects. As such interventions that promote establishment of a congruent narrative and sense of self, and direction towards a holistic rather than medicalised model, were discussed.

'To them the war destroyed not only the physical homeland but psychologically it also turned an assumptive world, to use Janoff-Bulman's (1992) terms, upside down in a peaceful mind'
(Ai et al., 2003, p. 56).

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Chapter 2: Empirical Paper

A Mixed-Sample Follow-Up Study Investigating Rumination Style, Unconditional Positive Self-Regard, Posttraumatic Growth and Wellbeing Over Time

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A Mixed-Sample Follow-Up Study Investigating Rumination Style, Unconditional Positive Self-Regard, Posttraumatic Growth and Wellbeing Over Time

Abstract

The present study investigated the relationship between rumination style, unconditional positive self-regard (UPSR), posttraumatic growth (PTG), and wellbeing, over a period of time. A repeated-measures design was employed, comprising purposively recruited university students and non-student community participants who had experienced an adverse life event, to complete a battery of standardised measures targeting these variables: rumination style (the Event Related Rumination Inventory); UPSR (the UPSR Scale); PTG (the Posttraumatic Growth Inventory, and the Changes in Outlook Questionnaire – Positive Changes (CiOP) and Negative Changes (CiON) subscales); and wellbeing (the Warwick Edinburgh Mental Wellbeing Scale). 236 participants (44 males,192 females) completed the survey at 'Time 1' (T1), and 146 participants (25 males, 121 females) completed the survey three months later at 'Time 2' (T2). The study presents novel findings showing that whilst deliberate rumination was not significantly correlated with UPSR, intrusive rumination had a significant weak inverse correlation with UPSR across the time points. The findings demonstrated that individuals low in UPSR may experience increased levels of intrusive ruminative thinking. In addition, deliberate rumination had a significant weak positive correlation with PTG. Intrusive rumination, however, showed a significant weak positive correlation with CiON, and had a significant inverse correlation with wellbeing,

across the time points. Moreover, UPSR showed a significant positive correlation with PTG and wellbeing, and a significant inverse correlation with CiON across the time points. The study findings are discussed in relation to the hypotheses, clinical implications, and future research directions.

Introduction

Trauma Related Growth

Adverse life events are experiences seldom sought but nonetheless prevalent within society (Norris, 1992). The National Institute of Clinical Excellence (NICE) suggests that twenty-five to thirty percent of people struggle to move on from the acute stress reactions that can follow in the aftermath of traumatic or adverse life events; developing symptoms recognised by the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-V; American Psychiatric Association [APA], 2015) as features of posttraumatic stress disorder (PTSD) (NICE, 2012). In contrast, the concept of post traumatic growth (PTG)[1] refers to the notion that survivors of traumatic life events can ultimately experience an enhanced sense of meaning, or eudaimonic wellbeing, following adverse or traumatic experiences (Tedeschi & Calhoun, 1995). This raises the question of why some individuals go on to have a more positive outcome whilst others experience negative sequelae, following adverse experiences.

[1] The term PTG is utilised to refer to experiences of growth following adversity and trauma, and is synonymous with the term 'adversarial growth' used elsewhere in literature

Models of Posttraumatic Growth

The theoretical understanding of PTG has been evolving over recent years. For example, the Organismic Valuing Processing (OVP) theory (Joseph & Linley, 2005) proposes that individuals are intrinsically motivated towards the resolution of dissonance between trauma-related experiences and their pre-existing assumptive world. Joseph and Linley (2005) posit that engaging in cognitive processing allows the reassessment and rebuilding of the assumptive world in new ways that facilitate resolution of this dissonance. However, the reconstruction of a person's assumptive world can be threatening to their self-structure (or self-concept), which forms the basis of how the person views themselves, others and the world.

The OVP model asserts that resolution of discrepancies between a person's prior assumptive world and new trauma-related information occurs via processes of assimilation or accommodation (Joseph & Linley, 2005). Assimilation is characterised by a person adhering to, or attempting to adhere to, their prior assumptions. Accommodation, by contrast, involves recognition that prior assumptions may no longer be valid, and results in new trauma-related learning taking place (Janoff-Bulman, 1994); this being central to PTG, both as a process and an outcome (Joseph & Linley, 2005).

Building on the OVP model, the affective-cognitive processing model of PTG (ACP-PTG) (Joseph, Murphy & Regel, 2012) (Appendix E), describes a number of specific cognitive processes that are thought to contribute to the reappraisal process, including distinct ruminative processes.

Deliberate and Intrusive Rumination

Research indicates that the type of posttraumatic sequelae experienced by an individual appear to be closely linked to certain cognitive processes. Evidence suggests that deliberate and reflective ruminative behaviours are associated with positive changes, and may promote PTG and alleviate depressive symptoms (Stockton, Hunt, & Joseph, 2011; Joseph et al., 2012). Conversely, findings suggest that intrusive rumination, or brooding, may be inversely related to PTG, (Stockton et al., 2011), and are instead associated with negative changes in the aftermath of trauma, which may contribute to the maintenance of negative symptomology (Moberly & Watkins, 2008). Formal measurements have been developed that capture these two contrasting rumination styles (Cann et al., 2011).

Intrusions – including distressing memories such as images, thoughts or perceptions, as well as flashbacks and distressing dreams – have traditionally been associated with PTSD (5th ed., DSM-V; APA, 2015). However, literature now exists suggesting that a variety of cognitive processes, including the processing of cognitions that could be considered negative or distressing, may be involved in the process of growth following adversity (Joseph et al., 2012). Furthermore, it has been observed that the impact of rumination type may be multidimensional over time (Taku, Cann, Tedeschi & Calhoun, 2009). Research suggests, therefore, that features of PTSD need not be incongruent with PTG; and instead, asserts that experiences of stressor contemplation, may, to some extent, necessitate growth (Hegelson, Reynolds and Tomich,

2006; Joseph et al., 2012). This offers a new perspective to a traditionally pathologised set of symptoms.

Unconditional Positive Self-Regard

Evidence is emerging suggesting that unconditional positive self-regard (UPSR) also has relevance to PTG. For example, a recent study found that UPSR was positively correlated with PTG (Flanagan, Patterson, Hume and Joseph, 2015).

UPSR, which is described as an individual's ability to relate to "all of one's [own] experiences, whether positive or negative, with warmth and a non-judgmental understanding" (Patterson & Joseph, 2013, p.95), proceeds from person-centred psychology. Person-centred psychology upholds the theory that humans have an innate motivational drive, or actualising tendency, to enhance themselves (Rogers, 1959). Evidence suggests that UPSR is closely associated with self-compassion, which represents the ability of an individual to have a healthy relationship with oneself – including one which is non-judgmental and accepting (Griffiths & Griffiths, 2013). It follows then that an individual higher in UPSR is likely to be more open to, and less judgemental of, internal experiences, such as intrusive cognitions for example, than an individual with low levels of UPSR.

Rationale for Research

Facilitating UPSR is a key aim of person-centred therapeutic approaches – a framework that has been shown to be beneficial for a range of mental health

difficulties, including depression (Greenberg & Watson, 1998; King et al., 2000) and PTSD (Joseph, 2012; Joseph & Murphy, 2013) – by promoting self-acceptance and strengthening one's sense of self (Goldman, Greenberg, & Angus, 2006).

Person-centred theory suggests that people who have high levels of UPSR may be more open to, and accepting of, the internal processes that allow the affective-cognitive processing of traumatic material and accommodation to occur – such as deliberately ruminating or actively reflecting on material. Conversely, those with low levels of UPSR may find such processes more difficult, or indeed threatening; positive self-regard being more contingent upon complying with, and maintaining introjected conditions of self. As such, people with low UPSR may be cognitively conservative, tending towards assimilation, avoiding deliberate ruminative behaviours, and entering into more passive ruminating processes. Conversely, intrusive thoughts may be more likely to be subject to deliberate rumination and reflection in those with higher levels of UPSR. Initial research findings provide tentative support for this assertion (Flanagan et al., 2015).

The present study set out to build on previous research that examined the relationship between rumination style and PTG (Stockton, Hunt, & Joseph, 2011; Joseph et al., 2012) as well as the research that investigated the relationship between UPSR and PTG (Flanagan et al., 2015). It sought to extend this work by examining the relationships between rumination, UPSR, PTG and wellbeing over time. In addition to examining the relationship

between two variables considered to be important to the development of PTG, the present study sought to determine whether rumination style may mediate the relationship between UPSR and PTG.

Aim

Adopting a repeated measures design, the current study aimed to investigate relationships between rumination style, UPSR, PTG and wellbeing over time (across two time points). Furthermore, it aimed to investigate a potential mediatory function of rumination style in the relationship between UPSR and PTG.

The Present Study

The present study aimed to explore the relationships between rumination style, UPSR and PTG. It recruited a large mixed sample, consisting of non-student, and student participants, across two time points. The study hypotheses were:

Hypothesis 1: Deliberate rumination will be positively associated with PTG over time

Hypothesis 2: Intrusive rumination will be negatively associated with PTG over time

Hypothesis 3: Deliberate rumination will be positively associated (part a), and intrusive rumination will be negatively associated (part b), with wellbeing over time

Hypothesis 4: UPSR will be positively associated with PTG and wellbeing over time

Hypothesis 5: UPSR will be positively associated with deliberate rumination (part a), and negatively associated with intrusive rumination (part b) at any time point

Hypothesis 6: The relationship between UPSR at Time 1 (T1) and PTG at Time 2 (T2) will be mediated by rumination style at T1

Method

Sampling Design

In order to test the hypotheses, a minimum sample size of at least 100 participants was required, allowing for a 20:1 ratio for the number of cases to the number of free parameters (Kline, 2005). To account for an anticipated degree of participant attrition between T1 and T2 (Flanagan et al., 2015), the study aimed to recruit twice as many participants at T1 than the required sample size. A simple mediation model was anticipated to assess the mediating effect of rumination type on the relationship between UPSR and PTG (Figure 2.1) (Baron & Kenny, 1986; Hayes, 2009).

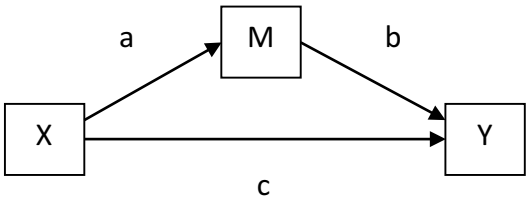

Figure 2.1 – A simple mediation model: the product of a and b quantifies the indirect effect of X on Y through M (the mediator); c quantifies the direct effect of X (Hayes, 2009). In the current study X denotes UPSR, M denotes rumination styles and Y denotes PTG.

The study recruited a mixed sample for the T1 survey; purposively recruiting participants from a community sample of university students, and non-student participants via on-line social media advertising (Flanagan et al., 2015; Stockton et al., 2011), over a four month period. Student participants were recruited from two universities (University A and University B), utilising: poster distribution across the two campuses; word of mouth advertisement by Psychology lecturers (University B); online advertisement (University A); and the presence of the study on an online research platform (University B). Participants recruited via the online research platform received incentive in the form of student research credits. Non-student participants were recruited via an advertisement placed on Facebook by the principal investigator. The advertisement received thirty shares – thirteen of which were by people, or pages, unknown to the investigator, indicating distribution of the invitation outside of the proximal spheres of the investigator.

Participants

There were six hundred and thirty visits to the survey site which did not progress past the consent page; seventy-one visits progressed past the consent page but did not result in completion of the survey (Appendix F). Two

hundred and thirty-six participants (44 males and 192 females), aged between 17 and 79 years of age (*M* = 29.25; *SD* = 14.39) completed the survey at T1.

Table 2.1 displays a summary of participant ethnic background and Table 2.2 shows a summary of participant employment and education status.

Table 2.1: Distribution of ethnicity within sample (*N* = 236).

Ethnicity	**Participants (%)**
White-British	53.8%
White-other	16.9%
Mixed – White and Black Caribbean	1.3%
Mixed – White and Asian	0.8%
Asian/ Asian British - Indian	6.4%
Asian/ Asian British – Pakistani	2.5%
Asian/ Asian British – Chinese	2.1%
Asian - Other	3.4%
Black/ Black British – African	7.2%
Black/ Black British – Caribbean	3.8%
Black – Other	0.4%
Other ethnic group – Arab	0.4%
Other	0.8%

Table 2.2: Employment and education status of participants (*N* = 236)

	Participants
Employment status	64% student; 15% employed full time; 13% employed part time; 3.5% not employed; 4% retired; 0.5% unable to work
Years of education	*M*=15.15 years, *SD*=4.96
Highest level of educational	3.4% GCSE; 46.2% A-level; 14.8% college diploma or equivalent; 15.7% undergraduate degree; 19.9% postgraduate qualification

Participants experienced a range of difficult life events displayed in Table 2.3[2]. 'Time since event' rates for participants are summarised in Table 2.4.

Table 2.3: The distribution of traumatic events reported by participants (*N* = 236).

Difficult event	**Participants (%)**
Natural disaster	2.1%
Fire or explosion	0.0%
Transportation accident	5.5%
Serious accident at work, home or during recreational activity	2.1%
Exposure to toxic substances	0.0%
Physical assault	7.2%
Assault with a weapon	0.8%
Sexual assault	11.9%
Other unwanted or uncomfortable sexual experience	5.5%
Combat exposure to a war-zone	0.4%
Captivity	0.4%
Life-threatening illness or injury	8.9%
Severe human suffering	0.4%
Sudden violent death	3.4%
Sudden accidental death	16.5%
Serious injury, harm or death you caused to someone else	2.1%
Any other very stressful event or experience[2]	32.2%

[2] Any other very stressful event or experience: addiction; adversity during childhood (e.g. presence of an 'alcoholic' parent); allegation; anxiety/ depression, bereavement; bullying (childhood or work); disclosure regarding sexual abuse; disownment, or separation, from loved ones; domestic abuse (to self, or witnessing parents); extremely stressful situation – pervasive sense of helplessness; eating disorder; emotional or psychological abuse; false imprisonment of a close relative; health complications; homelessness; life-limiting, or life-threatening, physical illness (self, dependent, or close relative); multiple adverse events in co-occurrence; pregnancy-related adversity (termination of pregnancy, miscarriage, traumatic birth, labour to dead foetus, post-natal depression); psychological difficulties of close relative; relationship separation/ significant relationship stressors; separation/ divorce of parents; suicide attempt (self, or close relative); being stalked; threat made to life.

Table 2.4: Time since traumatic event as reported by participants (*N* = 236)

Time since event	Participants (%)
Less than 6 months	15.3%
6 – 12 months	5.9%
More than 1 year, but less than 2 years	12.3%
More than 2 years, but less than 5 years	28.0%
More than 5 years	38.1%
Information not provided	0.4%

One hundred and forty-six participants completed the T2 survey. Additionally, there were ninety-two visits to the survey which did not progress to completion. Twenty-two percent of participants reported having experienced an adverse event since the completion of the T1 survey.

Measures

The Life Events Checklist (LEC) (Gray, Litz, Hsu & Lambardo, 2004):

The LEC is a 17-item checklist measuring exposure to traumatic and adverse life events, which has been developed for student and general population samples. 16 items relate to specific events deemed as adverse or traumatic – for example, sexual assault. The addition of a further item relates to 'other very stressful life events'. The items are scored on a 2-point Likert scale (1 = *happened to me*, 2 = *has not happened to me*) (Flanagan et al., 2015). The LEC exhibits adequate temporal stability and good convergence with established measures (Gray, Litz, Hsu, & Lombardo, 2004). Participants were additionally asked to select "which of these life events has caused you the greatest impact / difficulties". Participants were asked to specify the nature of the event if "other stressful life event" was selected.

The Event Related Rumination Inventory (ERRI) (Cann, Calhoun, Tedeschi, Triplett, Vishnevsky & Lindsrom, 2011):

The ERRI is a 20-item measure, containing items which refer to two subscales: *deliberate rumination* (10 items) and *intrusive rumination* (10 items) (Cann et al., 2011) (Appendix G). The items are scored on a 4-point Likert scale (0 = *not at all*, to 3 = *often*) (minimum total subscale score = 0; maximum total subscale score = 30). The measure exhibits good internal consistency for both subscales (α = .95 and α = .91 respectively), and satisfactory construct validity (Stockton et al., 2011).

The Unconditional Positive Self-Regard Scale (UPSRS) (Patterson & Joseph, 2006):

The UPSRS is a 12-item measure, containing items which refer to two subscales: *self-regard* (6 items) and *conditionality of self-regard* (6 items). The items are scored on a 5-point Likert scale (1 = *strongly disagree*, to 5 = *strongly agree*) (minimum total score = 12; maximum total score = 60), and include two reverse score items. The UPSRS exhibits good internal consistency for both subscales (α = .88 and α = .79 respectively); Patterson & Joseph, 2006). Furthermore, correlational analyses showed good construct validity and good discriminant validity (Patterson & Joseph, 2006).

***Measures of PTG and Wellbeing*:** two measures of PTG, and one measure of wellbeing were included to offer triangulation, as well as consideration of positive and negative changes during post trauma sequelae (Frazier et al., 2009; Joseph et al., 2012).

i) The Changes in Outlook Questionnaire (CiOQ) (Joseph, Williams & Yule, 1993):

The CiOQ is a 26-item measure of perceived changes in the aftermath of a traumatic life event. The items are scored on a 6-point Likert scale (1 = *strongly disagree*, to 6 = *strongly agree*). The CiOQ consists of 11 items referring to positive changes (CiOP) (minimum total score = 11; maximum total score = 66), and 15 items assessing negative changes (CiON) (minimum total score = 15, and maximum total score = 90) (Joseph, Williams, & Yule, 1993). The measure has been utilised in a variety of studies where participants have experienced adverse or traumatic life events, both in person and vicariously (Joseph, Linley, Shevlin, Goodfellow, & Butler, 2006). The measure exhibits good internal consistency, with alpha coefficients between .80 and .88 across the two subscales, and evidence of convergent and discriminate validity (Joseph et al., 2005).

ii) The Posttraumatic Growth Inventory (PTGI) (Tedeschi & Calhoun, 1996):

The PTGI is a 21-item measure of perceived PTG consisting of items referring to five factors; factor 1: 'Relating to Others', factor 2: 'New Possibilities', factor 3: 'Personal Strength', factor 4: 'Spiritual Change', and factor 5: 'Appreciation of Life' (Tedeschi & Calhoun, 1996). The items are scored on a 6-point Likert scale (0 = *did not experience this change*, to 5 = *I experienced this change to a very great degree*) (minimum total score = 0; maximum total score = 105). The measure has been utilised widely in a variety of studies where participants have experienced adverse or traumatic life events, both in person and

vicariously. The measure exhibits satisfactory internal consistency reliability with alpha coefficients between .67 and .85, and evidence of good convergent and discriminant validity (Tedeschi & Calhoun, 1996).

iii) The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) (Tennant et al., 1993):

The WEMWBS is a brief, 14-item measure of mental wellbeing, that includes both hedonic and eudaimonic aspects. The items are scored on a 5-point Likert scale (1 = *none of the time*, to 5 = *all of the time*) (minimum total score = 14; maximum total score = 70). The measure exhibits good internal consistency with alpha coefficients between .89 and .91, and good convergence with established measures (Tennant et al., 2007).

Scale Reliability

Reliability statistics showed that all scales had a high level of internal consistency as determined by Cronbach's alpha (Table 2.5).

Table 2.5 – Internal consistency Cronbach's alpha scores

Scale	Cronbach's alpha	
	Time 1	Time 2
CiON	.91	.92
CiOP	.84	.82
ERRI – Deliberate rumination	.94	.95
ERRI – Intrusive rumination	.86	.90
PTGI	.94	.96
UPSR	.81	.84

Design

The independent variables were rumination style (hypotheses 1, 2, 3), and UPSR (hypotheses 4, 5), and the dependant variables were PTG and wellbeing (hypotheses 1,2 ,3, 4), and rumination style (hypothesis 5). The mediator variable for hypothesis 6 was rumination style. Demographic information was collected (see Appendix H), and a repeated-measures design was employed utilising previously validated self-report measures (Appendix G).

Procedure

The battery of measures was administered using a regulated and secure online psychological research website (Bristol Online Survey). Before consenting to participate in the study, participants were provided with an information sheet (Appendix I). Measures were obtained at T1, and again at T2, three months later. The LEC was not completed at T2, however, participants were asked to respond to the question: "Have you had a life event that you experienced as traumatic since you completed the first stage of this study?". Both surveys were open for a period of four months (9 September to 31 December 2016; 9 December to 31 March 2017, respectively). Participants were invited to complete the T2 survey via phased email invitation, managed via Bristol Online Survey.

Ethical Considerations

The study received ethical endorsement from the Faculty of Health and Life Sciences Ethics Board at Coventry University (project ref: P40423, Appendix

J). In line with the BPS Code of Ethics and Conduct, consent was gained from all participants using an online consent form (Appendix K), on the basis of receiving sufficient information regarding the nature of the study (Appendix I) (BPS, 2010). Participants were informed that they could withdraw from the study by informing the principal investigator up until 15 April 2017.

Debriefing was offered to participants in the form of a debrief sheet (Appendix L), at the completion of the survey, which included details of relevant support services. Participants were offered the opportunity to opt-in to receive a summary of findings via email at the completion of the study.

In accordance with the Data Protection Act, all information obtained from participants during the study is confidential, and is treated as such (BPS, 2010). To protect anonymity and confidentiality, e-mail addresses were stored separately to other data, and all participants were allocated a unique study code. All primary data and person-identifiable information was secured by password-protection.

Data Analysis

Statistical analysis was carried out using Excel (Version 15.26) and IBM Statistical Package for the Social Sciences (SPSS) (Version 24). Descriptive statistical analyses, Cronbach's alpha analysis of reliability, Pearson's correlation coefficient analyses, parametric assumptions tests, and Wilcoxon signed-ranks analyses were carried out. There was no missing data.

Results

Summary Statistics

Table 2.6 displays summary statistics for each of the variables investigated at T1 and T2.

Table 2.6 – Summary statistics for all the variables at Time 1 and Time 2

		Time 1 (*N*=236)			Time 2 (*N*=144)		
		M	*SD*	*SE*	*M*	*SD*	*SE*
ERRI	Deliberate rumination	19.54	6.60	.43	18.38	6.89	.57
	Intrusive rumination	20.69	7.69	.50	17.55	8.15	.68
CiON		40.10	15.34	.99	38.41	14.87	1.24
CiOP		43.90	9.86	.64	44.29	8.74	.73
UPSR		35.67	7.02	.46	36.35	7.44	.62
PTGI		52.37	25.78	1.68	52.03	25.79	2.15
WEMWBS		47.16	11.41	.74	41.60	9.01	.75

Correlations

Assessment of correlations was carried out for each relationship at each time point: T1 to T1, T1 to T2, and T2 to T2. The T1 to T2 relationships are reported in the main text, as these are the focus of the main study hypotheses. Additional data, describing T1 to T1 and T2 to T2 correlations are presented in Appendix M.

Hypothesis 1: Deliberate rumination will be positively associated with PTG over time

There was a significant weak positive correlation between deliberate rumination at T1 and PTG at T2 on the PTGI (r = .169, p = .022) and the CiOP

(*r* = .216, *p* = .005). CiON at T2 was not significantly correlated with deliberate rumination at T1 (*r* = .440; *p* = .302*).*

Hypothesis 2: Intrusive rumination will be negatively associated with PTG over time

Intrusive rumination at T1 was not significantly correlated with PTGI or CiOP at T2 (r = .010, *p* = .451; r = .094, *p* = .132). There was a moderate significant positive correlation between intrusive rumination at T1 and CiON at T2 (*r* = .306*, p* < .001*).*

Hypothesis 3: Deliberate rumination will be positively related (part a), and intrusive rumination will be negatively related (part b), to measure of wellbeing over time

Part a

Deliberate rumination at T1 was not significantly correlated with WEMWBS score at T2 (*r* = .029, *p* = .366).

Part b

There was a significant weak significant negative correlation between intrusive rumination at T1 and WEMWBS score at T2 (*r* = *-.239, p* = .002).

Hypothesis 4: UPSR will be positively associated with PTG and wellbeing over time

UPRS at T1 had a significant moderate positive correlation with PTGI at T2 (*r* = .303, *p* < .001), and a significant weak positive correlation with CiOP at T2

(r = .280, p < .001). UPSR at T1 showed a significant moderate negative correlation with CiON at T2 (r = -.409, p < .001), and a significant moderate positive correlation with WEMWBS score at T2 (r = .442, p < .001).

Hypothesis 5: UPSR will be positively associated with deliberate rumination (part a), and negatively associated with intrusive rumination (part b) at any time point

Part a

UPSR at T1 was not significantly correlated with deliberate rumination at T2 *(*r = .030*,* p = .361*) (*Table 2.7).

Part b

There was a significant weak negative correlation between UPSR at T1 and intrusive rumination at T2 (r = -.173, p = .019).

Table 2.7 – Rumination and UPSR correlations across time (r)

		UPSR	
		Time 1	Time 2
Time 1	Deliberate rumination	-.012	-
	Intrusive rumination	**-.281*** **	-
Time 2	Deliberate rumination	.030	-.026
	Intrusive rumination	**-.173***	**-.254****

*p<.05
**p<.01
***p<.001

Hypothesis 6: The relationship between UPSR at T1 and PTG at T2 will be mediated by rumination style at T1

Shapiro-Wilk tests of normality showed that CiOP (T2) and PTGI (T2) met the assumption for normality, however, the results for ERRI – deliberate rumination (T1), ERRI - intrusive rumination (T1), and UPSR (T1) did not (Appendix N). Data transformation did not result in a normal distribution of aforementioned variables, therefore, assessment of the mediatory role of rumination style was not possible due to the data not meeting the statistical assumptions required for mediation analysis.

Further Exploration of Data

To explore variable changes over time, non-parametric, Wilcoxon Signed Rank repeated measures tests were conducted. Results are displayed in Table 2.8.

Table 2.8 – Wilcoxon Signed Rank repeated measures test results

Scale	T1 *M(SD)*	T2 *M(SD)*	Wilcoxon Signed Rank
ERRI – Deliberate rumination	19.54 (6.60)	18.38 (6.89)	$Z = -2.85$, $p < .01$
ERRI **-** Intrusive rumination	20.69 (7.69)	17.55 (8.15)	*$Z = -4.59$, $p < .01$*
PTGI	52.37 (25.78)	52.03 (25.79)	$Z = -.45$, $p = .652$
CiOP	43.90 (9.86)	44.29 (8.74)	$Z = -.20$, $p = .841$
CiON	40.10 (15.34)	38.41 (14.87)	$Z = -.99$, $p = .320$
WEMWB	47.16 (11.41)	41.60 (9.01)	$Z = -7.34$, $p < .001$
UPSR	35.67 (7.02)	36.35 (7.44)	$Z = -1.223$, p = .221

The deliberate rumination subscale and the intrusive rumination subscale scores decreased significantly from T1 to T2 with small effect sizes (*Cohen's d* = .24; *Cohen's d* = .15, respectively), and WEMWBS scores decreased over time with a large effect size (*Cohen's d* = .61). There were no significant changes in PTGI, CiOP, CiON, or UPSR scores between time points.

Summary of Results

Data analysis indicated that a number of the study hypotheses were supported, whilst others were not. Figure 2.9 shows a summary of the key findings relating to PTG. Appendix O displays subscale analysis data.

Table 2.9 – PTG correlations (*r*)

		Time 2			
		PTGI	CIOP	CION	WEMWB
Time 1	Deliberate rumination	**.169***	**.216****	.44	.029
	Intrusive rumination	.010	.094	**.306*****	**-.239****
	UPSR	**.303*****	**.280*****	**-.409*****	**.442*****

* p<.05
**p<.01
***p<.001

Discussion

This is the first study to examine the relationships between rumination, UPSR, PTG and wellbeing over time, in one study. Results showed that hypothesis 1 was confirmed, as deliberate rumination was positively associated with PTG. Conversely, hypothesis 2 was not supported, as intrusive rumination was not negatively correlated with PTG. However, results showed that intrusive

rumination was correlated with CiON. Hypothesis 3 was partially supported. Deliberate rumination was not positively correlated with wellbeing, however, intrusive rumination was negatively associated with wellbeing. Hypothesis 4 was supported by the results, as UPSR was positively correlated with PTG and wellbeing over time. Hypothesis 5 was partially supported. UPSR was not positively associated with deliberate rumination, however, it was inversely correlated with intrusive rumination, and this relationship was maintained over time. Data did not meet the assumptions required for mediation analysis, therefore hypothesis 6 could not be tested within the present study. However, the finding that there was no association between UPSR and deliberate rumination suggests that deliberate rumination does not mediate the relationship between UPSR and PTG. The results are discussed within the context of existing research, and considerations for further empirical investigation are explored.

The Effect of Rumination Style on PTG and Wellbeing Over Time

Deliberate Rumination, PTG and Wellbeing

Consistent with existing research (Stockton, Hunt & Joseph, 2011), the present results revealed a significant positive correlation between deliberate rumination and PTG, as assessed by both the PTGI and the CiOP, and also with negative changes, as assessed by the CiON (Joseph, Williams & Yule, 1993). However, exploration of the relationships over time (T1 to T1, T1 to T2, and T2 to T2) (Appendix M) indicated some variation between correlations reported for each scale at the different time points. This suggests that the

pattern of relationships between deliberate rumination and PTG may vary over time.

Deliberate rumination and PTGI score was most strongly correlated when measured at the same time point. As such, deliberate rumination at T1 was less strongly correlated with PTGI score at T2 (r = .116, p = .037) than when both measures were assessed at T1 (r = .339, p < .001) or at T2 (r = .408, p < .001). This was also true for correlations between deliberate rumination and CiON scores. This was in keeping with research by Taku et al. (2009), who studied the role of four types of rumination[3], in the aftermath of trauma in 224 participants from the USA and 431 participants from Japan. The researchers found that recent deliberate rumination most strongly predicted current levels of PTG.

In contrast, the relationship between deliberate rumination and CiOP appeared to become less strong across time points (T1: r = .361, p < .001; T2: r = .207, p = .006). Further examination of results by Taku et al. (2009), revealed that a similar trend over time was observed in their study (1 month: r = .51; 3 months: r = .46; 6 months: r = .14).

Deliberate rumination was not statistically correlated with WEMWBS at T1 or T2. This suggests that although deliberate rumination appears to influence growth, it did not appear to be directly associated with changes in wellbeing –

[3] Intrusive rumination soon after the event, intrusive rumination recently, deliberate rumination soon after the event, and deliberate rumination recently (Taku et al., 2009)

which may be representative of the emotional cost of cognitive processing. The positive correlation observed between deliberate rumination and CiON may be an indication of this.

Intrusive Rumination, PTG and Wellbeing

Also consistent with findings reported by Stockton, Hunt and Joseph (2011), were results indicating that intrusive rumination was positively correlated with CiON score (Joseph, Williams & Yule, 1993). Furthermore, this was consistent across the time points. Intrusive rumination was also inversely correlated with WEMWBS score across the two time points.

The results suggest that intrusive rumination at any time point is associated with negative cognitive changes and lower levels of wellbeing in the aftermath of traumatic events. This was in keeping with findings from previous research demonstrating a relationship between intrusive rumination style and negative changes – such as degree of distress and depression after an event (Burwell & Shirk, 2007; Moberly & Watkins, 2008; Lo, Ho & Hollon, 2008), and vulnerability to suicidal ideation (Chan, Miranda & Surrence, 2009). Furthermore, the extent of intrusive rumination at any time point may be an accurate indicator of level of wellbeing occurring at the same, or at a later time point; providing a rationale for psychological interventions which address this aspect of trauma sequelae.

Conversely, intrusive rumination was primarily not correlated with PTG across the time points – similar to findings by Stockton, Hunt and Joseph (2011).

However, weak positive correlations were observed in two instances on opposite measures – between intrusive rumination at T1 and CiOP at T1 (r = .195, p = .001), and intrusive rumination at T2 and PTGI at T2 (r = .149, p = .038). This did not support the hypothesis that intrusive rumination would be negatively associated with PTG based on results reported by Stockton, Hunt and Joseph (2011). Interestingly, partial correlations revealed that no associations were found between intrusive rumination and PTG, on either PTG measure, after deliberate rumination was controlled for (r (233) = .033, p = .306 and r (141) = -.060, p = .240, respectively).

This provides an interesting perspective with regard to the relative impact of intrusive and deliberate rumination during post trauma sequelae, as well as the respective roles each play within cognitive processing of traumatic events. The findings suggest that the presence of intrusive rumination is not necessarily a barrier to PTG. For example, qualitative research investigating refugee experiences, describe phases of cognitive and emotional processing a person may undergo during trauma sequelae (Copping, Shakespeare-Finch & Paton, 2010; Nguyen, Bellehumeur & Malette, 2014). The research findings illustrate that the process is heterogeneous and not necessarily linear, and may incorporate periods of 'identity crisis' and distress, but also periods of sense-making and meaning-finding. The present results suggest that reflective and deliberate rumination may occur alongside intrusive and passive rumination, and that PTG may still occur.

The Effect of UPSR on Rumination, PTG and Wellbeing Over Time

UPSR was positively correlated with measures of PTG and wellbeing over time, which supported recent findings by Flanagan et al. (2015). Furthermore, UPSR was negatively correlated with CiON scores. Further regression analysis is indicated to explore the relationships between UPSR and PTG over time; as such to explore whether level of UPSR can indicate level of PTG and wellbeing over time, and conversely lower levels of negative changes during post trauma sequelae. The results of the present study provide preliminary findings which tentatively suggest that psychological interventions which act to strengthen UPSR may have a positive impact on PTG, wellbeing and negative changes over time in the aftermath of trauma.

UPSR also showed a weak negative correlation with intrusive rumination at both time points. However, UPSR was not significantly correlated with deliberate rumination at T1 or T2. The results indicate that individuals with lower levels of UPSR may engage with increased levels of intrusive rumination. Intrusive rumination has also been described as 'brooding' (Stockton, Hunt and Joseph, 2011); characterised by passively focusing on negative emotions, the causes and consequences of negative experiences, and comparisons with unachievable high standards. By contrast, people who are high in UPSR have been described to be more open to his or her experiences (Patterson & Joseph, 2013). As such, psychological interventions which facilitate self-regard and reduced conditions of worth (Patterson & Joseph, 2013), (for example, affording oneself kindness or self-compassion, and cultivating curiosity, acceptance and openness to the repertoire of one's

internal and external experiences), may have a positive impact on rumination style – and as such, may positively impact PTG and wellbeing over time. This is salient given that UPSR and rumination are foci of intervention within person-centred and cognitive-behavioural therapeutic approaches respectively.

Time Effects: Rumination Style, PTG and UPSR Over Time

Repeated measures analyses revealed that intrusive rumination and deliberate rumination decreased between T1 and T2. This may be indicative of the longitudinal picture of trauma sequelae, echoing previous findings that cognitive processing is multi-dimensional and may vary over time (Davis, Nolen-Hoeksema & Larson, 1998; Taku, Cann, Tedeschi & Calhoun, 2009).

There were no significant changes to PTG scores or CiON scores over time. However, wellbeing scores decreased significantly between T1 and T2 with a large effect size. The current study was a follow up study over a relatively short period of time. Furthermore, the sample was composed of individuals who had experienced adverse and traumatic events over varied range of time scales. As such, participants may have been at different stages of post trauma sequelae (Copping et al., 2010; Davis, Nolen-Hoeksema & Larson, 1998; Taku, Cann, Tedeschi & Calhoun, 2009).

Additionally, a practical consideration to be noted is the conceivable impact of seasonal effects on wellbeing score (Harmatz et al., 2000). Future research over longer time periods, would provide further insight into the sequelae of

PTG over time in relationship to rumination and UPSR. Moreover, qualitative empirical studies exploring personal accounts of the interaction of self-regard, rumination, and growth in the aftermath of trauma, may shed light on the processes at play.

There were no significant changes in UPSR total scores, or subscale scores, over time, thereby suggesting that UPSR was stable over time in the present study.

Limitations and Future Research Directions

A strength of the present study was the measurement of both PTG and wellbeing. Furthermore, the incorporation of a mixed sample design, which facilitated a large, diverse preliminary sample, improved the representativeness of the sample. Indeed, the variety of adverse events exemplified was broad. However, limitations relate to time effects, the heterogeneous nature of traumatic events, individual post-trauma sequelae, and the demographic characteristics of participants.

Time Effects

Time effects were salient within the current study firstly, with regard to 'time since traumatic event', and secondly, with regard to the confounding variable of unexpected additional traumatic events between T1 and T2. Furthermore, there was indication that some participants may have experienced more than one traumatic event reported at T1. This is significant given that findings suggest that rumination is multidimensional and may vary across time (Davis

et al., 1998; Taku et al., 2009). Furthermore, the experience of a new adverse or traumatic event is likely to add new cognitive components to existing cognitive processing, and therefore may act as a confounding variable. As such, future research would benefit from incorporating or controlling for these factors within the study design.

Although indicated within existing literature, time since event analysis was not within the scope of the present study, which was a preliminary study of the relationship between UPSR and rumination within the context of PTG. Future research, expanding upon research examining the relationship between rumination and PTG over specific time frames (Taku et al., 2009), could be expanded upon by including the variable of UPSR. This may inform time-orientated theory-practice links to be made with regard to intervention.

The Heterogeneous Nature of Trauma Experiences

Trauma situations, and individual experience of post-trauma sequelae over time, are heterogeneous in nature. Further research examining the role of the present variables, within samples representing a specific trauma type (for example, sexual assault), or specific sample population (for example, military personnel), would shed light on the effect of trauma type, or cohort effects, on specific trauma sequelae and processing. The inclusion of additional measures of positive outcome variables would provide additional triangulation. Qualitative exploration would furthermore provide insight into the individual processes and experiences at play, including the impact of subtler

personal characteristics, such as personality (Affleck & Tennen, 1996) and attachment style (Salo, Qouta & Punamaki, 2005).

Current Study Design

The high student composition within the current sample should be noted as a possible confounding variable, particularly with regard to the intrinsic and credit-based incentives of partaking in the study. Furthermore, practice effects were not accounted for within the present study, and as such, future research may benefit from a research design where this is considered. Also important to note, is the high female representation within the study sample, suggesting that the findings may not accurately represent the relationship between rumination style, UPSR, PTG and wellbeing among men.

Future Research Directions

Potential directions for further research with regard to longitudinal investigation, qualitative research, and trauma-specific studies have been indicated above. In addition, given that higher levels of UPSR are associated with higher PTG and greater wellbeing – as well as lower intrusive rumination and lower CiON – there is a rationale for further exploration regarding the development of psychological interventions that aim to strengthen UPSR in post-trauma populations. In addition, future research could usefully investigate whether interventions targeting UPSR could have a positive impact on rumination style (particularly intrusive rumination), wellbeing and PTG, in light of the findings of the present study. This is salient given that

UPSR and rumination are foci of change within person-centred and cognitive-behavioural therapeutic approaches, respectively.

Conclusion

The present study set out to examine the relationship between rumination, UPSR, PTG and wellbeing over time. Results showed that deliberate rumination was positively correlated with positive changes (PTG) over time, whereas intrusive rumination was positively correlated with negative changes (CiON) – and inversely correlated with wellbeing (WEMWBS) – across time points. UPSR was positively correlated with PTG and wellbeing, and inversely correlated with negative changes (CiON), across time points. Deliberate rumination was not related with UPSR. However, intrusive rumination was negatively associated with UPSR, suggesting that those low in UPSR may experience increased levels of intrusive thinking.

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Chapter 3: Reflective Paper

Growth Through Adversity and Learning: Trainee Reflections on Research, Practice, Theory and Process

Overall chapter word count (excluding tables, figures and references): 3753

Growth Through Adversity and Learning: Trainee Reflections on Research, Practice, Theory and Process

Introduction

Personal and professional development (PPD) is an integral feature of practice within clinical psychology (DCP, 2010) – offering a foundation, and continuous thread, for the development of the 'person' alongside application of the 'scientist-practitioner' model (Hughes & Youngson, 2009). PPD is therefore a key aspect of training, affording trainees the opportunity to reflect upon 'the work-self interface' (Cushway and Gatherer, 2003, pp.7), to learn in process, and to formulate areas of ongoing development and practice. Reflection is widely accepted as a key factor contributing to PPD (Cushway and Gatherer, 2003), drawing on Schon's seminal writing about 'reflection in action' (referring to reflecting in the moment) and 'reflection on action' (referring to reflecting about the past, in the present, for the future) (Schon, 1991; Carroll, 2009).

Hughes and Youngson (2009) propose that there are four realms within personal development: self, self in relation to others, self in community, and self in role at work. The current paper aims to reflect on the research process undertaken to complete the present thesis, as well as presenting reflections on experiences in clinical practice, interpersonal relationships, and accounts as therapist-as-person; integrating aspects salient to each of these realms.

Reflections on Conducting Empirical Research

Epistemology

Reflections on Quantitative Research

Reflecting on the process of establishing a research topic and methodology for empirical investigation as part of the present thesis, I recall feeling strongly drawn toward conducting a study with a qualitative design. With this in mind, I carried out preliminary investigations into two potential research topics – the first relating to the role that clinical psychologists play within teams, and the second relating to posttraumatic growth (PTG). While considering the relationship between these topics, I have noticed parallels between PTG and growth through day-to-day learning and experience. I have noticed how this might have resonances for my own growth through day-to-day learning and experience. However, I have also reflected on ways in which this might also be applicable to thinking about colleagues' growth and learning – for example through supervision, or team-based learning – and the processes at play within staff teams. This relationship will be explored within subsequent sections, and considerations will be made with regard to its application to clinical contexts.

Pausing to notice the discussion in the previous paragraph, and my epistemological position as a researcher and clinician, I notice that this is rooted in a strong constructionist and systemic stance. This stance gives significance to both intrapersonal and interpersonal experiences, as well as the integration of social-environmental contexts. It posits that each of us is a

product of our relationships, and, as such, we each possess discourses[1] which offer frames of reference and a way to interpret and give meaning to our experiences of the world and objects within it (Burr, 1995). Reflecting on the research process, and the articles that I have developed, I am struck by the observation that this personal epistemological position remains evident despite the quantitative design of the empirical study and the systematic design of the literature review. I notice my influence as an object within the construct. As such, the significance of researcher-as-person, in a similar vein to that of therapist-as-person, manifests itself; although this was not overtly considered as part of study design in the way that it very likely would have been if I had carried out a study employing a qualitative design.

Furthermore, continuing reflection on the work-self interface, I notice the expansive repertoire of interacting roles which one might possess in relation to the realms of personal development (self, others, community, and work). Consequently, I observe my positons as therapist-as-researcher, therapist-, and researcher-, as-trainee, and trainee-as-person, and the different conceptualisation of experiences that each presents. This brings to the fore the integral catalysing role of reflection, and the manner in which this facilitates deliberate consideration of new information, allowing it to be conceptualised within existing frameworks or learning. Throughout my empirical research I have been curious about the roles of two different rumination styles in relation to the process of PTG: intrusive rumination, which has also been described

[1] "a discourse can be thought of as a kind of frame of reference, a conceptual backcloth against which our utterances can be interpreted" (Burr, 1995, p. 50)

as brooding; and deliberate rumination, which has also been described as reflective pondering.

Reflections on Reflective Learning

Reviewing a synopsis of my empirical research, I am interested in potential parallels between PTG, and reflective learning. In the instance of PTG, rumination style is discussed as an integral feature pertaining to the assimilation or accommodation of new information in the aftermath of an adverse or traumatic event; resulting in a 'new assumptive world' and as such developing congruence with self (Brewin, Dalgeish & Joseph, 1996; Joseph & Linley, 2005). Furthermore, evidence suggests that integral to this process may be both positive and negative changes. The Organismic Valuing Model (OVT) (Joseph & Linley, 2005), has been referred to throughout my research as one model of PTG. However, the Affective-Cognitive Model of Post-Traumatic Growth (ACM-PTG) (Joseph, Murphy & Regel, 2012) (Appendix E), draws on two prominent models of PTG, which are both based on Janoff-Bulman's widely accepted account of 'shattered assumptions' (1992): the functional descriptive model (Tedeschi & Calhoun, 2004); and the OVT model (Jospeh & Linley, 2005). In so doing, the ACM-PTG attempts to provide a coherent and comprehensive conceptualisation of PTG, which can adequately account for both negative and positive features within a single framework. As such, it places ruminative brooding and reflective pondering within a wider framework of conscious and nonconscious representations – verbally accessible memories (VAMS) and situationally accessible memories (SAMS);

which represent the manner in which event cognitions are placed within memory, and as such learning takes place.

I am curious about whether wider experiences of learning through adverse events, or indeed day-to-day events, could be represented in a similar way. For example, conceptualising learning within the framework of Kolb's learning cycle (Kolb, 1984) – concrete experience (experience), reflective observation (reflection), active experimentation (doing), and abstract conceptualisation (theory) – similarly implies a need to take in or integrate new learning. Thus, new material – in the form of experience, reflection, doing, or theory – presents the individual with new information, which must be either assimilated into a person's existing schemas and narratives or accommodated, in order to maintain a coherent sense of self. Considering this framework, it follows that in day-to-day life, in the course of processing naturally-occurring new information, a person may experience subtle changes in emotional state as this information is orientated within self. As such, I am curious about how this model may be helpful with regard to considering the way in which people undergo periods of life in which larger amounts of new information are presented to them; which may be described as stressful but also 'normal' – for example starting a new job, changes in relationship status, moving home, or family transitions such as the arrival or moving on of a family member.

Reflections on Adversity

Reflecting on the process of carrying out the empirical study, I recall being struck by the variety of adverse life events that had been reported by

participants. On the Life Events Checklist (LEC) (Gray, Litz, Hsu & Lombardo, 2004), 17.4% of participants reported experiencing sexual assault, or another unwanted or uncomfortable sexual experience, 16.5% sudden accidental death, and 8.9% life-threatening illness or injury. Furthermore, 32.2% of participants reported experiencing an 'other very stressful event or experience'[2], detailing personal experience: "Father experienced a brain tumour and this led to the breakdown of our relationship"; "Stalked by someone who was threatening to kill me and himself"; "Labour of dead foetus".

I recall crying for a moment as I reached the end of the list, and registered the emotional impact of reading about individual traumas. I particularly noticed the ones which resonated with my own experiences – a moment of awareness of researcher-as-person. I was reminded of the significance of the individuality of experience – that each person's experience in a particular moment is a construct of a lifetime of experiences and interactions (Burr, 1995). This is represented to some extent in the ACM-PTG model presented in the previous section. Every personal experience is of value to that person and their construction of self. Victor Frankl tells the incredible story of living through the Holocaust (Frankl, 2004). Towards the beginning of the book, he describes that to live within an experience may not afford the necessary 'detachment' to

[2] These included: addiction; adversity during childhood (e.g. presence of an 'alcoholic' parent); allegation; anxiety/ depression, bereavement; bullying (childhood or work); disclosure regarding sexual abuse; disownment, or separation, from loved ones; domestic abuse (to self, or witnessing parents); extremely stressful situation – pervasive sense of helplessness; eating disorder; emotional or psychological abuse; false imprisonment of a close relative; health complications; homelessness; life-limiting, or life-threatening, physical illness (self, dependent, or close relative); multiple adverse events in co-occurrence; pregnancy-related adversity (termination of pregnancy, miscarriage, traumatic birth, labour to dead foetus, post-natal depression); psychological difficulties of close relative; relationship separation/ significant relationship stressors; separation/ divorce of parents; suicide attempt (self, or close relative); being stalked; threat made to life.

observe it, yet to be detached from it means that the perspective is too removed, and as such “only the man inside knows” (Frankl, 2004, pp. 20).

Reflections on Conducting a Literature Review

Transitions

Refugees and Asylum Seekers

Reflecting on the process of identifying a topic for the literature review, I recall being drawn to studying refugees and asylum seekers (RaAS) due to a longstanding interest in both the transferability of westernised models across cultures, and culturally specific phenomena such as the impact of collective cultural norms. Furthermore, I recall having experienced dissonance in relation to my quantitative study design, regarding employing an open and mixed sample design rather than targeting a particular group. Reflecting on this process, I recognise the value of employing an open sampling design with regard to the empirical study aims. However, I value the opportunity that the systematic literature review has afforded, of giving a specific group detailed attention and study. I notice also, how this resonates with my epistemological position.

Reflecting on the theme of transience among RaAS, during the process of conducting the literature review, alongside undertaking clinical placements, has afforded me the opportunity to observe saliences and parallels with regard to themes across clinical psychology. These appear pertinent to ongoing practice, and PPD. Two parallels that stand out relate to children within the

care system, who are described as ‘looked after children’, and individuals who are encountering a hospital stay. I have been struck that for ‘looked after children’, a young person may experience significant transition, not only with regard to their living environment, and as such their physical base, but also with regard to their primary carer, and interpersonal system. As such, transience and transition is necessitated with regard to a psychological secure base as well as a physical base.

Reflecting on the second scenario, when undertaking a hospital stay, an individual will experience an admission – this may be pre-contemplated or unexpected, and may be precluded by adverse or traumatic events. A patient may face adversities related to ill-health, surgery, or treatment, once in hospital, and encounter periods of uncertainty and loneliness. Furthermore, during their hospital stay they are faced with temporary living conditions in a new environment, and exist within an institutional culture. Reaching the end of a hospital stay, a patient is faced with a transition home, and they are required to return to ‘normal’ day-to-day life.

In both of these circumstances, people are faced with transitions psychologically, physically, and socially, which umbrella experiences prior to, during and after an event. Experiences which will need to be negotiated into one’s sense of self. This parallels the stages of displacement discussed in relation to RaAS, described as pre-flight, flight, and post-flight. In addition to these two clinical scenarios, I have been prompted to reflect on the theme of transience and transition throughout my training experience.

Transitions: Parallels with Training

Throughout my placement experiences, I have been conscious of the stages of undertaking a placement – preparing for the ending of a placement, encountering an ending, preparing for the next placement, beginning a new placement, and working within a placement – and the psychological, physical, and social transitions that occur within this. Throughout my research, and during my placements, I have been prompted to think about the significance of endings and beginnings (Salzberger-Wittenberg, 2013), which has been salient also with regard to my experience of joining a new cohort group. Endings and beginnings can be conceptualised as involving resonances of early experiences of separations and transitions. These include one's attachment with their primary care giver, as well as subsequent transitions – for example, to nursery, within school, and so on – throughout their different life stages (Salzberger-Wittenberg, 2013; Waddell, 2002). As such, I have been caused to reflect on my own earlier life experiences and impressions within ongoing experiences.

In relation to clinical work, this framework of thinking presents significant 'food for thought' with regard to the spheres of beginnings and endings experienced by the clients and colleagues that we, as clinical psychologists, encounter. This seems pertinent regarding therapeutic work, supervisory relationships, and team systems. I consider that it offers some insight into the role that we might have within teams.

Attachment: Shifting Zones of Secure Base

A Proposed Model

Within the discussion section of the literature review, I propose a model of 'shifting zones of secure base' with regard to RaAS experiences of resettlement and acculturation. Four salient themes relating to the meaning-making process of PTG were identified: interpersonal interaction; experience of religion and spirituality; cultural experiences and norms; and concrete opportunities and quality of life. I proposed that these factors represent opportunities for establishing a sense of perceived, or actual, secure base – which in turn may have a facilitative impact on the process of PTG. Reflecting on the model in relation to scenarios discussed in previous sections – relating to processes of learning, and scenarios involving transition – causes ongoing consideration regarding the role that clinical psychologists play in facilitating others to establish or maintain a coherent sense of self, and a secure base, within their experiences.

Parallel Processes: Relationships with Research and Learning

Reflecting on attachment has prompted me to consider relationships with information, learning and research. When information feels safe, and a learning individual feels safe, it allows the individual to approach, appropriately explore and understand that information. This process might be considered akin to secure attachment. Conversely, when information (learning) feels inaccessible or unsafe to approach, the individual might only partially engage with the information, and therefore only understand it to a limited extent. This process might be considered analogous to avoidant

attachment. Furthermore, when information or learning is experienced as scary, confusing or uncontained, the individual might engage with the information very little. This might be akin to disorganised attachment. In light of previous discussions, these relationships could be applied to understanding the manner in which people engage with various learning environments; for example: relating to service level evaluations, engaging in supervision relationships, or working within teams.

Furthermore, I reflect on my own relationship with data and learning, throughout the process of thesis writing, and notice instances in which I have related to the process consistently and sensitively, and others where I have felt avoidant of it. The concept of cognitive avoidance is salient to both papers. Within the empirical paper it relates to patterns of intrusive thinking, whereas, in the reflective paper, cognitive avoidance, or distancing, has been described as a process which may occur within the early stages of resettlement and act as a barrier to PTG. The compelling psychoanalyst, Bion, describes that “we have to choose whether to avoid emotional pain or to face it; to live lies, or live with truth, which he calls “the food that nourishes the mind”” (Salzberger-Wittenberg, 2013, p. 11). As such, attention is bought back to the ACP-PTG model of PTG, and the experience of ruminative brooding and reflective pondering – and negative and positive emotional experiences – within the context of assimilation and accommodation of new information.

I reflect on this with regard to the parallel process of my training experience – particularly given my therapist-as-trainee, and researcher-as-trainee roles –

and as such, reflect on processes of grappling with knowledge and experience. I reflect on a keenness to get to a point of 'growth', or 'understanding'. However, reflecting on the emergent processes of PTG, and the parallels suggested with regard to learning processes, I am struck by the value that comes throughout the process of meaning-making with regard to establishing a coherent sense of self. Experience of working within a physical health setting offers an example of this process occurring within a distinct setting.

Growth Through Adversity: Reflections on a Physical Health Psychology Placement

This final section brings reflections from a reflective supervision conversation (which was recorded and transcribed for the purpose of this paper[3]) and considers growth through adversity in the context of working with people living through trauma. Recognising that trainees often face unique challenges within this setting, placement supervisors during the placement posed the following questions: 'What is it about learning on a physical health psychology placement that causes these placements to feel particularly challenging?', and, 'What advice would you give?' The following is a summary of the emergent themes in response to these discussions, accompanied by quotations. Consent was obtained from my placement supervisor (Ps) to use extracts from the recorded supervision conversation for the purpose of this reflective paper.

[3] With informed consent

The immediacy and prolonged nature of working within a setting in which physical and emotional trauma is present was a salient topic: *"It is relentless"; "Every day you've got to walk back onto the ward, and be here… in amongst the loss and the trauma, and have all the feelings and thoughts as a human being, and as a professional, and working with it" (Ps[4])*. This reminded me of the often uncertain and prolonged experiences of trauma for RaAS, and the inability to remove oneself from a situation experienced as traumatic. It was noted that typical boundaries – both physical and perceived – are often not present within physical health settings, or they need to be established in different and creative ways: *"[The person] might be sitting in their boxers" (T[5]); "Those boundaries are much more blurred aren't they"* (Ps). This prompted me to reflect on the significance of establishing a secure base and containment, both for self-as-therapist and patients, within therapeutic environments.

Furthermore, I considered the personal physical impact that might be experienced on a visceral level, as a result of exposure to sensory stimuli (sights, sounds and smells) – for example, smelling an infected wound, or seeing an amputation, or burn, injury. These bring the therapist experience of physical self to the fore. It was noted that this feature of working with patients within a physical health setting added a further level of processing whilst attending to self-as-therapist: *"And how do we stay present, in the moment,*

[4] Placement supervisor (Ps)
[5] Trainee (T)

and acknowledge those things, and give those things respect in our own experiences, visceral experiences… whilst being present with somebody?" (T)

Regarding therapeutic work, parallel processes at play, and dynamics incorporating transference and countertransference, were discussed: *"Hang on a minute, is this mine, or do some of these feelings belong to the people that I'm working with?"* (T); *"I think of how contagious some of those feelings can be, from the patients to the staff, and the staff to us, from the patients to us, and us to each other. From other members of staff in the MDT… and sometimes how difficult it can feel to even know whose it is when it's happening"* (Ps). As such, the importance of establishing levels of awareness, and pacing, were identified; both with regard to therapist-as-person, and patient: *"You're making me think of levels of awareness. So, for the people in the beds, how aware are they of where they are with what's happened?"* (Ps). Consequently, I am caused to reflect on the potential value of sequential and integrative approaches to working with trauma, and the model of *shifting zones of secure base* – attending first to a person's sense of ecological and physical stability, and at appropriate points unique for the individual, considering psychological processing and meaning-making.

Finally, personal experiences of health were given recognition: *"We all come with experiences of our own self, our own physical self, and our own experiences of not being well, and how we hold that. So I wonder if there is something very innate about working in physical health"* (T); *"There's something very earthy about thinking about how we relate to ourselves. And*

there's a new type of learning about that. Something that feels particularly vulnerable" (T)*.* As such, in parallel with the present topic of research, the value of establishing a coherent sense of self – a "reference point in the storm" (Ps) – and meaning relating to one's work and activity, was explored: *"How do I hold the things that are of value to me? How do I balance these things?"* (T). Pertinent to ongoing PPD, the development of reflexivity and circular questioning within therapeutic contexts – and with regard to reflection-in-action and reflective writing – were of benefit whilst working within a physical health psychology context.

Conclusion

"And how does all of that translate into all of us… a person, a therapist…"

(Ps)

In summary, the present paper offers my reflections upon the process of undertaking empirical and literature review research, together with salient themes from wider training and clinical contexts. My epistemological approach was discussed and offers a basis for observations regarding potential parallels between the process of PTG and day-to-day learning processes – particularly relating to how a learner experiences and conceptualises new information. Rumination and reflection are considered as integral processes within this. This is expanded upon within reflections relating to the literature review. PTG and learning are explored within the contexts of transience and transition; and attachment theory, and the context of early life experiences, are drawn upon to conceptualise the relationships one might hold with new information and

learning processes. In closing, I offer original reflections from a reflective supervision conversation, providing illustration of a learning process – including reflection-in-action and reflection-on-action – within a trauma-related clinical context.

Reflecting on this summary, I note the impact of my constructionist and systemic epistemology upon this paper. I value highly the perspective that this has afforded me with regard to past, present, and future experiences and learning.

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Appendices

Appendix A: Author Guidelines for Journal of Ethnic and Migration Studies

Instructions for authors

Thank you for choosing to submit your paper to us. These instructions will ensure we have everything required so your paper can move through peer review, production and publication smoothly. Please take the time to read and follow them as closely as possible, as doing so will ensure your paper matches the journal's requirements. For general guidance on the publication process at Taylor & Francis please visit our Author Services website.

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About the journal

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Please note that this journal only publishes manuscripts in English.

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Preparing your paper

Word limits

Please include a word count for your paper.

A typical paper for this journal should be no more than 9000 words; this limit does not include tables; figure captions; this limit includes references; endnotes; abstract.

Style guidelines

Please refer to these style guidelines when preparing your paper, rather than any published articles or a sample copy.

Please use British -ise spelling consistently throughout your manuscript.

Please use single quotation marks, except where ‘a quotation is “within” a quotation’. Please note that long quotations should be indented without quotation marks.

Formatting and templates

Papers may be submitted in any standard format, including Word and LaTeX. Figures should be saved separately from the text. To assist you in preparing your paper, we provide formatting templates.

References

Please use this reference guide when preparing your paper. An EndNote output style is also available to assist you.

Checklist: what to include

1. **Author details**. Please include all authors’ full names, affiliations, postal addresses, telephone numbers and email addresses on the cover page. Where available, please also include ORCiDs and social media handles (Facebook, Twitter or LinkedIn). One author will need to be identified as the corresponding author, with their email address normally displayed in the article PDF (depending on the journal) and the online article. Authors’ affiliations are the affiliations where the research was conducted. If any of the named co-authors moves affiliation during the peer-review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after your paper is accepted. Read more on authorship.
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11. **Figures.** Figures should be high quality (1200 dpi for line art, 600 dpi for grayscale and 300 dpi for colour, at the correct size). Figures should be saved as TIFF, PostScript or EPS files. More information on how to prepare artwork.
12. **Tables.** Tables should present new information rather than duplicating what is in the text. Readers should be able to interpret the table without reference to the text. Please supply editable files.
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Appendix B: Quality Assessment Checklist

Reviewer name:

Date:

Author name/ study ID:

Quality item:

1	Does the title reflect the content?	
2	Are the authors credible?	
3	Does the abstract summarise the key components?	
4	Is the rationale for undertaking the research clearly outlined?	
5	Is the literature review comprehensive and up to date?	
6	Is the aim of the research clearly stated?	
7	Are all ethical issues identified and addressed?	
8	Is the methodology identified and justified?	

	Quantitative	Qualitative	
9	Is the study design clearly identified, and is the rationale for the choice of design evident?	Are the philosophical background and study design identified and the rationale for choice of design evident?	
10	Is there an experimental hypothesis clearly sated? Are the key variables clearly defined?	Are the major concepts identified?	
11	Is the population identified?	Is the context of the study outlined?	
12	Is the sample adequately described and reflective of the population?	Is the selection of participants described and the sampling method identified?	
13	Is the method of data collection valid and reliable?	Is the method of data collection auditable?	
14	Is the method of data analysis valid and reliable?	Is the method of data analysis credible and confirmable	
15	Are the results presented in a way that is appropriate and clear?		
16	Are the results generalizable?	Are the results transferable?	
17	Is the discussion comprehensive?		
18	Is the conclusion comprehensive?		

Appendix C: Table of Quality Assessment Scores

	Quantitative	Qualitative	Ai† (2007)	Copping§ (2010)	Gregory† (2013)	Hijazi† (2014)	Hussain† (2011)	Hussain§ (2013)	Kim§ (2009)	Kroo† (2011)	Nguyen§ (2014)	Powell† (2003)	Teodorescu† (2012)
1	Title		2	2	2	2	2	2	2	2	2	1	2
2	Authors		2	2	1	2	2	2	2	1	2	2	2
3	Abstract		1	2	1	2	1	2	1	1	2	2	2
4	Rationale		2	2	1	2	2	2	1	2	2	2	2
5	Literature Review		2	2	1	2	2	2	1	2	2	2	2
6	Aims		2	2	2	2	2	2	2	2	2	1	2
7	Ethical considerations		0	2	2	2	1	1	1	0	2	1	2
8	Methodology		1	2	0	0	0	2	1	0	2	1	1
9	Design	Design / Philosophy	1	1	0	2	1	2	1	0	2	2	1
10	Hypotheses / Variables	Concepts	1	2	1	1	1	1	1	1	2	1	2
11	Population	Context	2	2	1	2	2	2	1	2	1	2	2
12	Sample	Participants selection	1	2	1	2	2	2	1	2	1	2	1
13	Data collection	Data collection	2	1	1	2	2	2	1	2	2	2	2
14	Data analysis	Data analysis	2	1	2	2	2	2	0	1	2	2	2
15	Results presentation		1	1	0	2	2	1	0	1	2	2	2
16	Results generalizable	Results transferable	1	0	0	1	0	1	0	0	0	1	1
17	Discussion		2	2	0	2	2	1	1	2	1	0	2
18	Conclusion		2	1	1	2	2	1	1	2	1	1	1
Total (Max: 36)			27	29	17	32	28	30	18	23	30	27	31
Percentage (%)			75.0	80.5	47.2	88.9	77.8	83.3	50.0	63.9	83.3	75.0	86.1

† Quantitative
§ Qualitative

Appendix D – Author Guidelines for Journal of Traumatic Growth

Author Guidelines

1. Online Submissions: The Journal of Traumatic Stress accepts submission of manuscripts online at:
http://mc.manuscriptcentral.com/jots
Information about how to create an account or submit a manuscript may be found online on the Manuscript Central homepage in the "User Tutorials" section or, on the Author Dashboard, via the "Help" menu in the upper right corner of the screen. Personal assistance also is available by calling 434-964-4100.

2. Article Formats: Three article formats are accepted for consideration by JTS. All page counts should include references, tables, and figures. Regular articles (30 pages maximum, inclusive of all text, abstract, references, tables, and figures) include research studies, quantitative systematic reviews, and theoretical articles. Purely descriptive articles or narrative-based literature reviews are rarely accepted. In extraordinary circumstances, the editors may consider longer manuscripts that describe highly complex designs or statistical procedures but authors should seek approval prior to submitting manuscripts longer than 30 pages. Brief reports (18 pages maximum) are appropriate for pilot studies or uncontrolled trials of an intervention, preliminary data on a new problem or population, condensed findings from a study that does not merit a full article, or methodologically oriented papers that replicate findings in new populations or report preliminary data on new instruments. Commentaries (1,000 words or less) involve responses to previously published articles or, occasionally, invited essays on a professional or scientific topic of general interest. Response commentaries, submitted no later than 8 weeks after the original article is published (12 weeks if outside the U.S.), must be content-directed and use tactful language. The original author is given the opportunity to respond to accepted commentaries.

3. Double-Blind Review: As of January 1, 2017, the Journal of Traumatic Stress utilizes a double-blind review process in which reviewers receive manuscripts with no authors' names or affiliations listed in order to ensure unbiased review. To facilitate blinded review, the title page should be uploaded as a separate document from the body of the manuscript, identified as "Title Page," and should include the title of the article, the running head (maximum 50 characters) in uppercase flush left, author(s) byline and institutional affiliation, and author note (see pp. 23-25 of the APA 6th ed. manual). Within the main body of the manuscript, tables, and figures, authors should ensure that any identifying information (i.e., author names, affiliations, institutions where the work was performed, university whose ethics committee approved the project) is blinded; a simple way to accomplish this is by replacing the identifying text with the phrase "[edited out for blind review]". In addition, language should be used that avoids revealing the identity of the authors; e.g., rather than stating, "In other research by our lab (Bennett & Kerig, 2014), we found ..." use phrases such as, "In a previous study, Bennett and Kerig (2014) found ..." Please note that if you have uploaded the files correctly, you will not be able to view the title page in the PDF and HTML proofs of your manuscript;
however, the Editor and JTS editorial office staff can view this information.

4. Preferred and Non-Preferred Reviewers: During the submission process, authors may suggest the names of preferred reviewers; authors also may request that specific individuals not be selected as reviewers.

5. Publication Style: JTS follows the style recommendations of the 2010 Publication Manual of the American Psychological Association (APA; 6th edition) and submitted manuscripts must conform to these formatting guidelines. Manuscripts should use non-sexist language. Manuscripts must be formatted using letter or A4 page size, with 1 inch (2.54 cm) margins on all sides, Times New Roman 12 point font (except for figures, which should be in 12 point Arial font), and double-spacing for text, tables, references, and figures. Submit your manuscript in DOC or RTF format.
For assistance with APA style, in addition to consulting the manual itself, please note these helpful online sources that are freely available:

http://www.apastyle.org/learn/tutorials/basics- tutorial.aspx and https://owl.english.purdue.edu/owl/section/2/10/ .

6. APA and JTS Style Pointers: In addition to consulting the APA 6th edition Publication Manual, the resources indexed above, and the JTS Style Sheet posted online, please consider these pointers when formatting each section of the manuscript:
a. Tense: Throughout the manuscript, please use past tense for everything that has already happened, including the collection and analyses of the data being reported.

b. Abstract: The Main Document of the manuscript should begin with an abstract no longer than 250 words, placed on a separate page. In addition, JTS house style requires the reporting of an effect size for each finding discussed in the abstract; if there are many findings, present the range.

c. Participants: Please include in this subsection of the Method section information on sample characteristics, subsample comparisons, and analyses that describe the sample but are not focused on testing the hypotheses that are the aims of your manuscript.

d. Procedure: Please describe the procedure in sufficient detail so that it could be comprehended and replicated by another investigator. Identify by name the IRB or ethics committee (edited out for blind review in the submitted manuscript) that approved the research, and the manner in which consent was obtained.

e. Measures: In addition to providing citations, psychometric, and validation data for each measure administered, please provide coefficient alpha from your data for each measure for which this is appropriate.

f. Data Analysis: Include a separate subsection with this header in the Method section in which you describe the analyses performed, the software program(s) used, and make an explicit statement about missing data in your data set. If there are no missing data, so state; otherwise describe the extent of missing data and how they were handled in the data analyses.

g. Results (and throughout): Please present percentages to 1 decimal place, means and SDs to 2 decimal places, and exact p values to 3 decimal places except for < .001. Include leading zeros (e.g., 0.92) when reporting any statistic that can be greater than 1.00 (or less than -1.00). For example, there is no leading zero used when reporting correlations, coefficient alphas, standardized betas, p values, or fit indices (e.g., r = .47, not 0.47).

h. References: Format the references using APA 6th edition style: (a) begin the reference list on a new page following the text, (b) double-space, (c) use hanging indent format, (d) italicize the journal name or book title, and (e) list alphabetically by last name of first author. Do not include journal issue numbers unless each volume begins with page 1. If a reference has a Digital Object Identifier (doi), it must be included as the last element of the reference.

i. Footnotes: Footnotes should be avoided. When their use is absolutely necessary, footnotes should be formatted in APA style and placed on a separate page after the reference list and before any tables.

j. Tables: Tables should be formatted in APA 6th edition style and should be placed after the references in the body of the manuscript. Please use Word's Table function to construct tables, not tabs and spacing. Tables should be numbered (with Arabic numerals) and referred to by number in the text. Each table should begin on a separate page. Please make tables double-spaced, decimal align all numeric columns, and use sentence case for labels. Each datum should appear in its own cell (e.g., do not include SDs in parentheses following Ms but instead create a separate column for SDs). When reporting a table of intercorrelations, fill the rows first and then the columns such that any empty cells are in the lower left-hand quadrant of the table; use dashes in any redundant cells indicating the correlation of a variable with itself. Please use asterisks to indicate significance levels in tables, not p values.

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k. Figures: All figures (graphs, photographs, drawings, and charts) should be numbered (with Arabic numerals) and referred to by number in the text. Each figure should begin on a separate page. Place figures captions at the bottom of the figure itself, not on a separate page. Include a separate legend to explain symbols if needed. Please use Arial font throughout except for the caption, which should remain as Times New Roman. Use sentence case for titles and labels. Figures should be in Word, TIF, or EPS format.
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7. Uploading Files: After the separate Title Page has been uploaded, the remaining text (abstract, main body of the manuscript, references, and tables) should be uploaded as a single file designated as “Main Document.” Figures may be either included in the main document or uploaded as separate files if in a non-Word format.

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“Supplementary file not for review,” which will be made available online for optional access by interested readers. This material will not be seen by reviewers and will not be taken into consideration in their evaluation of the scientific merits of the work, and will not be included in the published article. Material appropriate for such a designation includes information that is not essential to the reader’s comprehension of the study design or findings, but which might be of interest to some scholars; examples might include descriptions of a series of non-significant post- hoc analyses that were not central to the main hypotheses of the study, detailed information about the content of coding system categories, and CONSORT flow diagrams for randomized controlled trials (see below). Note well that the manuscript must stand on its own without this material; consequently, critical information reviewers and readers need to evaluate or replicate the study, such as the provenance and psychometric properties of the measures administered, is not appropriate for placement into Supplementary Materials.

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http://www.apa.org/science/leadership/care/guidelines.aspx for animal research) or equivalent guidelines in the study's country of origin. If the author(s) were unable to comply when conducting the research being presented, an explanation is required.

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10. Randomized Clinical Trials: Reports of randomized clinical trials should include a flow diagram and a completed CONSORT checklist (available at http://www.consort-statement.org) indicating how the manuscript follows CONSORT Guidelines for the reporting of randomized clinical trials. The flow diagram should be included as a figure in the manuscript whereas the checklist should be designated as a "Supplementary file not for review" during the online submission process. Please visit http://consort-statement.org for information about the consort standards and to download necessary forms.

11. Systematic Reviews: Reports of systematic reviews follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (http://www.prisma-statement.org/documents/PRISMA%202009%20checklist.pdf) and should be accompanied by a flow diagram (http://www.prisma-statement.org/PRISMAStatement/FlowDiagram.aspx) mapping out the number of records identified, included, and excluded, and the reasons for exclusions.

12. Writing for an International Readership: As an international journal, the Journal of Traumatic Stress avoids the use of operational code names or nicknames to describe military actions, wars, or conflicts, given that these may not be equally familiar or meaningful to readers from other nations. Helpful guides for clear and neutral language for reporting on military-based research can be found at the following webpages: the ISTSS newsletter StressPoints (http://www.istss.org/education- research/traumatic-stresspoints/2015-march-(1)/media-matters-what%E2%80%99s-in-a-name- using-military-code.aspx), the International Press Institute (http://ethicaljournalismnetwork.org/assets/docs/197/150/4d96ac5-55a3396.pdf) and the Associated Press Stylebook and Briefing on Media Law (http://www.apstylebook.com/?do=help&q=48/). In addition, authors are encouraged to give consideration to whether particular research findings might be culturally-specific rather than universally established; e.g., prevalence rates derived from samples consisting of all-US participants should be identified as such.

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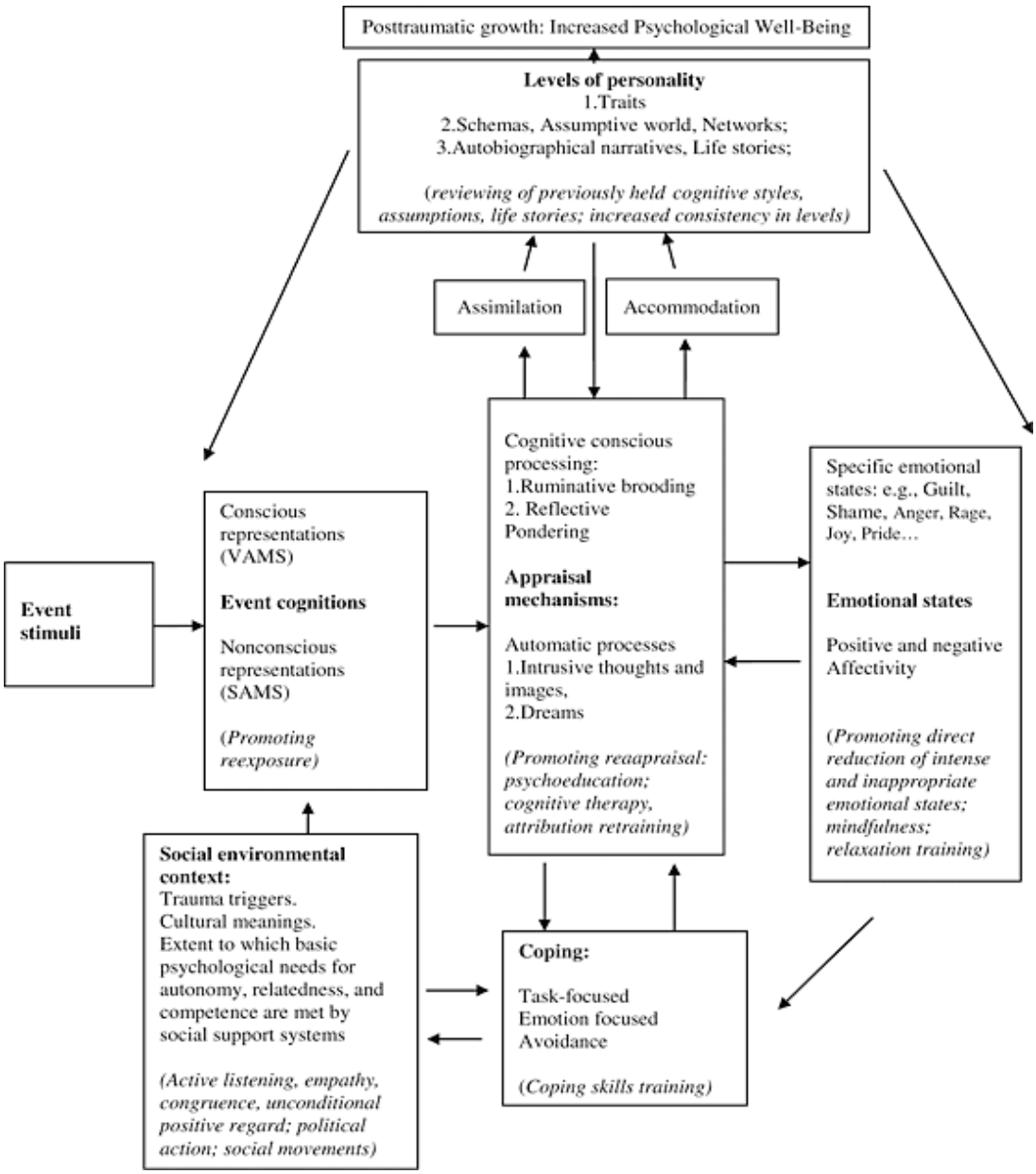
Appendix E: The Affective-Cognitive Processing Model of PTG (ACP-PTG) (Joseph, Murphy, & Regel, 2012)



Appendix F: Survey Progress Screen Shots

Time 1 survey progress summary:

Respondent progress

p.1	p.2	p.3	p.4	p.5	p.6	p.7	p.8	p.9	p.10
562	68	26	8	11	16	2	6	2	236

Time 2 survey progress summary:

Respondent progress

p.1	p.2	p.3	p.4	p.5	p.6	p.7	p.8
59	10	7	13	2	1	0	146

Appendix G: Battery of Questionnaires

The Life Events Checklist (LEC)

	Happened to me	Has not happened to me
a. Natural disaster (for example, flood, hurricane, tornado, earthquake)		
b. Fire or explosion		
c. Transportation accident (for example, car accident, boat accident, train wreck, plane crash)		
d. Serious accident at work, home, or during recreational activity		
e. Exposure to toxic substance (for example, dangerous chemicals, radiation)		
f. Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)		
g. Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)		
h. Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)		
i. Other unwanted or uncomfortable sexual experience		
j. Combat or exposure to a war-zone (in the military or as a civilian)		
k. Captivity (for example, being kidnapped, abducted, help hostage, prisoner of war)		
l. Life-threatening illness or injury		
m. Severe human suffering		
n. Sudden, violent death for example, homicide, suicide		
o. Sudden, unexpected death of someone close to you		
p. Serious injury, harm, or death you caused to someone else		
q. Any other very stressful event of experience		

The Event Related Rumination Inventory (ERRI)

After an experience like the one you reported, people sometimes, but not always, find themselves having thoughts about their experience ***even though they don't try to think about it***. Indicate for the following items how often, if at all, you had the experiences described during the weeks immediately after the event (or in the last few weeks).

	Not at all	Rarely	Sometimes	Often
I thought about the event when I did not mean to.				
Thoughts about the event came to mind and I could not stop thinking about them.				
Thoughts about the event distracted me or kept me from being able to concentrate.				
I could not keep images or thoughts about the event from entering my mind.				
Thoughts, memories, or images of the event came to mind even when I did not want them.				
Thoughts about the event caused me to relive my experience.				
Reminders of the event brought back thoughts of the experience.				
I found myself automatically thinking about what had happened.				
Other things kept leading me to think about my experience.				
I tried not to think about the event, but could not keep the thoughts from my mind.				

After an experience like the one you reported, people sometimes, but not always, deliberately and intentionally spend some time thinking about their experience. Indicate for the following items how often, if at all, you ***deliberately spent time thinking about*** the issue indicated during the weeks immediately after the event (or in the last few weeks)

	Not at all	Rarely	Sometimes	Often
I thought about whether I could find meaning from my experience.				
I thought about whether changes in my life have come from dealing with my experience.				
I forced myself to think about my feelings about my experience.				
I thought about whether I have learned anything as a result of my experience.				
I thought about whether the experience has changed my beliefs about the world.				
I thought about what the experience might mean for my future.				
I thought about whether my relationships with others have changed following my experience.				
I forced myself to deal with my feelings about the event.				
I deliberately thought about how the event had affected me.				
I thought about the event and tried to understand what happened.				

The Unconditional Positive Self-Regard Scale (UPSRS)

Below is a list of statements dealing with your general feelings about yourself. Please respond to each statement by selecting your answer using the scale '1 = strongly disagree' to '5 = strongly agree'.

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
1. I truly like myself.					
2. Whether other people criticise me or praise me makes no real difference to the way I feel about myself.					
3. There are certain things I like about myself and there are other things I don't like.					
4. I feel that I appreciate myself as a person.					
5. Some things I do make me feel good about myself whereas other things I do cause me to be critical of myself.					
6. How I feel towards myself is not dependant on how others feel towards me.					
7. I have a lot of respect for myself.					
8. I feel deep affection for myself.					
9. I treat myself in a warm and friendly way.					
10. I don't think that anything I say or do really changes the way I feel about myself.					
11. I really value myself.					
12. Whether other people are openly appreciative of me or openly critical of me, it does not really change how I feel about myself.					

The Changes in Outlook Questionnaire (CiOQ)

Each of the following statements has been made at some time by individuals who have experienced adverse or traumatic life events. Please read each one and indicate, by selecting the appropriate response, how much you agree or disagree with it AT THE PRESENT TIME.

	Strongly disagree	Disagree	Disagree a little	Agree a little	Agree	Strongly agree
a. I don't look forward to the future anymore.						
b. My life has no meaning anymore.						
c. I no longer feel able to cope with things.						
d. I don't take life for granted anymore.						
e. I value my relationships much more now.						
f. I feel more experienced about life now.						
g. I don't worry about death at all anymore.						
h. I live every day to the full now.						
i. I fear death very much now.						

j. I look upon each day as a bonus.						
k. I feel as if something bad is just waiting around the corner to happen.						
l. I'm a more understanding and tolerant person now.						
m. I have a greater faith in human nature now.						

	Strongly disagree	Disagree	Disagree a little	Agree a little	Agree	Strongly agree
n. I no longer take people or things for granted.						
o. I desperately wish I could turn the clock back to before it happened.						
p. I sometimes think it's not worth being a good person.						
q. I have very little trust in other people now.						
r. I feel very much as if I'm in limbo.						
s. I have very little trust in myself right now.						

t. I feel harder toward other people.						
u. I am less tolerant of others now.						
v. I am much less able to communicate with other people now.						
w. I value other people more now.						
x. I am more determined to succeed in life now.						
y. Nothing makes me happy anymore.						
z. I feel as if I'm dead from the neck downward.						

The Posttraumatic Growth Inventory (PTGI)

Please indicate for each of the statements below the degree to which this change occurred in your life as a result of the experience you described, using the following scale.

	Please select a response from the following scale					
	I did not experience this change as a result of my experience	I experienced this change to a very small degree as a result of my experience	I experienced this change to a small degree as a result of my experience	I experienced this change to a moderate degree as a result of my experience	I experience this change to a great degree as a result of my experience	I experienced this change to a very great degree as a result of my experience
1. I changed my priorities about what was important in life.						
2. I have a greater appreciation for the value of my own life.						
3. I developed new interests.						
4. I have a greater feeling of self-reliance.						
5. I have a better understanding of spiritual matters.						
6. I more clearly see that I can count on people in times of trouble.						
7. I established a new path for my life.						

8. I have a greater sense of closeness with others.						
9. I am more willing to express my emotions.						
10. I know better that I can handle difficulties.						
11. I am able to do better things with my life.						
12. I am better able to accept the way things work out.						
13. I can better appreciate each day.						
14. New opportunities are available which wouldn't have been otherwise.						
15. I have more compassion for others.						
16. I put more effort into my relationships.						
17. I am more likely to try to change things which need changing.						
18. I have a stronger religious faith.						

19. I discovered that I'm stronger than I thought I was.						
20. I learned a great deal about how wonderful people are.						
21. I better accept needing others.						

The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)

Below are some statements about feelings and thoughts.

	Please select the box that best describes your experience of each over the last 2 weeks				
	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future					
I've been feeling useful					
I've been feeling relaxed					
I've been feeling interested in other people					
I've had energy to spare					
I've been dealing with problems well					
I've been thinking clearly					
I've been feeling good about myself					
I've been feeling close to other people					
I've been feeling confident					
I've been able to make up my own mind about things					
I've been feeling loved					
I've been interested in new things					
I've been feeling cheerful					

Appendix H: Demographic Information Questions

Please answer the following questions:

2. Are you male or female?
Male
Female
3. How old are you?
4. Which of the following categories fits your employment status?
Student
Employed - full time
Employed - part time
Not employed
Unable to work
Retired
5. How many years have you spent in formal education?
Please enter a whole number (integer).
6. Please indicate your highest level of education completed to date
GCSE or equivalent
'A' level or equivalent
College diploma/ equivalent
Undergraduate degree/ equivalent
Postgraduate qualification
7. How would you describe your ethnicity?
White - English/ Welsh/ Scottish/ Northern Irish/ British
White - Irish
White - Gypsy or Irish Traveller
White - any other white background
Mixed/ multiple ethnic groups - White and Black Caribbean
Mixed/ multiple ethnic groups - White and Black African
Mixed/ multiple ethnic groups - White and Asian
Mixed/ multiple ethnic groups - any other mixed/ multiple ethnic background
Asian/ Asian British - Indian
Asian/ Asian British - Pakistani
Asian/ Asian British - Chinese
Any other Asian background
Black/ Black British - African
Black/ Black British - Caribbean
Black/ Black British - any other background
Other ethnic group - Arab
Any other ethnic group
Other
8. Please enter your email address below so that we can contact you to complete the second set of questionnaires in three months' time, and link your questionnaires by allocating a *unique code*. Please note that your email address is confidential and will not be passed on to any other parties. Your answers will be kept anonymous using a *unique code*. Appen

Appendix I: Participant Information Sheet

"COPING WITH ADVERSE LIFE EVENTS'

Participant Information Sheet

Hello. I am a trainee clinical psychologist on the Clinical Psychology Doctorate Course at the Universities of Coventry and Warwick. I am carrying out some research looking at how people respond to adverse and traumatic events, and what might be helpful for individuals during this time. I would like to invite you to participate if you feel able to.

Before you decide whether or not you would like to participate, I would like to give you some information about the research and what would be involved should you decide to take part. This information page will explain the possible advantages and disadvantages of taking part. If you would like to ask any questions, or clarify any points, prior to taking part you can email me on: kytee@uni.coventry.ac.uk.

Thank you for your interest in the study.

Details of the research

The aims of this study are to examine whether there are specific factors that impact on the experiences of an individual following an adverse or traumatic life event; namely the extent to which an individual experiences posttraumatic growth.

Posttraumatic growth is a term that is used to explain instances where an individual reports positive changes in the process of adjusting to an adverse or traumatic life event. It is important for us to understand this process because it can help us develop ways of supporting, and offering therapy, to people who experience traumatic life events. Understanding how we respond to adverse life events may also shed light upon what can be helpful for us all as we respond to more common adverse day to day occurrences.

What will I be expected to do?

If you decide to take part you will be asked to give consent and to complete several short questionnaires on the computer via an online link – this will take approximately 15-20 minutes. The first questionnaire will ask you to consider a specific adverse, or traumatic, life event that you have experienced, and subsequent questionnaires will consider the impact of this event. There are also some questions considering specific personality factors, and you will be asked to provide some brief demographic information.

Since we are interested in how things relate to each other and change over time we will contact you again via email in a few months' time to complete some of the questionnaires a second time. This is a significant part of what we are considering so we are thankful for your persistence at each of the time points. We will ask you for your email address at the start of the questions so that we can contact you at the second time point, and link your

questionnaires using a *unique code*. Only the principal investigator will have access to your email address.

Please remember that your answers will be linked using a *unique code*, and therefore handled anonymously. Your email address will be kept separately to your answers to protect your anonymity.

Do I have to take part?

We would like you to know that participation in the study is entirely voluntary. As such, even if you give consent to participate you can withdraw your answers from the survey at any point of time, without giving a reason for doing so. You can do this by contacting the principal investigator via email, stating the email address you provided during the questionnaires, until 15th April 2017 when the results will be collated. Please be assured that the information you provide will remain strictly confidential and anonymous. Answers will be reported so that no individual or organisation will be identifiable.

What are the possible risks associated with this study?

Answering questionnaires about an adverse or traumatic life event may bring difficult or uncomfortable memories, thoughts or feelings to the forefront. Please complete the questionnaires in a place that you feel comfortable, (this may be a quiet, or a private space), and at a time that you have the space to do so. We would also like to remind you that you are able to stop and withdraw from the study at any time. If completion of the survey does cause you any distress, please consider seeing your GP for support with this. In addition, a list of phone numbers and websites for relevant support agencies that may be useful are listed below.

What are the benefits of taking part in this study?

By participating in this study you are helping to contribute towards research that looks to establish how to better help those suffering after the experience of trauma. It is also possible that by working your way through the questionnaires it may help you reflect on what factors have changed for the positive, alongside any challenges, as a result of adverse life events you may have experienced.

Further information about this study will be made available through a debriefing sheet at the end of the questionnaires.

What if something goes wrong?

If you wish to make a complaint you can talk to the principal investigator directly, the academic supervisor, or you can use the Coventry University Complaints procedure, accessible via the contact details below.

Confidentiality and data protection

All of the data collected in this research study will be treated confidentially, and in line with the Data Protection Act (1998). Consent forms will be stored separately to

the completed questionnaires, in a locked filing cabinet or on an encrypted memory device. Questionnaires will only contain your *unique participant code* and therefore your identity will be kept anonymous throughout. Data from the questionnaires will be transferred into a statistical software programme and will be password protected. In accordance with the Data Protection Act (1998), data will be kept securely at Coventry University after the completion of the study, and will be destroyed after 5 years. The study has been reviewed by the Coventry University Research Ethics Committee.

What will happen to the results of the study?

The results of the study will be written up and submitted as part of a doctoral thesis by the principal investigator. Findings from the study may also be submitted for publication in a peer reviewed journal. The results of the research may also be presented at an academic conference as part of a verbal presentation or in poster format.

Who is the research team/ who can I contact?

Principal Investigator: Elizabeth Kyte, Trainee Clinical Psychologist. Email: kytee@uni.coventry.ac.uk
Research Supervisor: Dr Tom Patterson, Academic Director of the Clinical Psychology Doctorate. Email: aa5654@coventry.ac.uk.

Doctorate Course in Clinical Psychology, Coventry University (JSG24), Priory Street, Coventry, CV1 5FB. Telephone: 0247 7765 328.

Appendix J: Ethical Approval Confirmation

Certificate of Ethical Approval

Applicant:

Elizabeth Kyte

Project Title:

Unconditional positive self-regard and rumination style in posttraumatic growth

This is to certify that the above named applicant has completed the Coventry University Ethical Approval process and their project has been confirmed and approved as Medium Risk

Date of approval:

26 April 2016

Project Reference Number:

P40423

REGISTRY RESEARCH UNIT

ETHICS REVIEW FEEDBACK FORM

(Review feedback should be completed within 10 working days)

Name of applicant: Elizabeth Kyte .....

Faculty/School/Department: [Faculty of Health and Life Sciences] School of Psychological, Social and Behavioural Sciences.....

Research project title: Unconditional positive self-regard and rumination style in posttraumatic growth

Comments by the reviewer

1. Evaluation of the ethics of the proposal:

This is a potentially interesting study with a good rationale and clear aims and methods sections. There is a fair consideration of the ethical issues and it is essentially sound on this basis. However, there are a number of small points that require some clarification.It would be helpful to clarify the answers to a number of questions as follows:

Project Information:
Item 11: Clarify what "appropriate debriefing" means. As it stands, it seems that this consists of providing details of the results. This is helpful but is not, in itself a debrief. It is the reviewer's understanding that debriefing involves providing a little more detail about the study, the questionnaires administered and offering information/guidance on where to seek further support if necessary.

Q5 – risk of harm, potential harm and disclosure:
5.2 – The acknowledgement that completion of the questionnaires may cause some distress is helpful. However some clarification/further information would be helpful:

- Concern on the part of who?
- Details of the principal and chief investigators will be provided for what purpose? If it is to offer support/guidance, is this realistic/appropriate?
- As with the above comment, what is mean by "appropriate debrief"?

2. Evaluation of the participant information sheet and consent form:

Overall the participant information sheet (PIS) and participant consent form (PCF) are acceptable. However, as above, some further detail would be helpful as follows:

Participant information sheet:

- There is a typographic error in the first line – "our" should be "out". Whilst this isn't so much an ethical issue, presentation of all research materials should be high in order to instil confidence in the principal investigator. Further in this section "people that" should be amended to "people who".
- The second paragraph refers to "interventions" which some participants may not understand. Lay language eg "therapy" or "support" may be more helpful.
- Under the section describing what participants will have to do, it is unclear how they will receive their questionnaires, how long it will take.
- The participants have been informed that for reasons of "scientific credibility" they will be required to complete questionnaires at two time points. What does this mean? Furthermore, it is the reviewer's understanding that, in addition to issues of validity and reliability, questionnaires are being administered at different time points to establish how certain factors relate to each other. If this is the case, it could be made clear to participants that this is

3. Recommendation:
(Please indicate as appropriate and advise on any conditions. If there any conditions, the applicant will be required to resubmit his/her application and this will be sent to the same reviewer).

X	Approved - no conditions attached
	Approved with minor conditions (no need to re-submit)
	Conditional upon the following – please use additional sheets if necessary (please re-submit application)
	Rejected for the following reason(s) – please use other side if necessary
	Not required

Name of reviewer: Anonymous.....

Date: 26/04/2016.....

Appendix K: Participant Consent Form

"COPING WITH ADVERSE LIFE EVENTS'

Informed Consent Form

Thank you for considering taking part in this study. The questionnaires are completed anonymously, and can be saved part way through. The questions take around 15 minutes to complete.

If you decide not to participate, please do not continue with the remaining questions.

	Please tick
1. I confirm that I have read and understand the participant information sheet for the above study and have had the opportunity to ask questions (you can do this via: kytee@uni.coventry.ac.uk).	☐
2. I understand that my participation is voluntary and that I am free to withdraw my consent and participation in the study at anytime without giving a reason. I have been made aware that I can change my mind about participating in this study at any time until 15th April 2017 when the results will be collated.	☐
3. I have been made aware of the possible risks and benefits associated with taking part in this study and I understand what my participation will involve.	☐
4. I understand that all the information I provide will be treated in confidence, and anonymously.	☐
4. I understand that if I withdraw my consent, that my information will be destroyed, and that this will not affect my studies/ position in the universities in any way.	☐
5. I understand that this consent form will be kept secure from unauthorised access, accidental loss or destruction.	☐
6. I understand that in line with the Data Protection Act (1998) the information I provide via this form and the questionnaires will be destroyed after five years.	☐

Appendix L: Participant Debrief Sheet

Participant debriefing sheet

Thank you for participating in the study by completing the questionnaires.

Here is a little more information about the following areas for you to look at:

- The purpose of the study
- The questionnaires you filled out
- Further support

About the study

The experience of adverse or traumatic life events is not uncommon. Furthermore, it is estimated that 1 in 3 people may struggle to move on from what is termed as the 'acute stress reaction' that can follow in the immediate aftermath of a traumatic or adverse event.

In addition to the above, some people who live through adverse or traumatic life events may also experience a sense of improved wellbeing and meaning in life. This process is known as posttraumatic growth.

Aspects that may impact on the extent to which people experience posttraumatic growth are elements such as:

- A sense of positive self-regard (also referred to as unconditional positive self-regard)
- Being authentic and true to oneself
- Openness to experiences, and processing experiences, for example by reflecting on experiences

Understanding how the above elements relate to processes such as posttraumatic growth can help us develop effective support and therapeutic approaches. The questionnaires that you completed help us understand some of these relationships.

More information about the questionnaires

You completed validated questionnaires which help us consider the following things:

- Unconditional positive self-regard
- Thinking styles
- Posttraumatic growth
- Psychological wellbeing

For further support or information

If you are in a situation where you feel you may be in need of support please contact your GP. In addition, here is a short list of support agencies that may be helpful:

Anxiety UK
Helpline: 08444 775 774 (Mon - Fri 9.30am to 5.30pm)
anxietyuk.org.uk
Provides fact sheets for anxiety disorders (including PTSD).

ASSIST trauma care
Helpline: 01788 560 800
assisttraumacare.org.uk
Support, understanding and therapy for people experiencing PTSD, and families and carers.

Be Mindful
bemindful.co.uk
Explains the principles behind mindfulness, and gives details of local therapists.

British Association for Behavioural and Cognitive Psychotherapies (BABCP)
0161 705 4304 / babcp.com
Online directory of accredited therapists.

British Association for Counselling and Psychotherapy (BACP)
01455 883 300 / bacp.co.uk
Information about counselling and therapy.

Combat Stress
Helpline: 0800 1381 619 (24 hours)
contactus@combatstress.org.uk
combatstress.org.uk
Charity specialising in the treatment and support of British Armed Forces Veterans who have mental health problems.

The Compassionate Friends
Helpline: 0845 123 2304
tcf.org.uk
For bereaved parents and their families.

Freedom from Torture
freedomfromtorture.org
Provides direct clinical services to survivors of torture who arrive in the UK. Has access to interpreters.

Lifecentre
Adult helpline: 0844 847 7879
Under 18s helpline: 0808 802 0808
lifecentre.uk.com
Telephone counseling for survivors of sexual abuse and those supporting survivors.

National Institute for Health and Care Excellence (NICE)
nice.org.uk
Offers clinical guidance on PTSD.

PANDAS foundation
Helpline: 0843 289 8401 (Monday to Sunday 9am to 8pm)
pandasfoundation.org.uk
UK charity supporting families suffering from pre (antenatal) and postnatal illnesses.

Samaritans
Offers a listening service any time - 116 123.

SANEline
A specialist mental health helpline - 0300 304 7000 between 6pm and 11pm each evening.

University student support and counseling services
Coventry: Telephone: 024 776 58029/ Email: counsell.ss@coventry.ac.uk
Warwick: Telephone: 024 765 23761/ Email: counselling@warwick.ac.uk

Appendix M: Rumination and UPSR correlations over time with PTG and Wellbeing *(r)*

		Time 1			
		PTGI	CIOP	CION	WEMWB
Time 1	Deliberate rumination	**.339*** **	**.361*** **	**.116***	.044
	Intrusive rumination	.095	**.195****	**.327*** **	**-.291****
	UPSR	.251***	.284**	-.418***	.478***

		Time 2			
		PTGI	CIOP	CION	WEMWB
Time 1	Deliberate rumination	**.169***	**.216****	.044	.029
	Intrusive rumination	.010	.094	**.306*** **	**-.239****
	UPSR	**.303*** **	**.280*** **	**-.409*** **	**.442*** **

		Time 2			
		PTGI	CIOP	CION	WEMWB
Time 2	Deliberate rumination	**.408*** **	**.207****	**.146***	**.038**
	Intrusive rumination	**.149***	.027	**.371*** **	**-.221****
	UPSR	.304***	.278***	-.492***	.497***

* p<.05
**p<.01
***p<.001

Appendix N: Shapiro-Wilk Test of Normality Summary Statistics

	W	df	Sig.
ERRI – deliberate rumination (Time 1)[a]	.953	236	<.001[b]
ERRI – intrusive rumination (Time 1)[a]	.918	236	<.001[b]
UPSR (Time 1)	.984	236	.009[b]
CiOP (Time 2)	.990	144	.419
PTGI (Time 2)	.982	144	.057

[a] assumption for linearity not met

[b] significant value indicates that the scores do not meet the normality assumption

Appendix O: UPSRS and PTGI subscale correlations *(r)*

	Time 1			Time 2		
		UPSR			UPSR	
	Total	SR[a]	Cond[b]	Total	SR[a]	Cond[b]
Time 1						
CiON	**-.418*** **	**-.527*** **	-.050	-	-	-
CiOP	**.284*** **	**.291*** **	**.126***	-	-	-
PTGI Total	**.251*** **	**.259*** **	**.110***	-	-	-
PTGI F1[1]	**.186****	**.215*** **	.049	-	-	-
PTGI F2[2]	**.218*** **	**.215*** **	**.109***	-	-	-
PTGI F3[3]	**.238*** **	**.220*** **	**.140***	-	-	-
PTGI F4[4]	**.194*** **	**.232*** **	.041	-	-	-
PTGI F5[5]	**.301*** **	**.266*** **	**.196*** **	-	-	-
WEMWB	**.478*** **	**.603*** **	.056	-	-	-
Time 2						
CiON	**-.409*** **	**-.532*** **	-.020	**.492*** **	**-.601*** **	-.096
CiOP	**.280*** **	**.312*** **	.089	**.278*** **	**.326*** **	.075
PTGI Total	**.303*** **	**.295*** **	**.154***	**.304*** **	**.351*** **	.089
PTGI F1[1]	**.307*** **	**.279*** **	**.185***	**.272*** **	**.287*** **	.121
PTGI F2[2]	**.235****	**.219****	.134	**.260****	**.304*** **	.072
PTGI F3[3]	**.201****	**.219****	.069	**.225****	**.290*** **	.022
PTGI F4[4]	**.270*** **	**.301*** **	.083	**.297*** **	**.375*** **	.040
PTGI F5[5]	**.260*** **	**.256*** **	.131	**.252****	**.287*** **	.080
WEMWB	**.442*** **	**.552*** **	.257	**.497*** **	**.592*** **	.120

[1] Relating to others subscale

[2] New possibilities subscale

[3] Personal strength subscale

[4] Spiritual change subscale

[5] Appreciation of life

[a] Self-regard subscale

[b] Conditionality subscale

*p<.05

**p<.01

***p<.001