

# Resilience and Wellbeing and its Relationship to Posttraumatic Stress and Growth in the Experience of Stressful/Adverse Events in Adults.

Julie Ann Pooley PhD  
Edith Cowan University

# Post Traumatic Stress (PTS)

- Most researched.
- As a result of trauma/adversity.
- The Impact of Event Scale (IES, IES-R).
- 21 item self-report measure.
- A recent meta-analysis of 66 studies.
- IES as a general, reliable, and valid self-report measure for assessing psychological distress reactions after negative life events.
- As a result of the revisions, the IES-R includes items which represent all three DSM-IV PTSD symptom intrusion, avoidance and hyperarousal.

# Post Traumatic Growth (PTG)

- Experience positive psychological changes and growth as a result of stress/trauma.
- Stress-related growth, perceived benefits, thriving, positive adaptation.
- Tedeschi, Park and Calhoun (1998) defined posttraumatic growth as positive psychological change experienced as a result of the struggle with major life crises or traumatic events.
- Posttraumatic Growth Inventory (PTGI).
- The 21-item scale assesses dimensions related to new possibilities, relating to others, personal strength, spiritual change, and appreciation of life.
- The PTGI has since been utilised effectively with diverse samples such as hospital trauma victims, breast cancer patients, heart disease and seasonal disaster populations.

# Subjective Wellbeing (SWB)

- Subjective wellbeing is resultant from cognitive-affective factors and is a product of how an individual evaluates life satisfaction using cognitive and emotional processes.
- Subjective wellbeing can be described as how satisfied an individual is with a certain circumstance (cognitive) as well as the presence of positive emotions (affect) regarding those circumstances.
- Psychological well-being is a relatively stable construct which captures those aspects of human functioning which are likely to lead to adaptive human functioning and positive experiences.
- The Psychological Well-being Scale (PWB) (Ryff, 1989; 1995) was designed to measure six theoretically motivated constructs of psychological well-being.

# Resilience (RSA)

- Commentators from many different domains.
- Many understandings and definitions based on theorists different perspectives and training and/or research interests.
- ‘the potential to exhibit resourcefulness by using available internal and external recourses in response to different contextual and developmental challenges’ (Pooley & Cohen, In press).
- Most agree a minimum of two aspects:
  - Adversity
  - Competence/adaptation as a result of the adversity
- Resilience Scale for Adults (RSA) 33 items covering five dimensions: personal competence, social competence, family coherence, social support and personal structure.

# Rationale

- Lifetime prevalence of major stressful and traumatic is 69% of the general population reporting an occurrence of at least one stressful or traumatic event during their lifetime.
- Many people do well, that is they do not develop PTS.
- Argue for an understanding across different adverse/traumatic events.
- Adverse situations can constitute a potential threat to well-being and the normal healthy development.
- This then argues for clarity in the relationships between resilience, stress, growth, and well-being (Hobfoll, Hall, Canetti-Nisim, Galea, Johnson & Palmieri, 2007; Pat-Horenczyk & Brom, 2007).



# Research Aims

The aim of the current research is to explore the relationships between stress, posttraumatic growth, resilience and wellbeing in relation to different stressful/adverse life events.

The research questions are

- Is there a relationship between post traumatic growth, post traumatic stress, resilience and wellbeing?
- Does post traumatic growth, wellbeing post traumatic stress and predict resilience.
- Is there a difference between the type of adverse event and the experience of resilience, wellbeing, post traumatic growth and post traumatic stress?



# Instruments

- 1. The Posttraumatic Growth Index (PTGI) (Tedeschi & Calhoun, 1996). Reliability (.9).
- 2. The Impact of Events Scale Revised (IES-R) (Weiss & Marmar, 1997). Reliability (.84-.91).
- 3. The Resilience Scale for Adults (RSA; Friborg et al., 2003). ). Reliability (.83-.9).
- 4. The Scale for Psychological Wellbeing (SWB) (Ryff, 1989; Ryff & Keyes, 1995) Reliability (.83-.91).
- In addition participants will be asked to respond to demographic items and indicate the type of adversity/trauma they have experienced. These adverse events/traumas include 11 specific traumatic events (e.g. natural disaster, divorce, death of a loved one) are based upon similar items listed in the studies by Tedeschi and Calhoun (1996), and Vrana and Lauterbach (1994).

# Procedure

- Participants were recruited via Mail drop through Australia Post. Randomly picked suburbs in WA (inc. country locations).
- Reply- paid
- Response Rate approx 25%

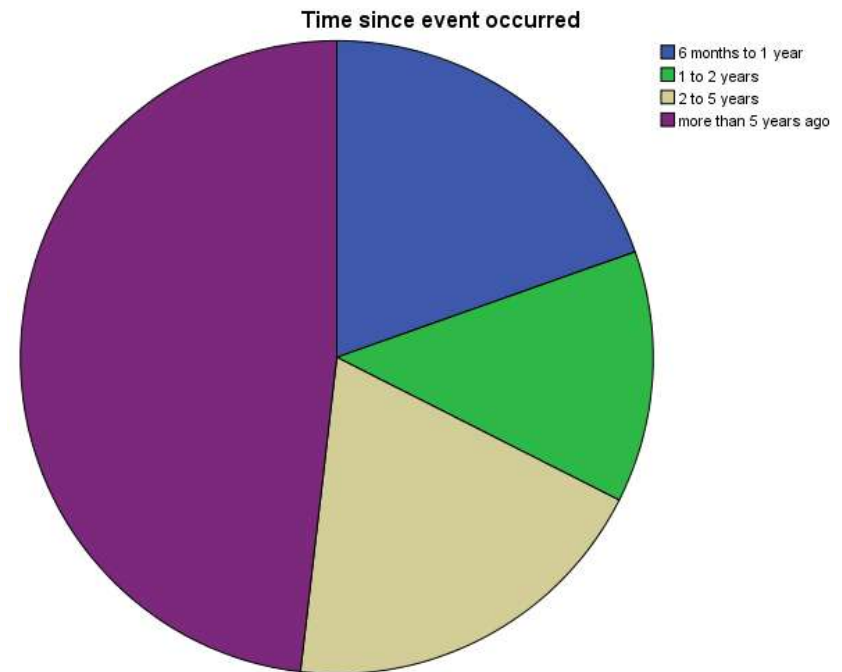
# Participants

- Respondents

Total 502

Female 77% (382)

Male 22% (109)



# Scale Information

Scale	Mean	SD	Reliability
PTGI	54.57	23.27	.93
IES	42.73	18.68	.93
RSA	167.86	30.39	.93
SWB	189.04	29.35	.95

# Is there a relationship between PTG, PTS, RSA, and SWB?

- Growth + correlated with
  - SWB .237,  $p < .000$
  - RSA .190,  $p < .000$
  - Time .126,  $p = .007$
- Resilience correlated with
  - IES -.474,  $p < .000$
  - SWB .794,  $p < .000$
  - PTG .190,  $p < .000$
- Stress - correlated with
  - SWB -.450,  $p < .000$
  - RSA -.474,  $p < .000$
  - Time -.133,  $p = .005$
  - Age -.093,  $p = .047$
- Well-being correlated with
  - IES -.450,  $p < .000$
  - PTG .237,  $p < .000$
  - RSA .794,  $p < .000$

# Does PTG, PTS and SWB predict RSA?

R<sup>2</sup> 66.7%

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	37.669	7.657		4.920	.000
	ies.total	-.246	.054	-.153	-4.536	.000
	swb.total	.738	.035	.733	21.291	.000
	ptgi.total	.019	.039	.015	.494	.621

a. Dependent Variable: res.total

# Does PTG, PTS and RSA predict SWB?

R<sup>2</sup> 64.3%

Coefficients<sup>a</sup>

FEMALE Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.778	9.036		4.402	.001
	ies.total	-.219	.063	-.138	-3.476	.000
	swb.total	.737	.040	.733	18.210	.000
	ptgi.total	-.021	.045	-.017	.464	.643

a. Dependent Variable: res.total

R<sup>2</sup> 77.0%

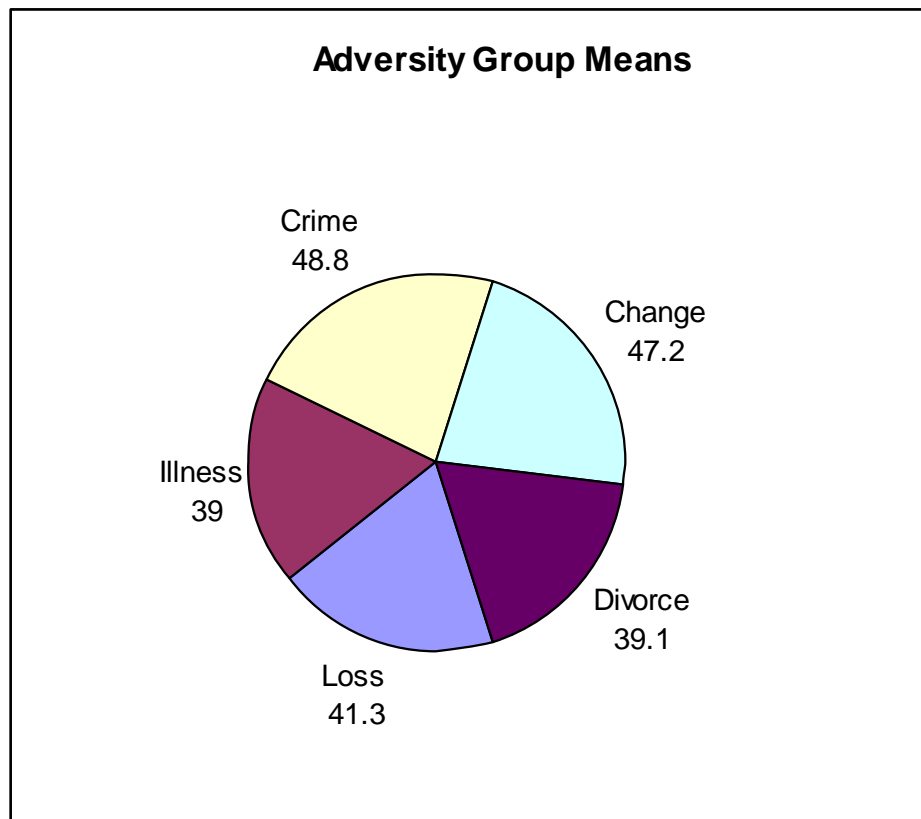
Coefficients<sup>a</sup>

MALE Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	43.019	14.280		3.013	.003
	ies.total	-.404	.105	-.241	-43.859	.000
	swb.total	.685	.066	.683	10.340	.000
	ptgi.total	.182	.078	.135	2.347	.021

a. Dependent Variable: res.total

# Difference between the type of adverse event and the experience of PTG, PTS, RSA and SWB?

- ANOVA revealed differences between groups for stress only





# Discussion

- Growth and Stress not related, this is unusual.
- Time correlated (IES and PTG), ANOVA reveals there is a significant difference between.
- Age correlation evidenced in some lit.
- Resilience and well-being.

# Discussion

- Limitations consistent with most of the research in - retrospective, cross-sectional, female dominated
- Information on subscales.
- Factor Analysis needs doing.
- Severity of trauma not taken into account
- Small numbers across trauma groups.
- Gender analysis

# References

- Affleck, G., & Tennen, H. (1996). Construing benefits from adversity: Adaptational significance and dispositional underpinnings. *Journal of Personality, 64*, 899–922.
- Anthony, E. J., & Cohler, B. J. (Eds.). (1987). *The Invulnerable Child*. New York: Guildford Press.
- Antonovsky, A. (1993). The implications of salutogenesis: An outsider's view. In A. P. Turnbull, J. M. Patterson & et. al. (Eds.), *Cognitive coping, families, and disability*. (pp. pp. 111-122). Baltimore, MD, USA: Paul H. Brookes Publishing.
- Baldwin, A. L., Baldwin, C. P., Kasser, T., Zax, M., Sameroff, A., & Seiffer, R. (1993). Contextual risk and resiliency during late adolescence. *Development and Psychopathology, 5*, 741-761.
- Beasley, M., Thompson, T., & Davidson, J. (2003). Resilience in response to life stress: The effects of coping style and cognitive hardiness. *Personality and Individual Differences, 34*, 77-95.
- Butler, L.D. (2007). Growing Pains: Commentary on the Field of Posttraumatic Growth and Hobfoll and Colleagues' Recent Contributions to it. *Journal of Applied Psychology, 56* (3), 367-378
- Calhoun, L.G., Cann, A., Tedeschi, R.G., & McMillan, J. (2000). A correlational test of the relationship between posttraumatic growth, religion, and cognitive processing. *Journal of Traumatic Stress, 13*, 521-527.
- Campbell-Sills, L., Cohan, S. L., & Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy, 44*, 585-599.
- Cohen, L. H., Hettler, T. R., & Pane, N. (1998). Assessment of Posttraumatic growth. In R. Tedeschi, C. L. Park & L. G. & Calhoun (Eds.), *Posttraumatic Growth: Positive Changes in the Aftermath of Crisis* (pp. 23-42). New Jersey: Lawrence Earlbaum.
- Cordova, M. J., Cunningham, L.L.C., Carlson, C.R., & Andrykowski, M.A. (2001). Posttraumatic growth following breast cancer: A controlled comparison study. *Health Psychology, 20*, 176-185.
- Crosbie, D & Rosenberg, S. (2007). *COAG Mental Health Reform: Mental Health and the new Medicare Services: An Analysis of the First Six Months*. Report to Mental Health Council of Australia.
- Derogatis LR, Lipman RS, Rickels K, Uhlenhuth EH, Covi L. (1974)0. The Hopkins Symptom Checklist (HSCL). A measure of primary symptom dimensions. *Modern problems of pharmacopsychiatry, 7*(0):79-110
- Dienstbier, R. A. (1992). Arousal and physiological toughness: Implications for mental and physical health. *Psychological Review, 96*(1), 84-100.
- Dunbar, H. T., Mueller, C. W., Medina, C., & Wolf, T. (1998). Psychological and spiritual growth in women living with HIV. *Social Work, 43*, 144-154.
- Fontana, A., & Rosenheck, R. (1998). Psychological benefits and liabilities of traumatic exposure in the war zone. *Journal of Traumatic Stress, 11*(3), 485-503.

# References

- Frazier, P., Conlon, A., & Glaser, T. (2001). Positive and negative life changes following sexual assault. *Journal of Consulting and Clinical Psychology, 69*, 1048–1055.
- Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: What are the central protective resources behind healthy adjustment? *International Journal of Methods in Psychiatric Research, 12*, 65-85
- Garnezy, N. (1993). Children in poverty: Resilience despite risk. *Psychiatry: Interpersonal & Biological Processes, 56*(1), 127-136.
- Gore, S., & Eckenrode, J. (2006). Context and process in research on risk and resilience. In R.J. Haggerty, L.R. Sherrod, N Garnezy, and M. Rutter. (Eds). *Stress, Risk, and Resilience, in Children and Adolescents*. Cambridge, UK: Cambridge University Press.
- Hobfoll, SE.; Hall, B J.; Canetti-Nisim, D; Galea, S, Johnson, R J. Palmieri, P A (2007). Refining our Understanding of Traumatic Growth in the Face of Terrorism: Moving from Meaning Cognitions to Doing what is Meaningful . *Journal of Applied Psychology 56*(3), 345-366
- Jacelon, C. S. (1997). The trait and process of resilience. *Journal Of Advanced Nursing, 25*(1), 123-129.
- Joseph, S., & Linley, P.A. (2005) Positive adjustment to threatening events: An organismic valuing theory of growth through adversity. *Review of General Psychology, 9*, 262–280.
- Kaplan, H. (1999). Toward an understanding of resilience: A critical review of definitions and models. In M. J. Glantz, J (Ed.), *Resilience and Development: Positive Life Adaptions* (pp. 17-84). New York: Plenum Press.
- Kobasa. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology, 37*, 1-11.
- Linley, P.A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress, 17*, 11-21.
- Mandleco, B. L., & Peery, J. C. (2000). An organizational framework for conceptualizing resilience in children. *Journal of Child and Adolescent Psychiatric Nursing, 13*, 99-111.
- Massey, S., Cameron, A., Ouellette, S., & Fine, M. (1998). Qualitative approaches to the study of thriving: What can be learned? *Journal of Social Issues, 54*(2), 337-355.
- Pat-Horenczyk, R., & Brom, D . (2007). The Multiple Faces of Post-Traumatic Growth. *Journal of Applied Psychology, 56* (3.), 379-385.
- Pooley, J.A., Cohen, L., & O'Connor, M. (2006). Community resilience and its link to individual resilience in the disaster experience of cyclone communities in northwest Australia. In D. Paton & D. Johnston ( Eds) *Disaster Resilience: An Integrated Approach*. Springfield, Illinois: Charles C Thomas
- Rauh, H. (1989). The meaning of risk and protective factors in infancy. *European Journal of Education, 2*, 161-173.
- Ryff, C.D. & Keyes, C.L.M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology, 69*, 719-727.
- Ryff, C.D. (1989). Happiness Is Everything, or Is It? Explorations on the Meaning of Psychological Well-Being. *Journal of Personality and Social Psychology, 57* (6), 1069-1081.
- Tartar, R., & Vanyukov, M. (1999). Re-visiting the validity of the construct of resilience. In M. J. Glantz, J (Ed.), *Resilience and Development: Positive Life Adaptions*. New York: Plenum Press.
- Tedeschi, R.G., & Calhoun, L.G. (1996). The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress, 9*, 455-471.
- Tedeschi, R.G., Park, C. L., & Calhoun, L. G. (1998). Posttraumatic growth: Conceptual issues. In R. Tedeschi, C. Park, & L. Calhoun (Eds.), *Posttraumatic growth: Positive changes in the aftermath of crisis*. Mahwah, NJ: London.
- Vrana, S., & Lauterbach, D. (1994). Prevalence of traumatic events and post-traumatic psychological symptoms in a nonclinical sample of college students.

Presented by:

Julie Ann Pooley PhD

School of Psychology and Social Science

Edith Cowan University

Joondalup, Western Australia, 6027

Email: [j.pooley@ecu.edu.au](mailto:j.pooley@ecu.edu.au)

Member of the Lifespan Resilience Research Group

<http://www.psychology.ecu.edu.au/research/lifespan-resilience/>