

Northumbria Research Link

Citation: Sherlock-Storey, Mandi (2016) Developing employee resilience to organisational change: the development of a practitioner intervention framework. Doctoral thesis, Northumbria University.

This version was downloaded from Northumbria Research Link:
<http://nrl.northumbria.ac.uk/id/eprint/29623/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

**DEVELOPING EMPLOYEE
RESILIENCE TO ORGANISATIONAL
CHANGE: THE DEVELOPMENT OF
A PRACTITIONER INTERVENTION
FRAMEWORK**

Amanda Sherlock-Storey

**Professional Doctorate in
Occupational Psychology**

2016

**DEVELOPING EMPLOYEE
RESILIENCE TO ORGANISATIONAL
CHANGE: THE DEVELOPMENT OF
A PRACTITIONER INTERVENTION
FRAMEWORK**

Amanda Sherlock-Storey

A thesis submitted in partial fulfilment
of the requirements of the University
of Northumbria at Newcastle
for the degree of

**Professional Doctorate in
Occupational Psychology**

Research undertaken in the Faculty of
Health and Life Sciences

May 2016

Abstract

Purpose – Recent research has explored employee resilience as a personal resource capable of development for both individual and organisational outcome benefits. Reviews examining programmes to build employee resilience have identified only a small number of empirical studies. Whilst one to one modes of resilience programme delivery have been identified as being potentially more effective than other modes, review authors conclude the current literature to lack coherence and call for further work. This thesis focuses upon employee resilience in the context of organisational change, a context with a current literature gap. The thesis sought to develop and trial an intervention framework, to examine impacts on participant psychosocial variables and to compare delivery modes.

Design/methodology/approach - Qualitative interviews with n = 16 public and third sector employees experiencing organisational change were conducted and results analysed using template analysis. Findings along with factors from the adult resilience literature informed the development of an intervention framework consisting of seven areas *optimistic style, getting perspective, using strengths, self-efficacy, social support self-care and goal setting* which was piloted with n=12 public sector managers. A quasi experimental study comparing group and one to one delivery modes was conducted with n= 44 public sector employees randomly allocated to the two delivery modes. Pre and post intervention (1 week and 4 weeks) measures of participant resilience, well-being and change efficacy were analysed using mixed between subjects ANOVA's. A final controlled trial involving a three session group based delivery programme was conducted with n = 27 intervention participants and n = 27 waiting list control participants from a public sector organisation. Participant resilience, change efficacy and well-being were measured in both groups one week prior to the intervention delivery, one week after completion and four weeks later. After controlling for level of change impact using ANCOVA's, results were analysed using mixed between subjects ANOVA's.

Findings – One to one delivery was associated with positive gains in participant well-being and change efficacy and some, but not all aspects of participant resilience. Group workshop delivery modes did not lead to any increases in study variables.

Research limitations – Design limitations mean it is not possible to distinguish the most efficacious components of the interventions. The small public sector sample restricts generalisation of findings to other contexts. The outcome focus of the studies prevents clarifying the extent to which process variables impacted findings. Overall results should be viewed as preliminary/exploratory.

Practical implications – Some support has been provided for the use of one to one resilience intervention for public sector employees experiencing change. The thesis intervention framework provides a potential template for resilience intervention design. Piloting and a process evaluation approach are recommended for any future application.

Originality/value –A focus upon employee resilience in an organisational change context offers an original contribution to the literature. Support for resilience as a functional personal resource with development potential is also offered.

List of Contents

<i>Abstract</i>	<i>ii</i>
List of Contents	iii
Acknowledgements	xxii
Authors Declaration	xxiii
Chapter 1: Introduction	1
1.1 Research purpose and general aim	1
1.2 Organisational change: the role of resilient employees	1
1.3 Organisational change: increased job demands	2
1.4 Employee resilience as a personal resource during change	3
1.5 Employee resilience as a Positive Organisational Behaviour	5
1.6 Theoretical perspectives, assumptions and links to thesis inquiry	6
1.7 Context of study organisations	7
1.8 Research Questions	9
1.9 Thesis structure and general aims of programme studies	9
1.10 Significance and contribution of the thesis	12
Chapter 2: Literature Review	13
2.1 Chapter overview	13
2.2 Organisational Change: adverse employee impacts	13

2.3	Cue resilience.....	16
2.4	Defining Psychological Resilience	17
2.5	Developmental foundations of resilience research.....	19
2.6	Waves of resilience research.....	21
2.7	Risk Factors and protective factors.....	23
2.8	Resilience: trait, process or outcome?	25
2.9	Resilience – outcome versus process.....	26
2.10	Adversity and adaptation	27
2.10.1	Adversity.....	27
2.10.2	Adaptation	28
2.11	Resilience and well-being.....	29
2.12	Adult resilience	30
2.13	Resilience promoting factors in adults	31
2.14	Resilience in workplace settings: the military contribution.....	34
2.15	Workplace resilience – the contribution from Health and Social Care settings	37
2.16	Employee resilience in changing organisations	38
2.17	Employee resilience as a personal resource	40
2.18	Resilience as a Positive Organizational Behaviour (POB)	45

2.19	Psychological Capital.....	46
2.20	Developing resilience in the workplace	47
2.21	Workplace resilience programmes – the evidence base	50
2.22	Delivery Mode.....	61
2.23	Content and design	61
2.24	Outcome Measures	62
2.25	Programme design recommendations	63
2.26	Research recommendations	63
2.27	Summary and Conclusions	64
Chapter 3: Methodology.....		65
3.1	Chapter overview.....	65
3.2	Critical realist ontology.....	65
3.3	Pragmatist epistemology	66
3.4	Mixed methods	67
3.5	Real World Research and the Role of Practitioner-researcher	68
3.6	Research methods	68
3.7	Ethical Considerations	69
Chapter 4: Study 1 – Qualitative Exploration of Employee Resilience During Organisational Change Using Template Analysis		70

4.1	Chapter Overview	70
4.2	Rationale for the current study	70
4.3	Method	71
4.3.1	Participants – sample and recruitment.....	71
4.3.1.1	Organisation A.....	72
4.3.1.2	Organisation B.....	73
4.3.2	Procedure.....	73
4.4	Data Analysis.....	74
4.4.1	Template Analysis	74
4.4.2	Development of a priori codes	75
4.4.2.1	Organisational Change a priori codes.....	76
4.4.2.2	Resilience factors a priori codes	76
4.4.2.3	Resilience definition codes	77
4.4.3	Initial template development	78
4.4.3.1	Initial coding – transcripts 1-6	79
4.4.3.2	Scrutiny and reflexivity.....	79
4.4.3.3	Iterative coding	80
4.5	Findings and discussion	82
4.5.1	Theme 1 change antecedents	83

4.5.1.1	Nature of change	84
4.5.1.2	Change recipient factors.....	84
4.5.1.3	Change management process.....	85
4.5.2	Theme 2 Change impacts.....	86
4.5.2.1	Organisational impacts	87
4.5.2.2	Impacts on relationships.....	87
4.5.2.3	Impacts on individuals	88
4.5.2.4	Impacts on managers	88
4.5.3	Theme 3 change reactions	90
4.5.3.1	Negative appraisal of change	91
4.5.3.2	Difficult emotions	91
4.5.3.3	Behavioural reactions	92
	Theme 4 change consequences	93
4.5.3.4	Work related consequences	93
4.5.3.5	Personal consequences	95
4.5.4	Theme 5 resilience factors.....	95
4.5.4.1	Positive personal resources.....	97
4.5.4.2	Cognitive flexibility	98
4.5.4.3	Meaning	100

4.5.4.4	Managing emotions	101
4.5.4.5	Connecting	102
4.5.4.6	Active coping and problem solving	103
4.5.5	Theme 6 resilience definitions	105
4.5.5.1	Coping	106
4.5.5.2	Adaptation	107
4.5.5.3	Growth.....	108
4.5.5.4	Positivity	108
4.6	Study discussion.....	109
4.6.1	Study Limitations	112
4.7	Conclusions and link to next chapter	113
Chapter 5: Development of initial intervention framework		115
5.1	Chapter overview.....	115
5.2	Evidence based design.....	117
5.3	Practitioner considerations.....	117
5.4	Brief intervention.....	118
5.5	Modes of delivery: group workshops and one to one sessions	119
5.6	Framework development	119
5.6.1	Framework and Intervention content.....	123

5.6.1.1	Optimistic style	124
5.6.1.2	Using strengths	125
5.6.1.3	Getting perspective.....	126
5.6.1.4	Self-efficacy.....	127
5.6.1.5	Goal Setting.....	128
5.6.1.6	Social Support.....	128
5.6.1.7	Self-care	129
5.7	Overview and links to next chapters	130
Chapter 6: Testing the initial framework, pilot study and stakeholder feedback....		131
6.1	Chapter overview	131
6.2	Piloting a one to one delivery mode.....	131
6.3	Stakeholder feedback.....	132
6.3.1	Participant feedback	132
6.3.2	Facilitator feedback.....	133
6.3.2.1	Materials and content	133
6.3.2.2	Session length and intervals.....	133
6.3.2.3	Goal setting	134
6.4	Researcher reflections and conclusions	134
6.5	Framework modifications and iteration	135

6.6	Conclusion and links to next chapter	136
Chapter 7: Comparison of Workshop and One to One Delivery of Resilience Intervention..... 137		
7.1	Chapter overview	137
7.2	Study Rationale	137
7.3	Study aim and hypotheses	138
7.4	Method	140
7.4.1	Design.....	140
7.4.2	Participants.....	140
7.4.3	Measures.....	142
7.4.3.1	Workplace Resilience Inventory (resilience process)	143
7.4.3.1.1	Self-Regulatory Processes Affective (SRPA)	145
7.4.3.1.2	Self-Regulatory Processes Behavioural (SRPB)	145
7.4.3.1.3	Self-Regulatory Processes Cognitive (SRPC).....	145
7.4.3.2	IWP Multi-Affect Indicator (Warr & Parker, 2010).....	146
7.4.3.3	Change efficacy.....	146
7.4.3.4	Study Reliability.....	147
7.4.4	Procedure.....	148
7.4.4.1	Data collection time points.....	149

7.4.4.2	Study interventions	150
7.4.4.2.1	One to one programme	150
7.4.4.2.2	Group workshop programme	155
7.5	Analysis and Results	155
7.5.1	Analysis strategy.....	157
7.5.1.1	Resilience.....	158
7.5.1.1.1	Self-Regulatory Processes Affective (SRPA)	158
7.5.1.1.2	Self-Regulatory Processes Behavioural (SRPB)	158
7.5.1.1.3	Self-Regulatory Processes Cognitive (SRPC).....	160
7.5.1.1.3.1	Post hoc analyses	161
7.5.1.2	Well-being	163
7.5.1.2.1	Positive Wellbeing.....	163
7.5.1.2.1.1	Post hoc analyses	164
7.5.1.2.2	Negative well-being.....	166
7.5.1.2.2.1	Post hoc analyses	167
7.5.1.3	Change efficacy.....	168
7.5.1.3.1	Post hoc analyses.....	169
7.6	Discussion	171
7.6.1	Limitations	172

7.6.2	Implications for research: designing Study 3.....	175
7.6.3	Implications for practice (framework modification, designing intervention).....	176
7.7	Chapter summary and links to next phase	176
Chapter 8: Final framework iteration		178
8.1	Chapter overview.....	178
8.2	Stakeholder feedback.....	178
8.3	Researcher reflections.....	179
8.4	Framework modifications.....	181
8.4.1	Modification 1: Delivery mode – 3 x group workshops over 4 weeks	181
8.4.2	Modification 2: Content, optimistic style - inclusion of Thinking Traps	181
8.4.3	Modification 3: Content, goal setting - Meaningful goals focus.....	182
8.5	Conclusion and links to next chapter	183
Chapter 9: Study 3 A controlled trial of a resilience development group workshop programme		184
9.1	Chapter overview	184
9.2	Modifications to research methodology.....	184
9.2.1	The use of a design involving a control group.....	184

9.2.2	Factoring in change impact.....	185
9.2.3	Change adaptation – inclusion of a performance measure	185
9.2.4	Measuring resilience as an outcome.....	185
9.2.5	Retaining well-being and change efficacy measures.....	186
9.3	Method	186
9.3.1	Design.....	186
9.3.2	The study organisation	187
9.3.3	Participants.....	187
9.3.4	Randomisation	189
9.3.5	Measures.....	191
9.3.5.1	Change Impact	191
9.3.5.2	Change efficacy.....	191
9.3.5.3	Well-being	191
9.3.5.4	Resilience.....	191
9.3.5.5	Change Adaptation.....	192
9.3.6	Procedure.....	192
9.3.6.1	The study resilience Intervention	194
9.3.6.2	Time 2 and Time 3 questionnaire administrations.....	196
9.4	Analysis and Results	196

9.4.1	Initial consideration of data	196
9.4.1.1	Study variable intercorrelations.....	198
9.4.1.2	Consideration of means and standard deviations.....	200
9.4.2	Analysis strategy	203
9.4.2.1	Change adaptation	203
9.4.2.2	Resilience.....	204
9.4.2.3	Positive well-being.....	205
9.4.2.4	Negative well-being	205
9.4.2.5	Change efficacy.....	205
9.5	Discussion	206
9.5.2	Limitations	207
9.6	Conclusion.....	209
Chapter 10: Discussion.....		210
10.1	Chapter overview.....	210
10.2	Thesis contributions.....	210
10.2.1	An examination of resilience in an organisational change context ..	210
10.2.2	Identification of contextually relevant adult resilience factors	211
10.2.3	A contribution to workplace resilience development literature	211
10.2.4	Support for the role of positive constructs in the workplace.....	211

10.2.5 Contribution to practice: A framework for employee resilience development.....	212
10.3 Review of Research Questions	212
10.3.1 RQ1: What are the adverse impacts of organisational change for participant employees?.....	212
10.3.2 RQ2: What resilience factors do participant employees utilise when dealing with organisational change?	213
10.3.3 RQ3: How do employees define personal resilience in the context of organisational change?.....	214
10.3.4 RQ4: What are relevant components/content of a resilience intervention for employees experiencing organisational change?.....	215
10.3.5 RQ5: Can resilience well-being and performance outcomes be achieved by brief resilience programmes for participants experiencing organisational change?.....	215
10.3.6 RQ6: Which mode of delivery – group or one to one is most effective for promoting resilience, change efficacy, adaptation, and well-being outcomes?	216
10.4 Explaining the limited impact of group intervention.	217
10.5 Thesis strengths	221
10.6 Thesis limitations.....	221
10.6.1 Lack of a process evaluation lens	221

10.6.2	Variability in the nature of change in the study organisations	226
10.6.3	Study instruments	228
10.6.4	Short term longitudinal design.....	228
10.6.5	Sampling.....	229
10.6.6	Dual role of Practitioner and researcher/evaluator	230
10.6.7	Random assignment to intervention.....	230
10.6.8	The challenge of identifying the most effective content components of the interventions	231
10.6.9	The challenge of drawing conclusions relating to delivery mode	231
10.7	Implications and recommendations	232
10.7.1	The final framework	232
10.7.2	Timing and targeting intervention	234
10.7.3	An inoculation approach.....	234
10.7.4	Improving workshop outcomes.....	235
10.7.5	Utilising one to one delivery in employee resilience development	236
10.7.6	Piloting.....	237
10.8	Future avenues of research.....	238
10.9	Researcher Reflections	240
10.10	Conclusion	248

List of Tables

Table 1.1: Thesis Theoretical Foundations and Links to Studies

Table 2.1: Protective Factors by Author from Earvolino-Ramirez (2007) (p. 75)

Table 2.2: Reviews of Resilient Adult Characteristics

Table 2.3: Individual Factors Relating to Resilience in Health Professions (McCann et al., 2013, p.77)

Table 2.4: Outline of Content and Adversity in the 39 Studies Featured in Systematic Review and Meta-analysis (2015)

Table 3.1: Summary of Research Methodologies

Table 4.1: Profiles of Interview Participants

Table 4.2: A Priori Codes for Template Analysis

Table 5.1: Evidence Sources underpinning the Framework components

Table 5.2: Selected Resilience Factors from Meredith et al. (2011) (p. 21)

Table 7.1: Study 2 Participant Demographics

Table 7.2: Scale Reliability Alphas for all Study Time Points: $\alpha =$

Table 7.3: Participant Timeline and Process for Both Conditions

Table 7.4: One to One Facilitator Demographics

Table 7.5: Framework - Outline of activities in one to one and workshop formats

Table 7.6: Means Standard Deviations and Correlation Coefficients amongst all Study Variables

Table 7.7: Means and Standard Deviations for Intervention and Control Group over 3 Study Time Points

Table 7.8: Mean Levels of SRPB Scores for all Participants across Study Time Points

Table 7.9: Descriptive Statistics SRPC Scores Time 1, Time 2 and Time 3 for Both Conditions

Table 7.10: Descriptive Statistics - Positive Well-being Scores Time 1, Time 2 and Time 3 for Both Conditions

Table 7.11: Descriptive Statistics - Negative Well-being Scores Time 1, Time 2 and Time 3. Both Conditions

Table 7.12: Mean change efficacy scores Time 1, Time 2 and Time 3 for Both Conditions

Table 9.1: Participant Demographics

Table 9.2: Measure Reliability Coefficients for Three Study Times

Table 9.3: Means and Standard Deviations for Intervention and Control Group over Time

Table 9.4: Means Standard Deviations, Coefficient Alphas and Correlations for all Study Variables

Table 9.5: Mean Levels of Change Adaptation Scores for All Participants across Study Time Points

Table 10.1: Final Framework Showing Activities in Each Delivery Mode

List of Figures

Figure 2.1 Personal Adaptation Model van de Heuvel et al. (2010) (p.138)

Figure 4.1 Hierarchy of Codes under Major Theme of Change Antecedents

Figure 4.2 Hierarchy of Codes under Major Theme of Change impacts

Figure 4.3 Hierarchy of Codes under Major Theme of Change Reaction

Figure 4.4 Hierarchy of Codes under Major Theme of Change Consequences

Figure 4.5 Hierarchy of Codes under Major Theme of Resilience Factors

Figure 4.6 Hierarchy of Codes under Major Theme of Resilience Definitions

Figure 5.1 Timeline for Process of Developing and Testing the Resilience Development Framework

Figure 7.1 Self-regulatory Processes – Affective Levels across Study Time Points for Both Conditions

Figure 7.2 Self-regulatory Processes –Behavioural Levels across Study Time Points for Both Conditions

Figure 7.3 Self-regulatory Processes – Cognitive Levels across Study Time Points for Both Conditions

Figure 7.4 Mean levels of SRPC at time 3 for both Conditions .Error bars represent standard errors *p.05

Figure 7.5 Levels of Positive Well-being across Study Time Points for both Conditions

Figure 7.6 Negative Well-being Levels across Study Time Points for Both Conditions

Figure 7.7 Change-efficacy Levels across Study Time Points for Both Conditions

Figure 7.8 Mean levels of change efficacy at time 3 for both conditions. Error bars represent standard errors *p.05

Figure 9.1 Extract from Study Organisation's Strategic Plan for 2015/2016

Figure 9.2 Participation Flow Diagram

Figure 9.3 Outline of Participant Schedules for Intervention and Control Group

Figure 9.4 Outline of Study Three Session Resilience Intervention

Figure 10.1 Baldwin and Ford (1988) Training Transfer Model

Acknowledgements

This thesis is dedicated to my children Conor and Niamh who will remain always my life's best work. To my parents Ray and Eileen for being a lifelong cornerstone of my own personal resilience and who instilled in me a love of learning and a strong sense of self-belief, amazing gifts thank you.

Special thanks to the following: To Linda Little whose support and supervision made completion of this doctorate possible – not sure what karmic debt you had to deserve me but I think it is repaid! Thanks also to Lynne Coventry for becoming involved in my supervision at a late stage and to Mel Mitchell for being there at the start. To Mark Moss for the encouragement and space to undertake this doctorate. To the coaches who volunteered their time to help me, Sue Timson, Tracey Hutchinson, Clare Hardy, Michelle Rouse, Dawn Parkin, Emily Sweetman, and particularly Marje Mills, Kitty Haylock and Dave Kitching who helped me out with two rounds. Laura Neale, thanks for your patient support with SPSS and formatting I couldn't have done it without you. John Blythe thanks for continuous "Team Mandi" support. Finally to the unnamed organisations and participants who took part in the research, thank you.

To the people who have supported me personally: Vicki Elsey, special thanks for all the things you have done to support me over the last few challenging years, you are an amazing friend. Neill Thompson thanks for your inputs and continual support patience and encouragement. Niamh Storey for sorting my references and constant encouragement.

Finally..... to Del thanks for being supportive.

Authors Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others. Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by the Faculty of Health & Life Sciences Ethics Committee on 21/7/2011 and 17/12/2014.

Word count 59,190

Name:.....

Signature:.....

Date:.....

Chapter 1: Introduction

“In light of the turbulent economic, political, and technological environment that organizations are currently operating in, the ability of employees to recover and even excel in the face of adversity has important consequences for contemporary workplaces” (Fisk & Dionisi, 2010 p. 168).

1.1 Research purpose and general aim

This thesis aimed to create and trial a framework to guide the development of resilience interventions for employees experiencing organisational change. In order to draft and test the framework specific research questions were addressed (see Section 1.8). This thesis sought to examine and/or test: 1) the nature of organisational change as a source of adversity for employees 2) the most salient personal resilience promoting factors in the context of organisational change and 3) the potentially malleable nature of employee resilience as a personal resource that facilitates positive individual and organisational outcomes. This chapter positions the theoretical basis for the body of work and presents the research questions and an outline of the thesis structure.

1.2 Organisational change: the role of resilient employees

A UK report for the Chartered Management Institute (Worral & Cooper, 2012) revealed that 90% of businesses surveyed had experienced change within the last year. Being able to rapidly respond to change is now a key imperative in order to survive and build a thriving organization (Van den Heuvel, 2013). Organisational change is likely to be an ongoing primary source of challenge for both organisations and their employees. The impact of organisational change on employees is historically well documented in the literature (see for example Armenakis & Bedain, 1999). The current climate of continuous organisational change means that

employers require adaptive and resilient employees who can maintain performance and well-being in the face of challenges. Interest in workplace resilience has grown during the current period of global recession and austerity (Robertson & Cooper, 2013). Workplace resilience offers organisations the potential for enhancing capacity for adaptation, change and growth/innovation. An understanding of how to create resilient organisations, including via strategies targeting the promotion of resilience in employees, may offer significant competitive and/or survival advantages for organisations and enhanced outcomes such as well-being and openness to change for employees (Wanberg & Banas, 2000; Fisk & Dionisi, 2010).

The study of resilience has its foundations in early developmental studies which have been extensively researched, however research relating to adult resilience is less well advanced (Wright, Masten, & Narayan, 2013) particularly in the context of the workplace (Vanhove, Herian, Perez, Harms, & Lester, 2015). Recent reviews of employee resilience building programmes in the workplace have identified only 39 empirical studies in total (Vanhove et al 2015; Robertson, Cooper, Sarkar, & Curran, 2015). Of the 39 studies, only one study by the current author (Sherlock-Storey, Moss, & Timson, 2013) has focused explicitly upon employee resilience development in the context of organisational change.

1.3 Organisational change: increased job demands

Organisational change means giving up established ways of working and changing structures (Woodman & Dewett, 2004) and has been described as a critical life event, capable of evoking negative outcomes in employees (Jimmieson, Terry & Callan, 2004). Organisational change may typically increase work pressures for example as organisations downsize and individual employees are tasked with doing “*more with less*”. Increased workloads may not be the only increased demand,

emotional management for example may become more challenging for employees in downsizing or financially restricted organisations as they experience loss of colleagues, challenges to professionalism and/or a general climate of uncertainty and loss of security (Bordia, Hobman, Jones, Gallois & Callan, 2004; Oreg, Vakola & Armenakis, 2011). In the Job Demands Resources (JDR) model, Bakker and Demerouti (2007) propose that job demands may impact upon employee motivation, engagement and well-being particularly where resources that support job performance are lacking. Bakker and Demerouti (2007) further propose that the job demands within any given job role will vary according to the nature of the role and the tasks involved e.g. some roles with a human interface element, such as nursing, or social work which for example may have more evident emotional demands than roles that do not have high levels of client/patient contact. In the context of the current study organisational changes are conversely viewed as a generic variable which impacts organisations and the job demands of employees within those organisations regardless of the role. Whilst the adverse impacts of organisational change for employees such as increased job demands is documented in the literature, empirical literature relating to employee resilience in the context of organisational change is very limited involving only a handful of studies (see Shin, Taylor & Seo, 2012).

Using a qualitative approach in Study 1 the thesis explores how organisational change challenges employees and identifies the factors that may enable individuals to be resilient in the face of these challenges.

1.4 Employee resilience as a personal resource during change

Personal resources have been described as “aspects of the self that are generally linked to resiliency” (Hobfoll, Johnson, Ennis, & Jackson, 2003, p. 632). Personal

resources refer to positive individual states such as levels of optimism, resilience, and a sense of confidence in personal ability for example. Personal resources enable individuals to interact and influence their environments more effectively through increased proactive and positive behaviours and expectations, they are characteristic of a resilient style of operating (Schaufeli & Taris, 2014). Personal resources are related to a sense of control over the environment. They support individuals to stay motivated in the face of change and adversity (Hobfoll, Johnson, Ennis & Jackson, 2003). Personal resources may operate as protective factors during organisational change enabling individuals to increase job resources such as colleague or manager support and maintaining engagement (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009a, 2009b).

The role of personal resources during change may also be understood in the context of Conservation of Resources (COR) theory (Hobfoll 1989, 2002) that suggests employees are motivated to build, maintain and protect resources. In situations that threaten an employee's resources such as organisational change, conservation of resources may prevent negative outcomes such as stress. COR further suggests that individuals high in resilience may be more successful in protecting themselves from resource loss and the consequences (Hobfoll, 2001).

Van den Heuvel, Demerouti, Schaufeli and Bakker (2010), link personal resources explicitly to organisational change in their *personal adaptation model* which is reviewed in Chapter 2. In the personal adaptation model personal resources are anticipated to have a reciprocal relationship with job demands and job resources for example the presence of personal resources may influence the perceptions of job demands, the presence of support in the work environment may influence self-

efficacy. Personal resources are additionally positioned as having both direct and indirect impacts upon organisational outcomes in a change environment.

A consideration of personal resources provides an opportune area of focus for organisations and individual employees who are interested in maintaining or enhancing well-being and performance in the face of the increased job demands presented by organisational change. This may be particularly the case when efforts to enhance job resources have been exhausted.

1.5 Employee resilience as a Positive Organisational Behaviour

Resilience has been investigated as a positive organisational behaviour (POB) (Luthans, 2002). The research stream of POB focuses on state-like concepts that can be “measured, developed, and effectively managed for performance improvement in today’s workplace” (Luthans, 2002, p. 59). Psychological resource capacities such as self-efficacy (Bandura, 1997), hope (Snyder, 2000), optimism (Scheier & Carver, 1985), and resilience (Masten, 2001) meet these criteria for inclusion and have received the majority of attention from POB researchers and more recently examined as the higher order concept of Psychological Capital (PsyCap) (Luthans, Avey, Avolio, Norman & Combs, 2006a; Luthans, Avey & Patera 2008). Within PsyCap resilience has been studied as a component of the higher order construct but also as an outcome where the other components of *hope*, *optimism* and *self-efficacy* operate as potential pathways to resilience (Luthans, Vogelgesang, & Lester 2006b).

An organisationally relevant evidence base for the positive benefits of PsyCap which includes resilience is growing (Youssef & Luthans 2007; Luthans, Avolio, Avey & Norman, 2007; Luthans, Avey, Avolio, Peterson, 2010). In addition PsyCap has been demonstrated to be capable of development in workplace populations

through the use of a relatively brief *microintervention* (Luthans et al., 2006; Luthans et al., 2008; Hodges, 2010).

This thesis examines the role of resilience as a personal resource that enables employees to effectively deal with the challenges and demands of organisational change. Further the thesis studies sought to test the potential POB qualities of employee resilience in an organisational change context and to explore the extent to which resilience could be developed using relatively brief intervention approaches.

1.6 Theoretical perspectives, assumptions and links to thesis inquiry

Three core theoretical models influence the focus of this thesis and the body of work which follows. The selected theories have been cited briefly in this chapter and will be expanded further in Chapter 2. Theoretical assumptions that drive the operational construct of resilience within the thesis are illustrated in Table 1.1 along with links to the areas of inquiry in the thesis studies. The aim of this thesis is not to test the central assumptions of these theories as such, but rather to shed light on the thesis research questions regarding the nature of employee resilience in an organisational change context.

Table 1.1

Thesis Theoretical Foundations and Links to Studies

Theoretical base	Assumption	How examined or tested within the thesis
Conservation of Resources (COR)	Organisational change will create a situation of adversity for employees through the nature of potential threat to resources. Those employees who are able to develop and/or retain higher levels of resources will show better outcomes (e.g. well-being, adaptation, performance).	Explored via the qualitative interviews with employees (chapter 4) that sought to establish the nature of organisational change as an adverse situation and further to identify factors that enable individuals to develop and/ or utilise resilience as a resource. Outcomes of resilience as a resource impacting well-being and change orientation variables are measured in both quantitative studies (chapters 7 and 9).
Personal resources adaptation model	Resilience is a functional personal resource that can; 1) mediate the perceptions of job demands in an organisational change context. 2) impact attitudes towards organisational change and, 3) can directly impact outcomes such as change adaptation.	Two studies (chapters 7 and 9) tested the extent to which the enhancement of resilience can positively impact well-being and change efficacy (study 2 chapter 7) and well-being, change efficacy and change adaptation (study 3 chapter 9).
Positive organisational behaviour (POB)	Employee resilience is a state like construct that may be developed through relatively brief intervention and produce positive outcomes for the individual and their organisation.	Three studies sought to test extent to which participant resilience could be developed using brief interventions. One to one interventions (pilot study chapter 6 and study 2 chapter 7) and group interventions (study 2 chapter 7 and study 3 chapter 9) were trialled and impact on participant's resilience process (study 2) and resilience as an outcome (pilot study and study 3) was assessed. Well-being, change efficacy and change adaptation were included as outcome measures in these studies.

1.7 Context of study organisations

The thesis sought to examine the nature of resilience in the context of organisational change that has the potential for significant and potentially adverse

impact upon individual employees. The studies outlined within this thesis have taken place within public or third sector organisations experiencing significant organisational change as a result of the prevailing political and economic environment. The UK Government austerity measures and funding cuts provide the backdrop for the nature of organisational change being experienced by participants in the research:

At the start of its term in 2010, the Conservative-Liberal Democrat coalition government announced the biggest cuts in state spending since World War II. Savings estimated at about £83bn are to be made over four years. The plan is to cut 490,000 public sector jobs. Most Whitehall departments face budget cuts of 19% on average. The retirement age is to rise from 65 to 66 by 2020. The budget deficit is about 10% of GDP and unemployment - officially 2.67 million (8.4%). That is its highest level since 1994. (BBC News, 2012).

The local authority and third sector organisation involved in Study 1 were in the throes of dealing with these budget cuts and loss of funding (study period - September-December 2011). Both organisations had already made cuts to services, jobs and budgets and faced further, ongoing impacts.

The *Welfare Reform Act 2012* impacted the Social Housing organisations involved in Study 2 which took place between September 2013 and February 2014. This Act negatively affected the tenants of the Organisations' housing stock which in turn created changes and challenges to the nature of their service delivery and resource capacity. Challenges included dealing with increased rent arrears, increased requirement for tenant support, management of empty housing stock and required redeployment of strategic capital (Ipsos Mori, 2014).

Between 2010 and the time of Study 3 (February to May 2015), the local authority involved had made £100 million pounds of cuts and lost 25% of staff. The organisation faced a further 16% reduction in government funding for 2015/2016.

These cuts had led to significant changes in the organisations operations and presented an ongoing climate of uncertainty for employees.

1.8 Research questions

The overall aim of the thesis was to create and test an evidence based framework for resilience development interventions for employees experiencing organisational change. To achieve this aim the following research questions (RQ) have been addressed within the context of public and/or third sector organisations:

RQ1: What are the adverse impacts of organisational change for participant employees?

RQ2: What resilience factors do participant employees utilise when dealing with organisational change?

RQ3: How do employees define personal resilience in the context of organisational change?

RQ4: What are relevant components/content of a resilience intervention for employees experiencing organisational change?

RQ5: Can resilience, well-being and performance outcomes be achieved by brief resilience programmes for participants experiencing organisational change?

RQ6: Which mode of delivery – group or one to one is most effective for promoting resilience, efficacy and well-being outcomes?

1.9 Thesis structure and general aims of programme studies

Chapter 2 literature reviews: This chapter provides a review of the relevant literature to position the rationale and line of questioning for the current research. Resilience is reviewed from the perspective of employee resilience in organisations

experiencing organisational change, while highlighting the central concepts of adversity and adaptation in the resilience process. The chapter explores the context of organisational change then following a brief examination of key developments and constructs in the field of resilience, the nature of adult and employee resilience is explored. An examination of available workplace studies that would inform the design of employee resilience development is included. The case for resilience as a personal resource and positive organisational behaviour (POB) is positioned and gaps in the literature highlighted.

Chapter 3 Methodology: This chapter provides the rationale and justification for the critical realist ontology, pragmatist epistemology and mixed methods, approach utilised within the thesis. An overview of the methodology is provided for the three studies presented within this thesis. Readers are referred to the study specific chapters for more detailed information relating to the separate study methodologies.

Chapter 4 Study 1: The aim of Study 1 was to identify, from participant accounts of organisational change, how change impacts as a source of adversity for individuals and the resilience factors they employ when dealing with these. This study employed a qualitative interview method and used template analysis (King, 2012) to explore the results. The identified resilience factors were then taken forward into the next phase of the work for integration into the design of a framework for employee resilience development.

Chapter 5 Framework development: Guided by principles of evidence based practice this chapter outlines how an initial framework for employee resilience development was developed for use within the thesis studies.

Chapter 6 Framework pilot: Following the development process outlined in Chapter 5 the framework was piloted. This chapter outlines the trial delivery of a

brief one to one resilience programme with a small group of public sector managers. Feedback from stakeholders is integrated with researcher reflections to inform a next iteration of the framework for trial in Study 2.

Chapter 7 Study 2: This quantitative study compared the effectiveness of two modes of delivery of resilience interventions based on the resilience development framework. A half day group workshop was compared with a 3 x 90 minute, one to one delivery format. Participants were drawn from two social housing organisations and were randomly allocated to one of two conditions - a half day resilience workshop or a three session one to one delivery condition. The impact of the interventions on participant resilience, efficacy and well-being was measured and the one to one mode of delivery found to have greater impact than the workshop mode.

Chapter 8 Framework modification: Following Study 2 a next iteration of the resilience development framework was required and was informed in part by the findings of Study 2. The chapter outlines a further and final phase of researcher reflection and stakeholder input. Final modifications to framework delivery mode and content are outlined in preparation for a final delivery trial in Study 3.

Chapter 9 Study 3: Study 3 utilised a waiting list control group to establish the efficacy of a four week programme of 3 x 90 minute group workshop delivery of modified framework content. Participants were drawn from a local authority dealing with organisational change created by significant budget cuts and were randomly allocated to the treatment or waiting list control conditions. The effect of the intervention on resilience, efficacy, performance and well-being was measured. The intervention was not found to significantly impact study variables compared to the control group.

Chapter 10 Discussion: Thesis contributions are presented and findings reviewed in the context of the literature review in chapter 2 and the research aims and questions. The research is appraised and limitations explored. The chapter provides concluding observations relating to the impacts and implications of the thesis for research and practice. Future avenues of research are identified and researcher reflections included.

1.10 Significance and contribution of the thesis

The thesis sets out to contribute to existing knowledge and practice in the area of workplace resilience. The programme of work presented within the thesis offers an exploratory contribution to the field of workplace resilience in an organisational change context. Specifically the following contributions are of significance:

- A focus upon employee resilience in an organisational change context – an area currently lacking in the literature.
- Identification of contextually specific adult resilience factors.
- Contribution to the knowledge base relating to the development of employee resilience and of the effectiveness of different modes of delivery.
- Support for the role of positive constructs in the workplace – resilience as a potential positive organisational behaviour (POB) and as a personal resource during change.
- Contribution to practice – an evidence based framework to guide the design of resilience development programmes for employees.

Chapter 2: Literature Review

2.1 Chapter overview

This chapter provides a review of relevant literature commencing with a review of organisational change and its potential impacts upon employees. The review is structured as follows: 1) resilience is briefly introduced as a relevant construct for organisations and employees; 2) the field of resilience is reviewed building from early work to the positioning of resilience development in the workplace; 3) an examination of the most recent reviews in the area. Particular emphasis is given to personal resilience as a malleable personal resource which may benefit employees and their organisations. Limitations of the existing literature are discussed as a rationale for the series of studies presented in the thesis.

2.2 Organisational change: adverse employee impacts

Change in organisations represents both a potentially significant challenge for employees and a potential source of competitive advantage, if not survival for organisations. Organisational change defined by Herold and Fedor (2010) as “...alterations of existing work routines and strategies that affect a whole organization” (p. 7) can have significant impact upon employees. Consequences of change may include: increased job demands; reduced autonomy; changes in working relationships and reduced social support (Kivimäki, Vahtera, Elovainio, Pentti & Virtanen, 2003; Noel, 1998). These potentially negative consequences may in turn, contribute to increased job strain or stress (Niedhammer, Chastang, David, Barouhriel & Barrandon, 2006; Kivimaki et al., 2003). Uncertainty is one of the most commonly reported and challenging psychological states in the context of organisational change (Bordia et al., 2004). This uncertainty may be as a result of poor leadership (Kotter, 1996), or changes in strategy, structure or technology in

order to remain competitive (Armenakis & Bedeian, 1999). Organisational change can undermine employee stability as it requires giving up established ways of working, dealing with changing structures and often prolonged periods of uncertainty. Thus uncertainty at a strategic, organisational level has been found to impact at the individual job level creating stress and negative well-being impacts (Terry & Jimmieson, 2003).

Detrimental psycho-social well-being consequences of organisational change for employees are well-documented (see for example Blau, 2003; Niedhammer et al., 2006; Bamberger, Vinding, Larsen, Nielsen, Fonager et al., 2012). Many studies of well-being during change fail to take account of individual employee factors that may affect the potential negative impact of change and also act as moderators i.e. factors associated with individual appraisal of the change, coping strategies, perceived social support and personality (Bamberger et al., 2012; Van den Heuvel, et al., 2010).

Organisational change can lead to increased workloads, changes in the nature of work, new working relationships and new strategic goals (Shin et al., 2012; Pollard, 2001). Jimmieson et al. (2004) describe organisational change as a critical life event with the potential to evoke negative outcomes in employees. Head, Kivimäki, Martikainen, Vahtera, Ferrie and Marmot (2006) demonstrated how changes negatively impacted upon employees perceived decision latitude and perceived job demands which led to an increase in the likelihood of long term sickness absence. Also Shin et al. (2012) note that employees experience challenges caused by the potentially intrusive nature of change and its disruption of routines and workplace relationships.

Applying an *antecedent, reaction, consequence* framework to a review of 60 years of change literature, Oreg et al. (2011) present a model demonstrating the potentially negative reactions and consequences of change for individual employees. Reactions include employee's appraisal of change and emotional reaction for example, impaired well-being, and reduced work engagement. Within the model, Oreg and colleagues also represent moderating or mediating factors located within the literature such as an employee's pre-change traits, coping styles and demographics and individual appraisal of change, use of coping behaviours etc. The change management process itself is also represented as a variable. Where the management of change includes employee participation, for example, Armenakis and Bedeian (1999) found that change is appraised as less stressful.

The Oreg et al. (2011) model which synthesises a considerable literature suggests that organisational change has the potential for adversity but individual employee factors and the change management process can impact upon the actual outcomes. This is consistent with Bonanno (2004) and Bonanno, Westphail and Mancini's (2011) view of *potentially traumatic events* (PTE's) based on the notion that individual response trajectories relating to loss or potential trauma are so varied as to render the term *trauma* a potential misnomer.

The fact that organisational changes affect individuals differently prompted Caldwell, Herold and Fedor (2004) to include a measure of individual job impact of change when researching change interventions. This concept has been refined by Tvedt and Saksvik (2012) who found employees appraise change differently. In order to capture this they developed the Change Impact Factor (CIF) scale which measures ways in which employees may be affected by change. Tvedt and Saksvik found the scale was not correlated with individual differences predisposing people for change

suggesting quantifiable differences in how people are affected by change. As such the scale represents a potentially viable means of accounting for differences in individual PTE magnitude.

Hobfoll's (1989, 2002) Conservation of Resources theory (COR) offers potential insights into reasons why employees may perceive organisational change as threatening and offer resistance rather than commitment or compliance. According to COR individuals tend to perceive the world as innately threatening. In order to navigate and survive threats individuals need to obtain and retain valued resources such as personal strengths and valued relationships. The challenge of organisational change for employees according to COR theory is created by the potential threat to maintaining resources and the resulting stress created. Because COR theory highlights the role of resource possession, resource lack, and resource loss and gain, it is a pivotal theory for interpreting and predicting both positive and negative impacts of stress as well as the resilience process (Chen, Westman & Hobfoll, 2015).

2.3 Cue resilience

Robertson et al. (2015) suggest that a focus on organisational and individual resilience are now "*centre stage*" agendas for Human Resource and Occupational Psychology professionals and researchers in addressing issues of workplace productivity, well-being and engagement. Studies at the organisational level of resilience have tended to focus upon crisis and disaster management or High Reliability Organisations (HRO's) (see for example Sutcliffe & Vogus, 2003; Weick & Sutcliffe, 2001). In less specialised or isolated event contexts, resilience may also help organisations and specifically employees who face the day to day challenges experienced in today's business environments. Resilience is not just required in

response to sudden shocks such as natural disasters or terrorist attacks but is also required by employees faced with the continuously transforming nature of business environments. Mallak (1998) suggests that resilience may actually be life-saving in the case of critical incidents but in more routine environments may be required to maintain well-being and survival. Interest in resilience in the workplace has grown during the period of global recession and subsequent austerity which has particularly affected the UK public sector (Robertson & Cooper, 2013).

2.4 Defining psychological resilience

The study of resilience seeks to understand why some individuals are able to withstand or even thrive in the face of pressures and challenges (Fletcher & Sarkar, 2013). The foundations of the resilience literature are situated within developmental psychology and childhood psychopathology, exploring the evidence behind the phenomenon that some individuals emerge from significant early adversity with minimum detrimental impact whilst others suffer lasting psychological, physical or emotional damage (Garmezy, 1991; Werner, 1995; Rutter, 1985).

Resilience has been traditionally viewed as the ability to positively adapt and/or “*bounce back*” from adverse situations (Rutter, 1985). Current psychological models and definitions of resilience particularly those relating to an organisational context tend to emphasise the growth element of resilience as opposed to merely returning to a state of equilibrium following adversity i.e. *transcending* not just *surviving* (Coutu, 2002).

Resilience has been conceptualised and defined in many different ways prompting a number of conceptual reviews. Windle (2011) explored resilience from a range of disciplinary perspectives concluding resilience is; “the process of effectively negotiating, adapting to or managing significant sources of stress or trauma” (p.

698). Windle further suggested that a more multi-disciplinary and lifespan oriented approach to the study of resilience is required. Meredith, Sherbourne, Gaillot, Hansel, Ritschard et al. (2011) classified 122 resilience definitions according to three main types:

Basic – definitions that describe resilience as a process or capacity that develops over time.

Adaptation – definitions that incorporate the concept of “bouncing back” adapting, or returning to a baseline after experiencing adversity or trauma.

Growth – definitions that additionally involve growth after experiencing adversity or trauma (p. 20).

Fletcher and Sarkar (2013) reviewed and critiqued the variety of definitions, concepts, and theories of psychological resilience. Many definitions fail to capture the learning and growth elements that are an important part of more current and dynamic views of resilience (Fletcher & Sarkar, 2013). Based on consistent themes emerging from the review, they defined psychological resilience as “the role of mental processes and behaviour in promoting personal assets and protecting an individual from the potential negative effect of stressors” (p. 16).

In a recent review of workplace resilience intervention, Robertson et al. (2015) recommend researchers utilise resilience definitions that are consistent with the measures applied to evaluate the intervention. Due to its inclusion of both a trait and a process element to resilience, Robertson et al. (2015) further recommend the use of the Fletcher and Sarkar (2013) definition to support clarity and focus relating to conceptual boundaries. The trait conceptualization suggests that resilience represents a constellation of characteristics that enable individuals to adapt to the circumstances they encounter (Connor & Davidson, 2003). The process conceptualization of resilience recognizes that it is a capacity that develops over time in the context of person–environment interactions (Robertson et al., 2015). This

interactionist view of resilience, whereby resilience is conceived as a dynamic person-environment phenomenon (see for example Pangallo, Zibarras, Lewis & Flaxman, 2015), offers a potentially viable way to provide a more contextually relevant lens for adult resilience and bring greater conceptual clarity to the field.

The resilience definition adopted in the context of the current thesis is that of Luthans (2002): “the developable positive psychological capacity to rebound or ‘bounce back’ from adversity, uncertainty, conflict and failure or even positive events, progress and increased responsibility” (p. 702).

The rationale for the selection of this definition relates to its consistency with the thesis. The definition focuses upon the malleable nature of resilience as a positive resource and the potential for a wide range of situational factors including uncertainty which is a characteristic of change, to necessitate its application. This definition is considered most fitting for the context of the current thesis with its emphasis on developing resilience in employees in an organisational change context.

2.5 Developmental foundations of resilience research

The seminal Werner and Smith (1989) longitudinal study following Hawaiian island individuals for over forty years in order to explore the impact of early adversities on adult functioning epitomizes early resilience work. A multidisciplinary team of professionals began a study on the development of all 698 babies born during 1955 on the Hawaiian Island of Kauai (Werner & Smith, 1989; Werner, 1993). The aim of the study was to document the developmental stages of each individual at ages 1, 2, 10, 18, and 32 years in order to assess the long-term consequences of perinatal complications and unfavourable childrearing conditions on development and life adaptation. The team by examined the children’s vulnerability, also defined as their

susceptibility to negative developmental outcomes following exposure to risk factors such as perinatal stress, poverty, parental mental illness, and disruption of the family unit. Latent-variables path analyses were used to examine the relationship between protective factors in the individual and the external sources of support during childhood and adolescence that contributed to successful adult adaptation (Werner, 1993). Four clusters emerged: 1) temperamental characteristics which helped to elicit positive responses from a variety of caring people, 2) skills and values that led to realistic education, employment plans, and domestic responsibilities, 3) characteristics and caregiving styles of the parents that demonstrated competence and cultivated self-esteem in the child, and 4) supportive adults who promoted trust and acted as gatekeepers for the future.

Werner and colleagues longitudinal study was influential in identifying significant individual differences in how resilient individuals responded to negative and positive environmental circumstances throughout childhood and early adulthood. The findings assumed however that an individual's level of resilience is static and based solely on the relationship between the personality characteristics of the individual and level of support from caregivers. There was a lack of focus on individual differences in coping among the at-risk participants (Richardson, 2002).

Rutter (1979, 1985) conducted a series of epidemiological studies on inner-city London youth and on the rural island of Wight. He found that one quarter of the children were resilient even though they may have experienced many risk factors. Some of the resilient qualities that Rutter identified were easy temperament, being female, a positive school climate, self-mastery, self-efficacy, planning skills, and a warm, close personal relationship with an adult.

Garnezy (1991) and colleagues (Garnezy, Masten, & Tellegen, 1984) conducted the Minnesota Risk Research Project, which investigated dysfunction in children of schizophrenic parents from 1971 to 1982. Garnezy found that most children did not become maladaptive adults, but grew up to be balanced and competent people. Garnezy (1991) identified a triad of protective resilience factors that included the personality disposition, a supportive family environment, and an external support system. Following a review of the early developmental literature Bernard (1997) concluded that some 50-70% of high risk children grow up in adaptive and positive ways. This early developmental work formed the first wave of resilience research.

2.6 Waves of resilience research

The resilience literature describes “waves” of resilience research or inquiry involving iterative conceptualisation and refocusing (Richardson, 2002). The first wave of inquiry described in section 2.5 focused upon the identification of characteristics and factors that enabled individuals (typically children) to successfully adapt to adverse circumstances and environments (Werner 1993; Werner & Smith, 1992; Rutter, 1985). The outcome of this first wave included the identification of “assets” and “*protective factors*” such as self-esteem, the presence of mentors etc. that enable certain individuals to adapt and or/thrive when confronted with significant adversity or challenge (Earvolino-Ramirez, 2007). First wave studies identified a range of characteristics and protective factors that continue to appear as salient concepts in current literature such as optimism, sense of meaning and humour. Grafton, Gillespie and Henderson (2010) however observe there is little agreement concerning a definitive, generically applicable list of factors.

The second wave of inquiry focused upon the process of resilience and specifically the ways in which individuals access protective factors that enable them to grow

and develop in the face of adversity i.e. how resilience is developed in the face of challenge, change and loss. The second wave also focuses upon resilience as a dynamic process where an individual demonstrates adaptation and reintegration as a result of experienced disruption and adversity in the course of the individual life.

The important shift from wave one to wave two inquiry involved a move from referring to resilience as a personality trait to a redefinition of resilience as a dynamic, modifiable process (Earvolino-Ramirez, 2007; Luthar, Cicchetti & Becker, 2000). This change of focus had important practical implications as the conceptualisation of resilience as modifiable paved the way for studies directed at promoting the development of resilience through intervention.

The third wave of resilience inquiry focused upon resilience as an innate motivational drive for growth and development through adversity. Masten's seminal 2001 work frames this as "*ordinary magic*" that which emerges in response to adversity as a natural and universal endowment and an "*ordinary*" response of human adaptation. Such adaptation may occur at individual, family or community level. Third wave conceptualisations of resilience see it as an accessible inner resource that enables "*positive reintegration*" (Richardson, 2002). This represented a paradigm shift from a risk focus to a strengths focus. This emphasis on strengths is in line with the shift in resilience conceptualisation from a negative approach focused upon an absence of psychopathology to a positive focus on competence and adaptive behaviour (Truffino, 2010). Using insights from the first two waves, researchers began to translate the emerging evidence into interventions to promote resilience (Masten & Wright, 2010).

A "*fourth wave*" (Masten & Wright, 2010) of resilience research has been facilitated by developments in research technology that enable for example gene assessment,

and sophisticated statistical modelling. The fourth wave focuses on multilevel dynamics examining gene-environment interplay and multi-level adaptation. Emergent inquiry strands from this wave of research include a focus upon the neurobiology of resilience (Cicchetti, 2010; Feder, Nestler & Charney, 2009) and a multi-disciplinary approach to address the multi-level nature of resilience in issues such as natural disasters, terrorism and pandemics (Masten & Osofsky, 2010; Longstaff, 2009).

2.7 Risk factors and protective factors

Risk factors are those factors that would increase the likelihood that a stressor will produce disruption or a breakdown of the individual or system. Protective factors are those that increase the likelihood that the system will be able to bounce back from the disruptions, and interruptions created by the stressor (Van Breda, 2011). Fraser, Kirby and Smokowski (2004) describe risk factors as harmful influences while McCubbin and McCubbin (1996) refer to these simply as *vulnerability*. The identification of protective factors was the focus of early research exploring factors that predict resilience in children. Garmezy and Rutter (1983) for example identified three main categories, *within child factors* including temperament and cognitive ability, *within home factors* relating to the nature and quality of relationships in the home and *extra-familial factors* such as teacher expectations and community resources. Protective factors are conceptualised as assets or resources that interact to facilitate positive responses to adversity (Windle, 2011).

In a comprehensive concept analysis, Earvolino-Ramirez (2007) provides a summary of protective factors identified via key early researchers in the field, see Table 2.1.

Table 2.1

Protective Factors by Author from Earvolino-Ramirez (2007) (p. 75)

Protective factors	Anthony	Benard	Garmezy	Masten	Rutter	Werner
Good natured, easy temperament		X		X	X	X
Positive relationship	X	X	X	X	X	X
Communicates effectively			X		X	
Sense of personal worthiness	X	X	X	X	X	X
Sense of control over fate	X	X	X			
Effective in work, play, love			X			
Positive social orientation	X		X	X	X	X
Assertive/asks for help	X		X			
Above average social intelligence			X		X	
Informal social support network	X		X		X	X
Ability to have close relationships	X		X		X	
Healthy expectations and needs			X			X
Uses talents to personal advantage			X	X	X	
Delays gratification	X		X		X	X
Internal locus of control	X		X		X	X
Flexible	X		X		X	X
Believes in her or his self-efficacy	X	X	X	X	X	X
Desires to improve			X			
Interpersonal sensitivity					X	X
Problem-solving ability	X		X		X	X
Decision-making ability	X		X			
Future oriented					X	X
Trust in others/hope for the future	X	X	X	X		
Sense of humor	X	X	X	X	X	X
Productive critical thinking skills	X		X	X	X	X
Manages range of emotions	X			X		
Adaptive distancing		X				
High expectations	X	X	X	X	X	X

In line with the nature of these early studies and the *first wave* perspective many of these protective factors relate to trait like characteristics such as *easy temperament* others however would appear to be potentially more malleable for example *assertive asks for help*. Earvolino-Ramirez further points out that *assets* and *strengths* may be viewed as individual level protective factors such as competence and self-efficacy whilst *resources* relate alternatively to external influences such as family or community support.

Following a review of the research waves, Wright et al. (2013) conclude that following four decades of research on resilience conducted among at-risk child and adult populations a number of consistent dimensions of resilience have been identified. These include factors such as using adaptive coping strategies, the tendency to experience positive emotions, the maintenance of a positive or

optimistic outlook on life, and the cultivation of meaningful social relationships (see for example Masten, 2007; Rutter, 1985).

2.8 Resilience: trait, process or outcome?

Trait *views* of resilience focus upon resilience as a set of adaptive characteristics that enable individuals to thrive in the face of adversity (Connor & Davidson, 2003). Trait *approaches* view resilience as a relatively stable facet of personality (Ong, Bergeman, Bisconti & Wallace, 2006; Silk, Vanderbilt-Adriance, Shaw, Forbes, Whalen et al, 2007). Waugh, Fredrickson & Taylor (2008) identified the traits of *perseverance, self-confidence, personal autonomy, meaning* and a *balanced view of one's life* as important contributors to positive adjustment in the face of loss or harm. Drawing upon literature examining the link between the five factor model of personality or “*Big Five*” (McCrae & Costa 2003), Fisk and Dionisi (2010) conclude that resilience has a characteristic personality profile that is typified by the *well-adjusted poles* of all five Big Five Dimensions i.e. high conscientiousness, emotional stability, agreeable ,extraverted and openness.

“*Ego-resilience*” is conceptualised as a trait that reflects an individual's adaptability, such that those with higher levels of ego-resilience experience more positive emotions in stressful situations and demonstrate a greater capacity for overcoming adversity and achieving growth outcomes (Ong et al. 2006). Luthar (1996) distinguishes between “*ego resiliency*” (Block & Block, 1980) and “*resilience*”:

Ego resiliency is a personality characteristic of the individual, whereas resilience is a dynamic, developmental process. Second ego-resiliency does not pre-suppose exposure to substantial adversity whereas resilience, by definition does. (p. 546).

Kobasa, Maddi and Kahn (1982) define *hardiness* as a personality construct comprised of *control* (a tendency to feel and act as if one has influence rather than

helpless when faced with external forces), *commitment* (a tendency to be involved and find purpose and meaning in life circumstances rather than feeling alienated), and *challenge* (a belief that change is normal and the anticipation of change is an opportunity for growth rather than a threat to one's sense of security). Hardiness is sometimes used interchangeably with the concept of resilience and there is a need to distinguish the two. Bartone (2003) described hardiness as a personality style or tendency that is stable over time and across situations. Maddi, Khan & Maddi (1998) were however able to successfully increase hardiness levels in managers through training. Windle (2011) however maintains that hardiness as a personality trait is distinguishable from resilience which alternatively is viewed as dynamic and changeable across the lifespan. Later waves of resilience focus moved from referring to resilience as a personality trait to a view of a more dynamic process. This movement enabled resilience to be conceived as a resource that may be developed (Earvolino-Ramirez, 2007).

2.9 Resilience – outcome versus process

Following a comprehensive analysis of the resilience concept, Zautra, Hall and Murray (2010) conclude the importance of distinguishing between resilience as an outcome involving successful adaptation to adversity and resilience processes which are empirically supported variables that enhance the likelihood of adaptation. Similarly Truffino (2010) describes the difference as one of *defining* characteristics versus *modulating* characteristics of resilience.

The resilience process refers to the individual process of adaptation to adversity and the accessing of resources to facilitate adaptation. An emphasis on the resilience process links to the *second wave* perspective. When conceived as an outcome,

resilience is viewed as successful adaptation to an adversity and the context specific outcomes such as the maintenance of performance or well-being.

2.10 Adversity and adaptation

Resilience is recognised as an inferential concept involving two judgements, one that there has been significant threat to development or adaptation i.e. adversity, and secondly that adaptation has been satisfactory as determined by some specified criteria (Luthar & Cicchetti 2008; Masten & Coatsworth, 1998). Fletcher and Sarkar (2013) provide an extensive review and critique of resilience theory and concepts in which they observe that the field is littered with a diversity of definitions and frameworks making comparisons and challenging. They conclude however that most definitions contain the two core concepts of *adversity* and positive *adaptation*.

2.10.1 Adversity

Challenge, change, and disruption are all aspects of adversity that are required before the process of resilience can occur (Windle, 2011). Luthar and Cicchetti (2000) indicate that adversity typically involves negative life events or circumstances known to be empirically related to difficulties of adjustment or adaptation. Davis, Luecken and Lemery-Chalfant (2009) in line with Masten's (2001) view as to the *everyday* nature of resilience, note that adversities are experienced as more everyday disruptions than major disasters i.e. resilience involves adapting to ongoing daily stressors and challenges.

Rutter (2006) identifies the role of challenging experiences as assisting the development of resilience, i.e. there is a requirement for exposure to risk in order to develop mature coping mechanisms. This reflects the "*steeling effect*" which was an important contribution from Rutter's (1981) work whereby successful navigation of

earlier risk factors facilitates a resilient response later. Pangallo et al. (2015) point to the need to distinguish between resilience in the context of chronic versus acute stressors to take account of anticipated contextually specific adaptation and outcome trajectories.

2.10.2 Adaptation

Pangallo et al. (2014) highlight how resilient outcomes have been described in three different ways in the literature including; a return to normal functioning (Wagnild & Young, 1993); positive adaptation (Luthar, Cicchetti & Becker, 2000); and post-traumatic growth (Linley & Joseph, 2011; Polk, 1997). Meichenbaum (2005) also referred to resilience as a group of experiences characterized by good outcomes in spite or serious threats to adaptation or development adaptive outcomes include:

Bouncing back and coping efficiently in the face of difficulties
Bending but not breaking under extreme stress
Jumping back from adversities
Handling setbacks
Persevering and adapting when things go awry
Maintaining balance following highly aversive events (p. 4)

Luthar and Zigler (1991) argued the need to focus on how positive adaptation to adversity best be defined maintaining that both behavioural and psychological indices need to be included. Behavioural signs of adaptation could for example co-exist with psychological difficulties as in the case of a child showing adaptive social behaviours whilst experiencing internal distress (Wright, Masten & Narayan, 2013). Bonanno (2012) is critical of a *binary* assessment of outcomes as pathology /no pathology stressing the need for granularity in assessing resilience outcomes. Bonanno (2012) refers to adult exposure to traumatic events as an example where a spectrum of individual outcomes may exist ranging from “elevated symptoms of short duration through prolonged sub-threshold symptoms to a healthy profile” (p. 754). Considering the personal resilience of employees within the current economic

climate of austerity, Robertson and Cooper (2013) point to the need for a twofold view of adaptation, one that encompasses both psychological and behavioural components. The psychological component enables people to maintain their mental health and well-being in the face of adversity, the behavioural component refers to the extent to which the individual remains effective at home and work for example in their goal focus.

2.11 Resilience and well-being

The link between resilience and well-being is well established though complex (Fisk & Dionisi, 2010) and a number of theoretical strands contribute to an understanding of the connection. Resilience may act to buffer the effects of negative events on well-being (e.g. Beasley, Thompson & Davidson, 2003) through resilient appraisal of events and/or motivation to engage in task related regulatory strategies (Campbell-Sills, Cohan & Stein, 2006). In terms of positive emotions resilient individuals who experience high levels of positive affectivity may experience protection from negative events as found in pain sufferers and the bereaved for example (Ong, Bergeman, Bisconti & Wallace, 2006). This dynamic model of affect (DMA), (Reich, Zautra & Davis, 2003; Zautra, Smith, Affleck & Tannen, 2001) posits that positive affect has stronger beneficial effects under conditions of stress compared to lower stress situations. Finally the *Broaden and Build theory* of positive emotions (Fredrickson 1998, 2001) proposes that positive affect broadens and individual's attentional focus and behavioural repertoire and as a consequence builds resources. In challenging situations positive affect serves to enable the individual to see beyond the immediate adversity and generate alternative approaches, the "*build*" function enables the rebuilding of potentially depleted resources complimenting resource conservation theory (Hobfoll 1989, 2002). A body of work supports both the broadening and building functions of positive affect. (see for

example Fredrickson & Branigan, 2005). Tugade and Frederickson (2004) demonstrated that positive emotions actually broaden the range of physical, intellectual and social resources that a person can then use in order to cope in times of adversity. Humour, meaning making optimistic thinking and emotional awareness are cited as potential means by which positive emotions may be generated (Tugade, Frederickson & Feldman Barrett 2004; Tugade & Fredrickson 2004).

These conceptual strands contribute a view of the reciprocal nature of resilience and well-being that has implications for resilience development, the promotion of positive well-being may provide a pathway to resilience and vice versa.

2.12 Adult resilience

Adult resilience has focused upon a range of contexts including chronic illness and disability (Davidson, Payne, Connor, Foa, Rothbaum, et al., 2005; Farber, Schwartz, Schaper, Moonen & McDaniel, 2000), chronic pain (Zautra, Johnson & Davis, 2005) and mental health disorders (Deegan, 2005). Bonanno (2004) focused upon how individuals cope with isolated and potentially highly disruptive events such as the death of a loved one or experience of a violent or life-threatening situation. On the basis of the studies Bonanno (2004) claimed that adult resilience is more commonplace than previously believed. Evidence suggests that around half of individuals coping with the death of a spouse for example show evidence of a resilience trajectory (Bonanno, Wortman, Lehman, Tweed, Haring, et al., 2002). Bonanno (2004) argues that adults are more likely to have a broader array of resilience promoting factors than children.

Given the emphasis on chronic adversity such as poverty or interrupted parenting within developmental studies, it could be argued that findings from these studies may not be directly comparable (or relevant) to adult resilience outcomes in

personal or workplace settings (Bonanno, 2004). Resilience research is only recently gaining momentum in the occupational literature (Vanhove et al., 2015) and concerns over the generalizability of child development models to adult populations and occupational settings are in evidence (Eidelson, Pilisuk & Soldz, 2011). Bonanno (2012) expresses concern that the conceptual migration of resilience from adversity in children to acute events in adult lives has proceeded without corresponding theoretical adaptations that account for context. As a consequence the resilience focus on adult population's remains fixed on largely acute potentially traumatic events (PTE's) ignoring chronic adversities with a reverse situation applying to contemporary child studies (Bonanno et al., 2011). Later waves of resilience research began to move the focus of resilience onto adult populations.

2.13 Resilience promoting factors in adults

The later waves of resilience research facilitated a shift to identifying the psychosocial factors that facilitate the process of resilience in adult populations. In an early study of strength in adversity in former American prisoners of war (POW) for example, Hunter (1993) identified preservation of contact and ties to other prisoners, using the mind, and finding strength in family connections/memories to be important during captivity. On release key variables relating to adaptation were: taking direct action; self-confidence; ability to communicate; a will to live; service to others; a future orientation; a personal cause; and meaning making. A later study with POWs' from the Vietnamese war identified similar factors to Hunter's (1993) study adding: optimism; humour; facing fears; and *training* to become resilient (Yehuda, Flory, Southwick, & Charney, 2006).

Masten and Wright (2010) observe the limitations in the literature relating to adult resilience but maintain that studies support those protective factors found in

developmental contexts as having salience for adults. Reviewing resilience across the lifespan they also note the following protective factors as important: *attachment relationships/social support; intelligence/problem solving skills; self-regulation skills; agency/self-efficacy; meaning making; cultural traditions/religion*. They also note however that protective processes may be contextually specific - a finding that emerged out of second wave investigations into the resilience process.

In an attempt to classify important characteristics of adult resilience, some authors have conducted extensive reviews and/or attempted to consolidate findings from the different research waves. Table 2.2 illustrates key contributions:

Table 2.2

Reviews of Resilient Adult Characteristics

Meredith et al. (2011)	Kent and Davis (2010)	Haglund, Nestadt, Cooper, Southwick and Charney (2007)	Southwick, Vythilingham and Charney (2005)
Positive coping	Positive emotions	Positive attitude – optimism and humour	Positive emotions
Positive affect	Control (e.g. locus of control, commitment)	Active coping	Cognitive flexibility
Positive thinking	Active coping	Cognitive flexibility	Life meaning
Realism	Cognitive Flexibility	Finding meaning	Social support
Behavioural control	Meaning/value in adversity	Physical exercise	Active coping strategies
Physical fitness	Spirituality	Social support –role models	
Altruism	Training (experience/history)		

Unlike the other more academically based reviews listed in Table 2.2 Meredith et al's. (2011) comprehensive review is somewhat different in focus. The review was commissioned to inform the design of resilience building programmes for military populations via the identification of evidence based resilience factors. Meredith and colleagues utilised expert scrutiny and a rigorous rating system based on weighting of empirical evidence to consolidate factors. The target focus of resilience development in the military extends beyond individual soldiers to their units and families, resilience factors at the family, unit and community level of resilience were identified in addition to the individual factors identified in Table 2.2. Reviews of adult psychosocial resilience factors have relied upon the existing literature relating to adult resilience which is predominantly focused upon trauma and /or post-traumatic stress disorder (PTSD) (Kent & Davis, 2010).

Some studies focusing upon resilience in specific occupational groups for example do exist (see 2.13 and 2.14) but there is currently to the author's knowledge, no large scale review or meta-analysis of adult resilience factors in such everyday settings, across a range of occupations and sectors for example.

2.14 Resilience in workplace settings: the military contribution

To recap, whereas child resilience studies have focused upon adverse life events resilience studies in adult populations have more often focused upon overcoming acute and/or traumatic stress created by catastrophe or major loss (Vanhove et al., 2015). In the case of organisational and occupational applications, resilience studies have more typically been addressed at groups or individuals assumed to be at risk of traumas and stressors for example police officers (Arnetz, Nevedal, Lumley, Backman & Lublin, 2009), rescue workers (Alvarez & Hunt, 2005; North, Tivis, Mcmillen, Pfefferbaum, Spitznagel et al., 2002) and palliative care staff (Ablett & Jones, 2007) than more general working populations.

Military organisations particularly those in the US have provided a significant area of focus within the occupationally specific resilience field (see for example Harms, Krasikova, Vanhove, Herian & Lester, 2013; Meredith et al., 2011; Mulligan, Fear, Jones, Wessley & Greenberg, 2011). In 2009 the US Army implemented a multi-million pound preventative intervention designed to train all soldiers and their families in mental fitness and resilience - The Comprehensive Soldier Fitness (CSF) programme (Cornum, Matthews & Seligman, 2011). Based on principles of positive psychology generally and the Penn Resilience Programme (PRP) (Gillham, Jaycox, Reivich, Seligman & Silver, 1990) in particular, the CSF aims to:

shift the normal psychological performance 'curve' of the soldier population to the right, that is, to increase the number of soldiers who derive meaning

and personal growth from their combat experience (the rightmost part of the curve), to increase the number of soldiers who complete combat tours without pathology, and to decrease the number of soldiers who develop stress pathologies (Cornum et al., 2011, p. 6).

The CSF consists of four core components (Cornum et al., 2011): (1) Assessment using the Global Assessment Tool (GAT) soldier career long psychological fitness is tracked; (2) Universal resilience training – progressive resilience training for all levels; (3) Individualised training based on GAT profiles specific resilience focused training provided; (4) Trained Master Resilience Trainers (MRTs) soldiers with advanced training in the resilience elements who act as teachers throughout the army.

The Penn Resilience Program (PRP) and related APEX program (Gillham et al., 1991; Reivich, Shatte & Gillham, 2003) forms the core curriculum for the resilience elements of the CSF programme. The programme was developed at the University of Pennsylvania and focuses on a subset of the resilience factors identified by Masten and Reed (2002). These include optimism, problem solving, self-efficacy, self-regulation, emotional awareness, flexibility, empathy, and strong relationships. The PRP was originally developed as a school based training program for students in late childhood and early adolescence. The training for Master Resilience Trainers (MRT's) course incorporates key elements from the PRP and APEX programmes focused upon the enhancement of cognitive and social skills. In addition, empirically validated concepts from positive psychology, such as identifying signature strengths (Peterson & Seligman, 2004), cultivating gratitude (Emmons, 2007), and strengthening relationships through active constructive responding (Gable, Reis, Impett, & Asher, 2004), are incorporated in the MRT course. Ellis's (1962) ABC

model (*adversity-belief-consequence*) and *explanatory style* concepts form an important core component of the CSF and MRT programmes which are utilised to enable individuals to monitor beliefs and evaluate their accuracy (Reivich, Seligman & McBride, 2011).

Whilst there is some evidence for the efficacy of the PRP in reducing anxiety, depression and adjustment or conduct disorders with children and adolescents (e.g. Gillham, Hamilton, Frees, Patton & Gallop, 2006; Gillham, Reivich, Freres, Chaplin, Shatte et al, 2007; Jaycox, Reivich, Gillham & Seligman, 1994), a meta-analysis examining the impact of the PRP on depressive symptoms by Brunwasser, Gillham and Kim (2009) raised questions about the clinical significance of the effect size. Interestingly Vanhove et al. (2015) however indicate that The Brunwasser et al findings relating to effect sizes of the PRP ($d = 0.11-0.21$) be used as a benchmark for the effects of primary prevention focused occupational resilience-building programmes .

Whilst evidence exists relating to the efficacy of cognitive behavioural based military resilience programmes (see for example table 2.3) currently emerging evidence relating to the efficacy of the CSF programme is less conclusive (Steenkamp & Litz, 2013). A recent evaluation (Harms et al., 2013) for example found the programme to have had negative impacts upon participant outcome measures relating to follow-up mental health diagnoses and substance misuse. Further, critics have questioned the robustness of the evidence utilised in making the decision to base the CSF on the PRP and positive psychology principles (Litz, 2014) and the transferability of a programme designed for child and adolescent populations to a military setting (Eidelson et al, 2011).

Whilst adult focused resilience studies have been applied in organisational contexts relating to “*at risk*” occupations the relevance to employment contexts with less acute stressors has been highlighted as an area both lacking in research and of practical importance (Vanhove et al., 2015)

2.15 Workplace resilience – the contribution from Health and Social Care settings

Due to the often intrinsically stressful nature of work and the potential for exposure to traumatic incidents in health and social care vocations (McCann et al 2013), along with the military these occupations have been the subject of the majority of studies in the resilience field. Efforts to prevent burnout and turnover in health and social care staff have fuelled efforts to identify important resilience factors and inform recommendations for recruitment, training and practice (Jackson, Firtko & Edenborough, 2007). A comprehensive review by McCann et al. (2013) identified a range of individual factors linked to resilience in different healthcare professions (Table 2.3).

Table 2.3

Individual Factors Relating to Resilience in Health Professions (McCann et al., 2013, p.77)

Occupation	Resilience factor
Nurses	Competence, Positive reappraisal, Creativity, Empowerment, Interpretive styles, Sense of accomplishment
Social workers	Ethnicity, Routine, Conscientiousness, Positive emotions, realistic expectations
Psychologists	Recreational activities, Hobbies, Preparation, Personal values, Self-growth, Autonomy, Sense of Purpose
Counsellors	Self-compassion
Doctors	Time alone, assertiveness, Letting go of the need for control

The health and social care sector has also contributed evidence relating to the development of resilience in occupational groups such as nursing, doctors and specialists (for example see Table 2.4).

2.16 Employee resilience in changing organisations

At an organisational level the ability to rapidly respond to and adapt to change is now critical to survival and the establishment and maintenance of flourishing organisations (Van den Heuvel, 2013). The contemporary workplace climate characterised by continuous organisational change necessitates adaptive and resilient employees able to maintain performance and well-being levels in the face of often challenging organisational change environments (Robertson et al., 2015).

Dernhardt and Dernhardt (2010) define organisational resilience as “the ability (of the organisation) to bounce back or to recover from challenges in a manner that leaves the organization more flexible and better able to adapt to future challenges” (p. 334). Doe, (1994) emphasised the role of employee resilience in adaptive organisations, stressing that resilient organisations are composed of resilient individuals who are capable of absorbing change and of viewing the opportunities within change such as spotting opportunities for personal development as opposed to threats. Resilient employees have been found to exhibit improved coping with change (Judge, Thoresen, Pucik & Welbourne, 1999). Wanberg and Banas (2000) found employee levels of resilience to be related to willingness to participate in organisational change also Hunter (2006) suggests that resilient employees are required to turn organisational crisis situations around. Lewis, Donaldson-Feilder and Pangallo (2011) observe that organisational resilience is similar conceptually to individual employee resilience albeit with a differentiator being the area or level of focus. Individual level resilience is focused upon bouncing back from adversity and

organisational resilience refers to how well the organisation can “weather the storm” (p. 4). At an organisational level resilience will involve the creation of the right culture and processes to create an adaptive organisation.

Whilst Horne and Orr (1998) state that resilient individuals alone do not guarantee resilience at the organisational level, there is an interactive effect where ideally, the individual and organizational factors will interact to support and augment each other to produce resilience in both (Riolfi & Savicki, 2003). Kantur and Iseri-Say (2012) conclude that whilst there is a lack of consensus as to the nature of the relationship of individual resilience to organisational resilience, it is viewed as an important factor.

Employee resilience has been linked to positive organisational outcomes such as commitment, job satisfaction and job performance. Larson and Luthans (2006) for example found a relationship between factory workers' levels of resilience and job satisfaction. Additionally Luthans, Avolio, Walumbwa and Li (2005) studied workers who were undergoing major organisational transformation and found a significant relationship between resilience and job performance. A relationship between employee resilience and job satisfaction, organisational commitment and work happiness has also been found (Youssef & Luthans, 2007). More recently, Paul and Garg (2012) found that employee levels of resilience were related to levels of organisational commitment and organisational citizenship. Also Shin et al. (2012) found employee resilience was related to normative and affective commitment to organisational change. These limited few studies provide the current empirical support for resilience in the context of organisational change, an area with a significant literature gap.

Adaptable, resilient employees may provide significant benefits for an organisation by enhancing the success rate of change implementation and minimising potential negative workforce impacts of absenteeism, turnover and reduced engagement for example. Warner and April (2012) capture this effectively in their definition of resilience in an organisational setting as: “The ability to remain task focused, productive and connected to the organizational mission whilst experiencing tough times” (p. 54).

Caza and Milton (2012) propose that resilience is best enhanced by cultivating it at three distinct levels: individual, social, and organisational. These researchers also suggest the possibility of enhancing organisational-level resilience by hiring for resilience in the selection process, but noted that doing so would be an ‘impoverished viewpoint’ (p. 900) that fails to consider the developmental possibilities. This positions an opportunity to explore how and to what extent and with what outcomes may employee resilience be developed?

2.17 Employee resilience as a personal resource

Cognitive adaptation theory states that individuals who are able to adjust well to stressful life events are those who are high on optimism, self-esteem and personal control (Taylor, 1983). These resources facilitate adjustment to threatening events through a process of meaning making, seeking control/mastery and self-enhancing evaluations. Taylor provides an early theoretical foundation for the notion of certain characteristics as adaptive mechanisms i.e. personal resources. According to Salanova, Llorens, Cifre and Martinez (2012) personal resources are positive self-evaluations which are linked to resilience. Positive self-evaluations enable employees to obtain a sense of control over their environments thereby facilitating resilience. Personal resources can be considered as lower-order, malleable

elements of personality (Gist & Mitchell, 1992). Whilst personal resources can be studied as a trait, most studies adopt a state perspective in order to develop interventions (Van den Heuvel et al., 2010). Personal resources may be considered analogous to protective factors in the resilience literature, and the strengthening of these may be particularly beneficial for those who face stress and adversity (Vanhove et al., 2015).

The Conservation of Resources (COR) theory (Hobfoll, 1989, 2002) positions resources as: "...those entities that either are centrally valued in their own right or act as a means to obtain centrally valued ends" (Hobfoll, 2002, p. 307). According to COR employees will strive to acquire and protect resources they value. Psychological, environmental and social resources are relied upon to support employees in overcoming workplace stressors and prevent strain (Halbesleben, Neveu, Paustian-Underdahl & Westman, 2014). Examples of resources include mastery; self-esteem; learned resourcefulness; socioeconomic status; and employment (Hobfoll, 1989). Adverse experiences may deplete resources, therefore those at greatest risk of experiencing stress and adversity may require a larger reserve of resources in order to surmount demands (Hobfoll, 2002). Resources can be classified as *task resources* or *interpersonal resources* (Salanova, Llorens & Schaufeli, 2011). Task resources relate to characteristics of an individual's work such as the level of feedback, decision latitude etc. Interpersonal resources relate to functional relationships with co-workers and managers for example.

According to Hobfoll (2002) acquiring and utilising resources creates *resource caravans* whereby the possession of one resource enhances others. For example good working relationships are more likely to result in an individual receiving

feedback in the workplace which in turn can enhance feelings of self-efficacy. In a ten year longitudinal study of employee well-being in a changing work environment Pahkin (2015) found employees with lower levels of baseline and follow up well-being levels had lower levels of both personal and work resources at both time points compared to those with higher levels of well-being who also showed resource gains over time.

In a rare empirical study of resilience in the context of organisational change, Shin et al. (2012) assert that Hobfoll's COR theory can be usefully applied to the area of organisational change. They suggest that the boosting of personal resources prior to a change process can enhance employee coping and commitment to change providing positive outcomes at both the individual and organisational level. Resource theories suggest employee personal and job resources can form important drivers for change adaptation. Resources can help individuals to sustain motivation and offer protection for an individual's self-concept during change (Van den Heuvel, Demerouti & Bakker, 2014).

Personal resources have been described as "aspects of the self that are generally linked to resiliency" (Hobfoll et al., 2003, p.632). This definition is utilised in the positioning of personal resources within the Job demands-resources (JD-R) model of engagement/burnout (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner & Schaufeli, 2001) where two types of resources are proposed, *job resources* and *personal resources*. Job resources are those physical, social, psychological and/or organizational aspects of the job that (a) are functional in achieving work goals, (b) reduce job demands and the associated physiological and psychological costs, and (c) stimulate personal growth and development (Demerouti et al., 2001). Personal resources were a later addition to the original JD-R model (Xanthopoulou, Bakker,

Demerouti & Schaufeli, 2007; Schaufeli & Taris, 2014). Personal resources are considered central to explaining how job resources are translated into positive outcomes such as engagement or performance (Xanthopoulou, Bakker, Heuven, Demerouti, & Schaufeli, 2008; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007, 2009a, 2009b). A principle of reciprocal influences also suggests that those employees who are higher in personal resources will create job resources in line with Hobfoll's (2002) concept of *resource caravans*.

Van den Heuvel et al. (2010) outline a personal resources adaptation model that positions the role of personal resources in the process of employee positive adaptation to organisational change (see Figure 2.1).

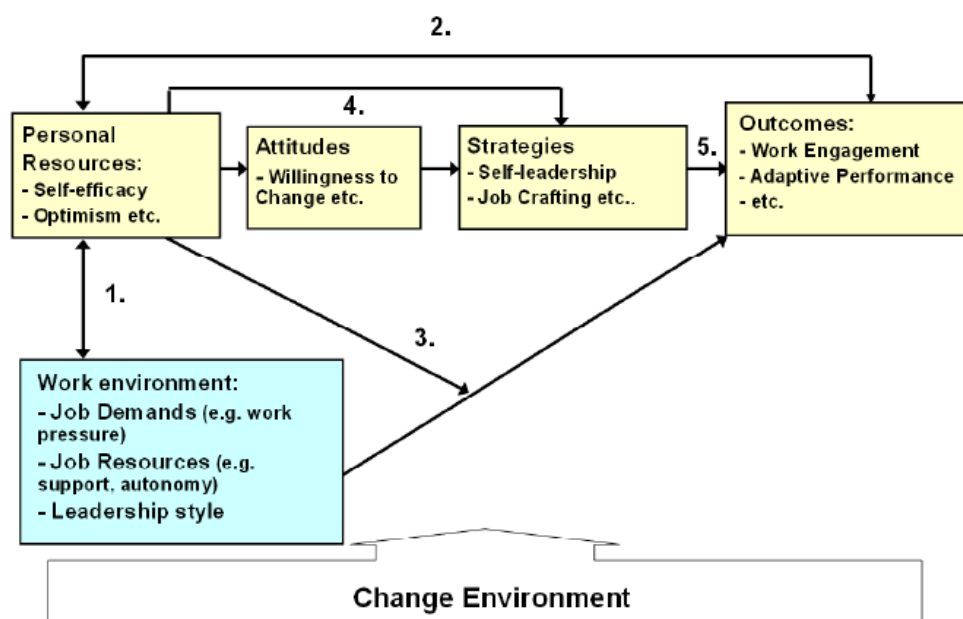


Figure 2.1 Personal Adaptation Model van de Heuvel et al. (2010) (p. 138).

In the personal adaptation model personal resources are positioned as having direct effects on outcomes and act both as a moderator and a mediator in the relationship between the changing work environment and outcomes. Personal resources such

as optimism and self-efficacy for example are considered to have a direct effect on outcomes such as adaptation to change and work engagement. As a mediator the model suggests that job resources such as support and autonomy for example build personal resources which in turn impact outcomes. This has been demonstrated for a range of personal resources including self-efficacy (Xanthapoulou et al., 2008), PsyCap (Luthans et al., 2006a) and organisation based self-esteem (OBSE) and meaning-making (Van den Heuvel et al., 2014). As a moderator, personal resources may buffer adverse factors in the work environment such as job demands. Additionally employees with high levels of personal resources are anticipated to be better able to spot and harness resources in the changing environment which in turn will enhance outcomes.

The model suggests that personal resources can lead to enhanced employee adaptation to change as the presence of more resources can enhance attitudes relating to change and influence strategies utilised e.g. whether or not the employee utilises adaptive strategies such as problem focused coping. Enhanced performance as an outcome variable is specifically defined as *adaptive performance* rather than broader work performance. Adaptive performance refers to performance that is reflected in behaviours related to the new way of working i.e. change specific behaviours. Van den Heuvel et al. (2010) observed that whilst generic measures of adaptive performance exist (e.g. Griffin & Hesketh, 2003) ideally the outcome measure should be based on the specific change related behaviours within a given study context e.g. enhanced team-working, adoption of technology.

Van den Heuvel et al. (2014) call for attention to be given to the role of individual resources in change implementation arguing that the field has been overly dominated by a focus at the organisational level when looking at change and

overlooking the role of individual employee level factors that may facilitate successful change implementation. Personal resources may facilitate employee behavioural adaptation necessary for organisational change implementation to be successful (Shin et al., 2012). Further Van den Heuvel et al. (2014) suggests this focus should be in line with a positive organisational behaviour (POB) (Luthans, 2002) approach so that the antecedents of successful organisational change may be better understood and applied.

2.18 Resilience as a Positive Organizational Behaviour (POB)

Whilst there is evidence to support a trait component to resilience (Waugh, Wager, Fredrickson, Noll, & Taylor, 2008, see also section 2.8. the shift towards conceptualising the malleable nature of resilience provides support for the view of resilience in the workplace constituting a “positive organisational behaviour” (POB) (Luthans, 2003). The POB field relates to: “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in today’s workplace” (p. 59).

POB emphasises measurement and the state rather than trait like nature of these behaviours which are therefore potentially developable. In line with the broader field of positive psychology (for example Seligman, Steen, Park, & Peterson, 2005) POB emphasises the need for more focused theory building, research, and effective application of positive traits, states, and behaviours of employees in organizations (Luthans & Youssef, 2007c). Resilience has been identified as a potential POB in a number of studies (Luthans & Jensen, 2002; Luthans et al., 2007a; 2007b).

2.19 Psychological capital

Hope, optimism, resilience and efficacy are the POB's which have been explored most extensively by Luthans and colleagues in their studies exploring the role of Psychological Capital (PsyCap):

PsyCap is an individual's positive psychological state of development and is characterized by; (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering towards goals and, when necessary redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success. (Luthans et al., 2007c, p. 3).

Luthans et al. (2002, 2007) have identified that the benefits of PsyCap represent a higher order core construct where the whole (PsyCap) is greater than the sum of the component elements of hope, optimism, resilience and self-efficacy. Overall PsyCap shows consistently higher relationships with study outcomes than any of the single capacities alone showing a synergistic effect (Luthans, Volgesang & Lester, 2006b). PsyCap has been shown to be amenable to development using relatively brief *microintervention* (Luthans et al., 2006a; Luthans et al., 2008) and to have positive impacts upon workplace performance (Luthans et al., 2007a), satisfaction and commitment (Larson & Luthans 2006) and absenteeism (Avey, Patena & West, 2006). Luthans et al. (2006b) conclude that the optimism, hope and efficacy dimensions of PsyCap may serve as predictors of resilience or alternatively as moderators of the relationship between resilience and other outcomes. Luthans and colleagues therefore position resilience as having potential dual functionality as either an antecedent to or outcome of, adaptive psychological states and positive functioning.

Van den Heuvel et al. (2010) suggest in designing informed interventions it may be more useful to look at personal resources in isolation rather than as combined into a

higher order construct. Gillespie, Chaboyer, Wallis and Grimbeek (2007) state that self-efficacy, hope and coping are the defining attributes of resilience. Finally Fisk and Dionisi (2010) observe: “Resilience is a topic subsumed within a POB framework that has recently gained some traction in the human management literature, as it is one individual difference that can help explain how employees manage occupational stress, crises, and change” (p. 168).

2.20 Developing resilience in the workplace

Meredith et al. (2011) define a resilience programme as one that targets any of the evidence based factors shown to improve resilience and stress response and which supports participants in incorporating the resilience factors into their lives. At the level of individual resilience a program would be characterised by a focus on at least one element identified by Meredith et al. in Table 2.2 and a focus upon enabling participants to strengthen or adopt key principles and practices. In selecting studies for inclusion in their meta-analytic review of workplace resilience programmes Vanhove et al defined appropriate programmes as those that emphasised modifiable psychosocial factors identified as contributing to resilience.

In a review of how resilience may be developed, Lewis et al. (2011) concluded that whilst the “prescriptive models” for interventions designed to develop resilience in the workplace are limited, there is some consistency in the literature concerning the areas of focus which can be helpful. The identified areas are *personality/individual characteristics, environment* or *person-environment*. Interventions targeted at the individual level for example can address: “personality factors, the external environment only or a combination of personality and social factors” (Lewis et al., 2011, p. 8). Vanhove et al. (2015) however observe in their meta-analytic review of

interventions that the lack of evidence to date to guide programme design and implementation may have contributed to large variations in delivery and impact.

Whilst programmes to develop resilience in the workplace are evident in the business and practitioner domains (see for example Lewis et al., 2011), the empirical evidence for resilience interventions in the workplace has yet to be fully developed, particularly those studies utilising more robust approaches such as a randomised controlled trial (RCT) approach. In 2014 Macedo et al. conducted a review of the literature relating to resilience interventions in non-clinical samples where only 14 studies were identified as matching the required criteria which included explicitly addressing resilience. Resilience programmes and stress management interventions (which are more prevalent in the literature) may have some overlapping focus or content. Vanhove et al. (2015) argue resilience intervention to be distinguishable from stress management initiatives due to its focus at primary prevention level targeting the promotion of overall wellness and competence whereas stress management programmes are more typically focused as a secondary measure in mitigating negative impacts of stress exposure (Murphy & Sauter, 2003). Whilst the evidence base relating specifically to resilience development in employee populations is limited (see Section 2.20), knowledge from other areas of training and development can be informative.

Evaluating the impact of positive psychology interventions on depressive symptoms for example, Sin and Lyubomirsky (2009) found impacts on well-being to be affected by participant levels of well-being, self-selection status and age. The format and duration of interventions was also found to impact outcomes. Sin and Lyubomirsky (2009) recommend 1) building regular practice of strategies/skills, 2) including multiple positive psychology activities, 3) ensuring a cultural fit between activities

and participants. In addition they further recommend where possible delivering interventions one to one and over a longer period allowing for the conversion of learning into habits. Although the study addressed clinical populations the findings have identified factors of consideration when designing applications within other settings.

A meta-analysis of occupational stress management initiatives (which included some studies targeted at primary prevention) identified cognitive behavioural programmes to produce the greatest effect sizes, these effects were found to diminish if other components were added (Richardson and Rothstein, 2008). Whilst this may appear a contradiction of the multiple activity component recommended by Sin and Lyubomirsky the issue seems to be one of the mixed mode of programme content, combining cognitive behavioural approaches with relaxation or meditation elements for example. Sin and Lyubomirsky advocate use of multiple positive psychology based activities i.e. a single conceptual mode. Despite the evidence base for the enhanced impact of cognitive behavioural approaches, relaxation and/or meditation were the most frequently occurring programme approaches. (Richardson & Rothstein, 2008), the researchers suggest that this is likely to be due to resource considerations whereby relaxation and meditation are potentially more accessible and resource efficient than cognitive behavioural interventions which typically require an experienced facilitator. Resource efficiency often drives decisions relating to organisational training and development despite a contradictory evidence base. Group training for example is a typically utilised workplace intervention that may not be effective in facilitating optimum transfer of learning to the work environment (Bright & Crockett, 2012).

Whilst a coherent body of knowledge relating to employee resilience development does not yet exist (Robertson et al 2015) there is a body of evidence relating to resilience factors and related intervention design that has informed the design of studies to date.

2.21 Workplace resilience programmes – the evidence base

A first systematic review of research relating to resilience training in the workplace by Robertson, et al. (2015) identified 14 studies. A meta-analysis reviewing the effectiveness of workplace employee focused resilience building programmes by Vanhove et al. (2015) identified 37 studies which includes the majority of studies in the Robertson et al. (2015) review (see table 2.4). Both of these reviews included the study which formed the pilot and first stage of development for the framework documented in this thesis (Sherlock-Storey et al., 2013) (see chapter 6).

The recent reviews of resilience development at work provide a much needed consolidation of evidence to date and stimulus for future work. Reviewed study participants included military samples and civilian samples from a range of occupations and sectors including, health and social care, education and service organisations. The reviews, particularly the meta-analysis, (Vanhove et al., 2015) focus largely on research aspects of the studies. Table 2.3 illustrates extracted information of relevance to the current thesis relating to the resilience programme format and content, the nature of participants and the prevailing adversity for the 39 studies included in the 2015 reviews. Whilst the nature of adversity in the Grant, Curtayne and Burton (2009) study is focused upon the occupational stressors and challenges of being a leader in a pressurised and changing environment only the study by the thesis author (2013) relates specifically to organisational change per se

highlighting a significant gap in the literature relating to employee resilience development see Table 2.4.

Table 2.4

Outline of Content and Adversity in the 39 Studies Featured in (1) Systematic Review (Robertson et al., 2015) and/or (2) Meta-analysis (Van hove et al., 2015)

Authors	Content/Conceptual foundation	Delivery mode	Sample & Numbers	Context/adversity
Abbott, Klein, Hamilton and Rosenthal (2009) (1, 2)	Resilience Online(ROL). The ROL program is designed to enhance seven components of resilience: emotion regulation, impulse control, optimism, causal analysis, empathy, self-efficacy and reaching out	Internet based	Sales Managers N=26 N=27	Sales related work stressors of homeworking, performance targets, high competition
Arnetz et al. (2009) (1, 2)	Imagery and relaxation plus Cognitive behavioural coping skills Programme included simulated critical incident exposure	Group 10 x 2 hours per week	Swedish police officers N= 18	Trauma exposure – critical incident police work
Bond and Bunce (2000) (2)	Condition 1 = Emotion focused Acceptance and Commitment therapy (ACT) Condition 2 = Problem focused “Innovation Promotion Programme”	Group 3 x half days in weeks 1, 2, and 14	Media organisation employees N=90,30 participants in each of three conditions 2 x treatment 1x control	Not specified – participants volunteered for generic stress management programme
Brouwers, Tiemens, Terluin and Verhaak (2006) (2)	3 stage problem solving model 1 Identifying problems, 2 Identifying strategies, 3 Implementing strategies	Individual – 5 x 50 minute sessions over 10 weeks	Employees on sick leave N= 98 , control = 96	Experience of emotional distress/minor mental illness resulting in absence from work

Burton, Pakenham and Brown (2010)	Intervention approach based on ACT targeting (1) positive emotions; (2) cognitive flexibility (e.g. acceptance), (3) life meaning, (4) social support, and (5) active coping strategies	Group 11 x 2 hours over 13 weeks	N = 16 university employees	Not specified – programme promoted as “everyday” resilience for those at risk of stress in workplaces
(1, 2)				
Carr, Bradley, Ogle, Fonta, Pygle et al. (2013)	Master resilience training programme	Group weekly training sessions over 12 weeks	N = 189 deployed military personnel	Military deployment
(1, 2)				
Castro, Adler, McGurk and Bliese (2012)	Battlemind programme – strengths based programme focused on adaptive cognitions and drawn from positive psychology	Group – single session @1 hour	Soldiers returned from deployment N = 801 Control N = 839	Exposure to military deployment stressors
(2)				
Cigrang, Todd and Carbone (2000)	Meichenbaum (1985) stress inoculation programme components : Relaxation, problem solving and self-instruction (positive self-talk)	Group 2 x 90 minute sessions on separate days over one week	Air force trainees 94 treatment , 84 control	Stressors of basic military training
(2)				
Cohn and Pakenham (2008)	2 CBT focused components: Cognitive restructuring , Adaptive coping	Group 2 x 40 minute sessions	Army recruits N = 101 , control N = 73	Coping with army recruit training
(2)				

Fortney, Luchterhand, Zakletskaia, Zgierska and Rakel (2013) (2)	Mindfulness training and daily mindfulness practice	5 x group training sessions varying 2-7 hours over 5 weeks	30 primary care clinicians	Occupational stressors – primary care clinician work
Gardner, Rose, Mason, Tyler and Cushway (2005) (2)	2 conditions either cognitive focused or behavioural focused coping	Group 3 x half day workshops at weekly intervals	NHS employees N= 57 cognitive N= 44 behavioural, N= 37 control	Occupational stressors – Healthcare professionals
Grant, Curtayne and Burton (2009) (1, 2)	Cognitive behavioural solution focused coaching GROW structure used to facilitate goal focus	Individual 4 x coaching sessions over 10-weeks	41 Public Health Agency executives	Leader/Executive pressures experienced in changing and pressurised Health service.
Grime, (2004) (2)	CBT programme – cognitive elements include attributional style, behavioural elements include problem focused strategies such as time management	Interactive Computer based programme	NHS employees sickness absence N= 24 , N= 24 Control	Work related stress leading to absenteeism
Hammermeister, Pickering and Ohlson (2009) (2)	The eight modules included; 1) mental skills foundations, 2) self-confidence, 3) goal-setting, 4) attention control, 5) energy management, 6) imagery for healing, 7) life-coaching theory, and 8) team building	Group 8 x 1.5 hour workshops	27 military personnel from a US “Warrior Transition Unit”	Job related adversities related to military medical settings

Harms, Krasikova, Vanhove, Herian and Lester (2013) (2)	Train the trainer format Master Resilience Training (MRT) MRT core elements: self-awareness, self-regulation, optimism, mental agility, character strengths, and connection	Train the trainer 8 day group programme Trainers then cascade training to their units	7,230 Soldiers N= 4983 treatment N = 2247 control	Military/battlefield trauma
Hodges (2010) (2)	Psycap training focusing on Hope ,Optimism, Resilience,Self-efficacy Plus -sustainable happiness-intentional activity	Group format 1 x 3.5 hours' workshop Plus weekly e-mail for four weeks containing a refresher element plus instructed activity and reflection	Financial Services Managers N = 58 treatment and N= 52 control	None specified
Jennings, Frank, Snowberg, Coccia and Greenberg (2013) (1, 2)	Emotion skills instruction Caring & Listening practices Mindfulness based stress reduction practices	Group weekend or 1 day sessions times 2 or 3 with 2 or 3 week interval plus telephone coaching in between	Two cohorts of educators (teachers and specialists)A = 15 B = 16	Occupational stressors - teaching
Jones, Perkins, Cook and Ong (2008) (2)	CBT, Dialectical behaviour therapy, Emotional intelligence, Crisis counselling and Solution focused therapy. 4 core skill sets emphasised: self-awareness and relaxation training, emotion regulation, interpersonal effectiveness, motivation and resilience	Group sessions over a 30 hour week	326 military mental health outpatients	Active military duty
Lester, Harms, Herian, Krasikova and Beal (2011) (2)	Comprehensive Soldier Fitness programme based on the Penn Resiliency programme. Study focused specifically on the impact of Master Resilience Trainers	A train the trainer programme cascaded to soldiers – group delivery	96 Master Resilience Trainers - recipient soldier groups N= 6739 treatment N = 3218 control	Military/battlefield trauma

Lioassis, Shochet, Milliar and Briggs (2009) (1, 2)	Promoting Adult resilience (PAR programme)7 topics: 1 Understanding personal strengths and resilience 2 Understanding and managing stress 3 Challenging self-talk 4 Changing negative self—talk 5 Promoting positive relationships 6 Problem solving /conflict management 7 Bringing it together	Group – 7 x 90minute weekly sessions over 7 weeks	19 Local government employees, control = 65 University Alumni	None specified
Litz, Engel, Bryant and Papa (2007) (2)	Two internet based programmes: 1) Self-managed CBT programme consisting of self -monitoring of triggers, stress management techniques, guided exposure and trauma writing 2) Internet delivered “supportive counselling” involving , educational material relating to daily logging of non-trauma hassles and concerns plus telephone counselling support	Internet based programme for treatment condition and internet plus telephone counselling for control	Service personnel with diagnosed PTSD N=24 treatment N=21 Control	Post-traumatic stress disorder as a result of combat or terrorist attack
Luthans, Avey, Avolio and Peterson (2010) (2)	Psychological Capital Intervention (PCI) programme targeted at increase of Hope, Optimism , Self-efficacy and Resilience	Group delivery 1 x 2 hour intervention	245 management students randomly allocated to treatment or control plus 80 managers follow up study	None

Luthans, Avey and Patera (2008) (2)	Psychological Capital Intervention (PCI) programme targeted at increase of Hope, Optimism , Self-efficacy and Resilience	Web based delivery 2 x 45 minute sessions	Working adults N= 187 treatment , N =177 Control	None
McCraty and Atkinson (2012) (1)	The Coherence Advantage Programme: The program utilizes a set of “proven techniques” (Heart Focused Breathing; Freeze Frame; Inner Ease; Prep, Shift, and Reset; and Getting In Sync) and technology (emWave) for achieving coherence, the psychophysiological state of optimal performance.	3 x 4 hour group sessions over 1 month plus individual access to coherence technology in between sessions	65 police officers	Occupational stress – police work
Milllear, Liopsis, Schochet, Biggs and Donald (2008) (1, 2)	Promoting Adult resilience (PAR programme)7 topics: 1 Understanding personal strengths and resilience 2 Understanding and managing stress 3 Challenging self-talk 4 Changing negative self—talk 5 Promoting positive relationships 6 Problem solving /conflict management 7 Bringing it together	11 x 1 hour group sessions over 11 weeks	N = 28 Resource Sector employees N = 71 University alumni control	Non-specific. Programme positioned as generic enhancement of resilience and well-being in the workplace as broader life-skills.
McGonagle, Beatty and Joffe (2014) (2)	Use of GROW modelEmphasis on creating awareness, seeing thingsfrom different perspectives, and looking for opportunities	12 week programme of 6 sessions one to one telephone coaching with “homework assignments between sessions)	Employees with a chronic illness .various organisations N= 23 study, N= 25 control	Chronic illness – managing within an employment context
Petree, Broome and Bennett (2012) (1,2)	Team Resilience (TR) an interactive program for stress management, teamwork, and work-life balance. TR focuses on “five Cs” of resilience: compassion, commitment, centering, community, and confidence. Plus stress management, teamworking and substance abuse awareness	Group workshops – 3 day programme covering 9 modules	947 young restaurant workers N = 249 treatment N= 236 control	Work stress (shiftwork, customer interface, workload), plus young adult adjustment to work

Pidgeon, O'Brien, Hanna and Klaassen (2014) (1, 2)	Mindfulness with Metta Training Programme (MMTP) consisting of periods of silence and training in mindfulness and meta skills and cognitive therapy strategies to increase mindfulness and self-compassion	A two and a half day group residential retreat programme plus two x 4 hour "booster sessions" over 12 weeks	44 Human service professionals from not for profit organisation N=22 treatment N=22 Control	Work stress -Human service professionals working with socially disadvantaged young people in care and their carers
Pipe, Buchda, Launder, Hudak, Hulvey et al. (2012) (1)	Heartmath heartrate variability programme. Behavioural techniques for stress management plus technology to provide heart rate variability feedback	Group based 1 x 5 hour workshop plus 1 x 2 hour workshop 3 weeks apart	44 Healthcare staff 29 oncology staff, 15 Healthcare leaders	Occupational stress – healthcare environment
Richards (2001) (2)	Comparison of critical incident stress debriefing (CISD) and critical incident stress management (CISM). CISM included in addition to CISD, pre-raid training and a post raid one to one mental health advice session	Pre-raid group training plus one hour one to one mental health session post event.	Employees of financial services organisation who had experienced an armed robbery N= 225 CISD only N= 229 CISM	Armed robbery at work in financial services
Sarason, Johnson, Berberich and Siegel (1979) (2)	Stress management training focusing upon : Self-monitoring of reactions to stressful situations, Muscular relaxation, Development of adaptive self-statements	6 x 2 hour group sessions	Trainee police officers N=18	Work stresses -police work

Sharpley, Fear, Greenberg, Jones and Wessley (2008) (2)	Pre-operational stress briefings covering : Stress education – definitions, management of and support mechanisms	Group briefings	Military personnel N=279 treatment, N=456 control	Military deployment
Sherlock-Storey et al. (2013) (1,2)	Optimism, Using Strengths, Getting perspective, Self-efficacy Social support, Self-care & Goal-setting	One to one. 3 sessions of 90 minutes over 6 weeks	N=12 Public Sector Middle Managers	Organisational Change
Sood, Prasad, Schroeder and Varkey (2011) (1, 2)	“SMART” programme based on Attention and Interpretation Theory (AIT) – techniques for relaxation, delaying judgement, mindful awareness and flexible disposition via e.g. gratitude. Meaning	1 x 90 minute session	Academic Physicians N=20 Treatment 12 Control	Work stress/physician distress
Stoiber et al. (2011) (2)	Programme focused upon a multi stakeholder pupil behaviour management protocol	Mixed mode programme of training inputs and manualised activities over a period of months	Teachers (primary) N=35 treatment, N=35 control	Work stressor-dealing with pupil challenging behaviours
Van Breda (1999) (2)	Psychoeducation 8 principles: Emotional Continuity Positive perspective Support systems Financial preparation Family structure Resilient children Flexible marriage Family oriented management	One day group seminar plus supporting manual	24 Naval couples	Separation from family due to employment requirements

Waite and Richardson (2004) (1, 2)	Biopsychospiritual programme	Group session 5 x 7 hours over 5 weeks	Government organisation employees N=123, N=109 control	Not specified
Williams, Hagerty, Andrei, Yousha, Hirth et al. (2007) (2)	BOOTSTRAP programme Reframe negative thinking Manage emotions and stress Sense of belonging/camaraderie	Group sessions of "short duration" over 9 weeks basic recruit training	Navy recruits N=583 intervention N= 616 Control	Challenges of completing basic training for naval trainees
Williams, Hagerty, Yousha and Horrocks (2004) (2)	BOOTSTRAP programme Reframe negative thinking Manage emotions and stress Sense of belonging/camaraderie	Group sessions of "short duration" over 9 weeks basic recruit training	801 Navy recruits	Challenges of completing basic training for naval trainees

2.22 Delivery mode

Documented interventions outline various developmental interventions ranging from hours to weeks - single inputs to weekly day long sessions over a period of time. The most commonly occurring format of delivery is group training used in over 70 per cent of the studies. One to one intervention delivery such as coaching is utilised in only three studies. Two studies combined group training with a one to one element for example as a follow up. Group delivery of resilience training is likely to be the most popular form of delivery due to its resource efficiency. Given the importance of social support as a resilience factor, the use of group training delivery may also however offer the added benefit of serving to strengthen workplace social networks. Train the trainer modes of delivery were also found in a minority of programmes and confined to military contexts. Typically such models involve a cascading approach where leaders are trained in the requisite resilience skill set and training approaches and then disseminate these in their workplaces e.g. with their reports. The Master Resilience Training (see Section 2.13 above) utilised within the Comprehensive Soldier Fitness programme is an example of this form of approach. On-line training was the mode of delivery in four cases including an on-line microintervention delivery of PsyCap (Luthans et al., 2008). In terms of effectiveness, programmes involving a one to one element were found to have most impact followed by group delivery formats. Train the trainer formats and computer based administrations were found to be least effective.

2.23 Content and design

Resilience programmes are typically targeted at enabling participants to enhance protective factors, successfully utilise capabilities and resources to counter adverse experiences. Such programmes are often targeted at the range of biological, social,

psychological and environmental protective factors that have been demonstrated to contribute to resilience (Meredith et al., 2011). The most commonly emphasized psychosocial factors include self-efficacy, optimism, social resources and cognitive appraisal/coping (Vanhove et al., 2015). Within the Robertson et al. (2015) and Vanhove et al. (2015) reviews of workplace programmes, a diverse range of programmes were included (see Table 2.4 for detail). The majority of programmes were based upon cognitive behavioural principles. Some were based explicitly on the PRP which in turn is based on the protective factors identified by Masten and Reed (2002, see Section 2.13). Some consisted of multimodal cognitive behavioural techniques such as relaxation techniques and self-talk (see for example Arnetz et al., 2009). Acceptance and Commitment Therapy (ACT) and or mindfulness strategies are the focus of a minority of studies in the reviews. The focus of these approaches is to support participants in changing their relationship with negative thoughts and cultivating presence and compassion. Technology based self-regulation of stress responses was utilised in the studies by McCraty and Atkinson (2012) and Pipe et al. (2012). Waite and Richardson's (2004) intervention was described as a "biopsychospiritual enrichment programme designed to improve mental and spiritual health" (p.179). This was based on enhancing participant personal energy and interpersonal skills. Finally some programmes utilised principles of positive psychology generally and/or PsyCap specifically (Luthans et al., 2007, 2008).

2.24 Outcome measures

The studies of workplace resilience programmes have explored and established a range of positive outcomes including; subjective well-being; (see for example Arnetz et al., 2009; Liossis et al., 2009) physical/biological outcomes; (see for example McCraty & Atkinson, 2012; Jennings et al., 2013), psychosocial outcomes; (see for

example Liossis et al., 2009; Jennings et al., 2013) and performance outcomes; (see Grant et al., 2009; Pipe et al., 2012; Arnetz et al., 2009). As performance effects are distal outcomes weaker effects on these variables may be expected (Vanhove et al., 2015). McCraty and Atkinson (2012) found reduced levels of productivity following resilience training for their police officer sample. Programme effects were found to diminish from proximal to distal time points except for studies where programmes were targeted at samples of participants at greater risk (Liossis et al., 2009).

Conclusions from both reviews suggest that resilience interventions in the workplace to date demonstrate effects on a range of variables. Whilst effect sizes are considered small to moderate, Vanhove et al. (2015) urge that even small preventive effects at the individual level can have considerable beneficial impact at the organisational level.

2.25 Programme design recommendations

The lack of coherence of programme design and implementation does not permit the drawing of conclusions concerning effective design content and format of workplace resilience interventions (Robertson et al., 2015). Based on the review of effect sizes however the inclusion of an element of one to one training within programme design and the targeting of training for those deemed most at risk is recommended to enhance impact (Vanhove et al., 2015).

2.26 Research recommendations

The reviews generated a number of recommendations for ongoing workplace resilience intervention research. In addition to recommendations for design and methodological improvements such as controlled trials and improved reporting,

there is a call for a move to a more coherent and workplace appropriate operationalization of constructs including: resilience, adaptation and resilience building intervention (Robertson et al., 2015). A recommendation is made to develop models which identify resilience mechanisms and mediators and their respective impacts on intervention outcomes (Robertson et al., 2015). For example focusing on questions that may reveal the mechanisms that lead to changes in resilience, performance etc. or identifying who may benefit most from the development of which protective factors. Comparison of differing modes of delivery and analysis and identification of which intervention components have the most impact is further recommended in order to support enhanced impacts (Robertson et al., 2015).

2.27 Summary and conclusions

This chapter has outlined the emergent case for the study of resilience in adults in general and a requirement for the focus upon developing resilience in employee populations in particular. The case for organisational change as a potential source of adversity for employees has been explored along with the positioning of employee resilience as a personal resource with developable POB characteristics that may have potential to counter such adversity. The lack of research relating to workplace resilience intervention particularly in the context of everyday stressors such as organisational change has been highlighted and explored and the implications for both intervention and research designs identified. The first study in this thesis described in Chapter 4 begins to explore the factors associated with resilience from an employee perspective.

Chapter 3: Methodology

3.1 Chapter overview

This chapter outlines the epistemological and methodological framework of the thesis research. The ontological and epistemological stance of the researcher is described to articulate and share the paradigmatic assumptions that underpin the research. The overall methodological approach employed within the programme of research is presented. Study specific design and methodology detail is provided in the relevant chapters.

3.2 Critical realist ontology

Critical realism is described by Houston (2010) as a “subtle form of realism” (p. 75). Realism suggests levels at which we may “know” the world at the first level is a real world the intransitive, secondly a transitive level of knowing based upon our perceptions and ways of construing the world. A gap exists between the transitive and intransitive worlds but it may be lessened as researchers refine their theories and perceptions in a way that aligns more to reality. As the social world is complex however and consisting of multiple systems, layers, interconnections and patterns, Bhaskar (1978) argues that our best approximation of reality will be based on “*tendencies*” rather than certainties.

Critical realists believe that all research is value based and often adopt both a positivist and interpretive stance leading to the use of a combination of quantitative and qualitative methods (Avramidis & Smith, 1999). A realist ontology was deemed appropriate for the current study due to the practitioner /researcher nature.

Robson (2011) highlights two features of realism of particular relevance:

Research very commonly seeks to provide explanations. Answers to “how” or “why” questions – how or why did something happen? Realism addresses these issues directly, providing a helpful language for this task. Secondly, an issue which looms particularly large in real world research; This is that virtually all real world research takes place in “field” rather than laboratory situations. Realism provides a way of approaching such open, uncontrolled situations (p. 30).

3.3 Pragmatist epistemology

Fulton, Kuit, Sanders and Smith (2013) observe that professional doctorates often utilise a range of methodological approaches and further that the variety of approaches “can have very different and often incompatible underpinnings” (p. 49). Fulton and colleagues conclude that in order to address these challenges it is important to be aware of these assumptions and underpinnings and to reconcile them via a focus upon congruence within the professional doctorate between overall philosophy and study design. Bryman (2006) suggests:

...in the new climate of pragmatismissues to do with the adequacy of particular methods for answering research questions are the crucial arbiter of which methodological approach should be adopted rather than a commitment to a paradigm and the philosophical doctrine upon which it is supposedly based. (p. 118).

Pragmatism is characterised by a focus upon results that are capable of practical application and a utilisation of methods that work effectively to produce those results (Crotty, 1998). These characteristics of pragmatism rendered it the most appropriate epistemology for the current research with its emphasis on practitioner research and a “real world” nature.

3.4 Mixed methods

In accordance with the critical realist stance, the research involved a multi-method approach. The pragmatist philosophical orientation is also the orientation most often associated with mixed methods. A mixed methods approach is described by Teddlie and Tashakkori (2009) "Mixed methodologists present an alternative to the QUAN and QUAL traditions by advocating the use of whatever methodological tools are required to answer the research questions under study" (p. 7).

Mixed methods has emerged from the 1990s' onwards (Denscombe, 2008) as a "*third paradigm*" for research and is somewhat less known than the positivist paradigm linked quantitative (QUAN) and the constructivist linked qualitative (QUAL) approaches. The use of a mixed methods approach confers a number of advantages. Incorporating the strengths from quantitative and qualitative approaches can combine the focus on deductive hypothesis testing, explanation and prediction with induction, discovery, hypothesis generation and qualitative depth of analysis (Johnson & Onwuegbuzie, 2004). A mixed methods approach can answer a broader range of research questions because it does not confine the researcher to a single approach or method. Multiple methods can be used to overcome shortfalls in a single approach. In short qualitative and quantitative approaches may combine to produce a more robust, comprehensive approach to the knowledge generation to inform theory and practice.

Challenges involved in a mixed methods approach include the fact it may be difficult for a solo researcher to execute and can be more resource intensive and time-consuming. In addition some purists view the philosophical underpinnings of qualitative and quantitative methodologies as incompatible see for example Denscombe (2008). Some scholars have however sought to look to the common

ground and see how integration may be best achieved to capitalize on the benefits of the mixed methods approach (Onwuegbuzie & Leech, 2005; Datta, 1994).

The mixed methods approach in this thesis used both qualitative and quantitative approaches. Qualitative approaches were used to explore resilience in those experiencing organisational change. This was deemed the most appropriate methodology, particularly given the lack of literature and theory relating to employee resilience. Quantitative evaluation of the resilience interventions was used in order to analyse impact and draw conclusions related to the intervention. In addition this work has contributed to the limited existing empirical studies in this field.

3.5 Real world research and the role of practitioner researcher

The research project was conducted within the realm of participatory real world research (Robson, 2011). The main aim of such research is to develop an approach that can illuminate practice through direct experience with individuals in specific contexts where the “*real life*” situations occur, for example in organisations (Robson, 2011). The researcher operated in dual roles as both practitioner and researcher. Whilst such a duality inevitably raises issues relating to objectivity the underpinning pragmatic philosophy coupled with an action research methodology dictates such a role. The researcher utilised reflexivity and the supervision process in order to ensure professional standards of behaviour and operation in her practice, and ethical and rigorous practice in her research were maintained.

3.6 Research methods

Table 3.1 outlines the research methods utilised in the thesis studies. Specific and more detailed design and methodological details relating to each study are provided in the relevant chapters.

Table 3.1

Summary of Research Methodologies

Chapter	Nature of Study	Participants	Method	Measures
4	Qualitative exploration of employee resilience during organisational change	N=16 volunteer employees from two organisations a public and a third sector organisation	Semi-structured interviews examining: Impact of organisational change Resilience factors Resilience definitions	Interview schedule
7	Quantitative evaluative comparison of two resilience development programmes: a group resilience workshop and a one to one programme	N= 43 volunteer employees from two social housing organisations	Randomised trial. Assignment to one of the two programmes Pre and post intervention measurement at 1 week and 4 weeks post-intervention	1. Workplace Resilience inventory (WRI) (McLarnon and Rothstein, 2013) 2. Workplace well-being (Warr and Parker, 2010) 3. Change efficacy (adapted from Holt, Armenakis, Field & Harris 2007)
9	Quantitative evaluation of a group based resilience development programme	N =54 volunteer employees from a local authority	Waiting list controlled trial. Random assignment to treatment or control. Pre and post intervention measurement ay 1 and 4 weeks post-intervention	1 CD-RISC (10) (Campbell-Sills & Stein, 2007) 2 Workplace well-being (Warr and Parker, 2010) 3 Change efficacy (adapted from Holt et al., 2007) 4 Change Impact Tvedt and Saksvik (2009) 5 Change Adaptation Griffin, Neal and Parker (2007)

3.7 Ethical considerations

For the three main studies and pilot documented in the thesis procedural approval was sought and given from Northumbria University's appropriate ethics board (School of Life Sciences pre 2013, Faculty of Health & Life Sciences from 2013 onward).

Chapter 4: Study 1 – Qualitative Exploration of Employee Resilience During Organisational Change Using Template Analysis

4.1 Chapter overview

This chapter outlines a qualitative exploration of employee resilience in the context of organisational change. Template analysis (King, 2012) was used to analyse the data from 16 semi-structured interviews with public and third sector employees. The findings relating to a consideration of organisational change as adversity, employee resilience factors and resilience definitions are presented and discussed.

4.2 Rationale for the current study

As noted in Chapter 2, the literature relating to employee resilience in the context of organisational change is severely lacking with a current absence of studies examining how resilience may be strengthened in a workforce experiencing organisational change. The focus of the current study was to explore the nature of resilience in employees working in public and third sector organisations experiencing organisational change and in particular to identify from participant narratives ways in which resilience may be promoted and developed. The purpose of the study was to inform the design of a framework for resilience intervention. Framework trials are examined in the chapters that follow.

Study research questions

The study sought to examine the following research questions:

1. In what ways does organisational change create adversity for individual employees?
2. What psychosocial strategies do employees utilise when displaying resilience in the face of organisational change?

3. How do employees define personal resilience in an organisational change context?

4.3 Method

4.3.1 Participants – sample and recruitment

Two organisations known to be experiencing organisational change one public sector, one third sector were approached for participation and asked to recruit interviewees. Volunteer participants were recruited through a contact in Human Resources in each organisation and provided with a participant information sheet outlining the study, (see Appendix B). The contact aimed to obtain a sample of ten volunteer participants drawn from parts of the organisation that had been affected by change and to include participants at different hierarchical levels. Ultimately, 7 participants from organisation A and 9 participants from organisation B completed the interview. The sample included employees from four levels; staff, supervisor, management and senior management (see Table 4.1 for further participant information).

Table 4.1

Profiles of Interview Participants

Participant Number (p)	Template coding order	Organisation	Gender	Level	Time in organisation
p1	16	A	Female	Staff	3 years
p2	1	A	Female	Supervisor	6 years
p3	9	A	Female	Senior Manager	10 years
p4	11	A	Male	Senior Manager	17 months
p5	6	A	Female	Staff	11 years
p6	7	A	Male	Staff	10 years
p7	4	A	Female	Middle Manager	18 years
p8	2	B	Male	Senior Manager	3 years
p9	10	B	Male	Senior Manager	21 years
p10	8	B	Female	Supervisor	11 years
p11	13	B	Female	Senior Manager	15 years
p12	3	B	Female	Middle Manager	14 years
p13	5	B	Female	Staff	11 years
p14	12	B	Male	Middle Manager	15 years
p15	15	B	Female	Middle Manager	25 years
p16	14	B	Male	Middle Manager	36 years

4.3.1.1 Organisation A

Organisation A was a national, third sector organisation employing around 8000 staff nationally, participants were from the North East regional division which employed around 500 staff. The organisation was facing significant changes in the form of loss of funding from various sources, both local authority funding for projects and reductions in charitable donations. Budget cuts had led to the organisation engaging in several “*management of change reviews*” (organisation terminology) involving fundamental and often quite radical reviews of services. In many service areas downsizing in staff had already occurred or was about to occur as a result of required efficiency savings. All participants had already been involved or would be involved in these reviews in the future.

4.3.1.2 Organisation B

Organisation B was a UK North East local authority employing around 3600 staff. At the time of the research (2011), the organisation was responding to significant budget and funding cuts created by the UK Government austerity measures (see section 1.7). Funding cuts had led to “*Fundamental Reviews*” (organisation terminology) of services at the time of the research. Reviews had led to some job losses already and radical changes to the delivery of some services. The general climate of funding cuts and reviews was expected to be ongoing and further budget cuts and fundamental reviews were anticipated.

4.3.2 Procedure

Face to face interviews took place within the participants’ workplace during September to December 2011. Participants were given a written brief relating to the study, confidentiality, data storage and withdrawal process (Appendix B). Participant consent was then established and a consent form including audio consent (Appendix B) completed. Ethical approval for the study had been granted by the Psychology Ethics Committee, School of Life Sciences Northumbria University. The interview schedule (Appendix C) was based around the 3 main research questions (see Section 4.2). Participants were first invited to describe the nature of organisational change they had recently experienced and its impact upon them personally, they were then asked to articulate a personal definition of resilience relating to organisational change. Participants were finally asked to describe one or two recent situations when they had experienced a feeling of being personally resilient in the face of the organisational changes experienced. Finally, the interviewer encouraged participants to identify the factors they felt had contributed to the experience of resilience within these accounts. Interviews lasted typically

around 20-25 minutes the shortest being 13 minutes and longest 48 minutes in length.

The interviewer endeavoured to maintain an open-ended and conversational tone to the questioning and dialogue, reflecting back, probing and prompting where necessary for deemed focus clarity or depth of exploration. On completion of the interview, participants were thanked for their time and advised of the procedure and timing for feedback relating to the research. Recorded interviews were transcribed verbatim retaining idiosyncrasies and original grammar transcriptions were checked for errors and omissions before data analysis.

4.4 Data analysis

4.4.1 Template analysis

Interview transcripts were analysed using template analysis (King, 2012). Template analysis is a branch of thematic analysis developed by King (1998). Thematic analysis forms the basis of most qualitative analysis, and is concerned with the identification of patterns and themes, often from interview transcripts (Holloway, 1997). Template analysis is a style of thematic analysis that balances a relatively high degree of structure of textual analysis with the flexibility to adapt it to a particular study (King, 2012).

As this exploratory study of employee resilience is grounded in theoretical models relating to organisational change and personal resilience the use of a priori themes, characteristic of a template analysis approach, was considered appropriate. A template approach includes a priori and emergent themes. It facilitates both a deductive approach where existing knowledge from previous research is included and allows researchers to set their assumptions out explicitly; and allows an

inductive approach, where themes can emerge in the data analysis based on the research questions.

Template analysis differs from the more structured quasi-statistical approach of content analysis which searches for regularities using a classification procedure, as the inductive template approach allows the text to alter the codes. In template analysis, developing the codes is part of the analysis process. Template analysis has been established as an appropriate methodology for exploratory research into people's experiences (e.g., Kent, 2000; King, Carroll, Newton & Dorman, 2002) in addition it is considered suitable where the knowledge, experience and biases of researchers render approaches such as grounded theory inappropriate (Waring & Wainright, 2008).

Within the study, a number of assumptions were made. Firstly that participants would have experienced organisational change as an adverse event, second, that they would have utilised a range of strategies in line with those found in the literature relating to adult resilience factors (see section 2.12) to facilitate their personal resilience in the face of this adversity. Finally it was assumed that participants would be able to articulate a definition of resilience of their own personal construction. It was further anticipated that participant responses would reflect existing theoretical perspectives relating to change and resilience but that the participant contextualisation of these would require a level of flexibility and openness to emergent themes. These assumptions were subsequently reflected in the selection and framing of the research and interview questions.

4.4.2 Development of a priori codes

Theoretically based a priori codes corresponding to each of the research questions formed the initial template of analysis. See Table 4.2 which provides an outline.

Selection of the a priori codes was guided by selecting frameworks that were (1) relevant to the research question of focus, (2) based on a comprehensive review of the relevant construct and (3) capable of being applied at a level of specificity that would not lead to the potential early over prescription of codes i.e. could be applied at the level of broad constructs rather than numerous elements. Selected frameworks and codes are outlined briefly.

4.4.2.1 Organisational Change a priori codes

Given the case that adversity is seen to be a pre-requisite for resilience (see Chapter 2) the current study research question focuses upon the adverse impacts of organisational change on individual employees. Oreg et al's. 2011 review of over 60 years of empirical literature relating to employee reactions to change and the resulting theoretical framework of change "*antecedents*", "*reactions*" and "*consequences*" provided a suitably broad but theoretically grounded framework for the a priori codes relating to the research question focused upon exploring the adverse impact of organisational change for individuals.

4.4.2.2 Resilience factors a priori codes

Southwick, Vythilingham and Charney (2005) provide a comprehensive review of factors linked to depression in adult populations and more specifically those factors that promote resilience and mental health. Included in Southwick et al's. (2005) framework is a set of factors which they term "*basic psychosocial resilience factors*" which are associated with stress resilience. These are *positive emotions, cognitive flexibility, meaning, social support* and *active coping style*. The potentially malleable nature of Southwick et al's. (2005) resilience factors (see for example Burton, Pakenham & Brown, 2010) rendered the classification an appropriate a priori

template for the current study with its overall aim of identifying factors that would form the content of resilience development interventions.

4.4.2.3 Resilience definition codes

Meredith et al. (2011) undertook a comprehensive review of the resilience literature with a view to informing the development of resilience interventions for military personnel. Included in their review was an analysis of resilience definitions. Analysis of 270 papers including resilience definitions resulted in Meredith and colleagues producing a three category coding of definition types, “*basic*”, “*adaptation*” and “*growth*”. The comprehensive extent of Meredith et al’s. 2011 review taken with the accessible three category coding was deemed to provide a valid a priori framework for the resilience definition research question within the transcripts (see Table 4.2).

Table 4.2

A Priori Codes for Template Analysis

Change codes (Oreg et al., 2011)	Resilience factors (Southwick et al., 2005)	Definition codes (Meredith et al., 2011)
ANTECEDENTS Reasons for the reactions to change e.g. employee characteristics, handling of change etc.	POSITIVE EMOTIONS Enthusiasm, active, alert – positive emotions –optimism, humour, hope	BASIC – describes resilience as process or capacity that develops over time
REACTIONS Affective, behavioural and cognitive responses to the change	COGNITIVE FLEXIBILITY Restructuring, reframing, sense making, flexibility/reappraisal – positive outlook and preparation	ADAPTATION –incorporates bouncing back, adaptation or returning to baseline
CONSEQUENCES Post change attitudes toward organisation etc. Personal consequences e.g. well-being	(LIFE) MEANING Meaning, purpose, spirituality	GROWTH – additional (to above) includes growth after adversity
	SOCIAL SUPPORT Emotional, tangible, instrumental informational and spiritual support from others	
	ACTIVE COPING STRATEGIES Pragmatic problem focused approaches (includes exercise)	

4.4.3 Initial template development

The a priori codes specified above were utilised for initial template development. During template refinement stages the a priori source theoretical models were revisited to support coding allocation and grouping. This approach was applied flexibly to ensure that in vivo codes were not compromised by the over prescriptive application of the a priori codes. At the thematic level, the final template had lost

some of the original a priori codes such as the *basic* resilience definition code were removed and new ones for example *positivity* were included (see appendix F).

Template development and coding was conducted manually by the researcher. A coding example is included in Appendix E. The first stage was the familiarisation with the data through reading and rereading of the interview transcripts. Following this the coding procedure proceeded.

4.4.3.1 Initial coding – transcripts 1-6

The initial a priori coding was applied to 6 of the 16 transcripts with the researcher refining the template through the addition of codes to the initial meaningful themes (a priori codes). Guest, Bunce and Johnson (2006) suggest that meaningful initial themes may typically be derived using this number. Six transcripts were selected to provide diversity on the basis of demographics of organisation and level of role (see Table 4.1). In line with King's (2012) recommendations, analysis proceeded via hierarchical organisation of codes where clusters of similar codes are grouped to produce more general higher order codes. The data was analysed by assigning a priori codes to themes or generating new codes for themes emerging from the data. An initial template was therefore created by combining a priori and emergent codes. At this stage the unsupported a priori codes were not removed. This was so that significant themes emerging in subsequent transcripts could be aligned with a priori themes if appropriate. The template hierarchy was reorganised to best represent the scope and order of themes.

4.4.3.2 Scrutiny and reflexivity

Once six transcripts had been coded a preliminary template was produced. A sample (two each) of the six transcripts was given to two experts, a member of the

thesis supervision team and a qualitative expert for independent scrutiny involving independent coding and critical discussion with the researcher. King (2015) maintains that independent scrutiny and researcher reflexivity form essential parts of the quality process within template analysis. Independent scrutiny may be used flexibly at various stages of the template development; researcher reflexivity is required throughout the research process and requires the researcher to be explicit about decisions made and underlying assumptions throughout the template development.

The independent experts were required to apply the first iteration of the template to the sample transcripts. Following the expert coding, a meeting was convened to discuss any challenges to applications of the template, any omissions observed by the experts, researcher reflections and suggested modifications. Refinements to the initial template were made on the basis of independent expert inputs and researcher reflexivity which occurred throughout the iterative development of the template (see Appendix F). Consolidation of the researcher's reflections was facilitated via challenge and exploration of the researcher's assumptions during discussion with the independent experts. The revised template was then taken forward to the next iteration. This process of scrutiny and reflexivity was utilised following production of the initial template and following the draft final template.

4.4.3.3 Iterative coding

Following the initial coding and quality process applied to scripts 1-6, template iteration 2 was produced (Appendix D). In line with Bazeley (2007) two further transcripts were selected in order to challenge the initial coding system. Bazeley (2007) suggests selecting a transcript that is particularly rich in detail and a second that contrasts in some way to the first. The researcher's familiarity with the

transcripts facilitated the selection of a rich transcript from an Organisation A employee and an equally rich example from a participant employed by Organisation B (see Table 4.1). The difference in organisation was considered to offer a viable means of facilitating meaningful contrast between transcripts for this stage. This strategy yielded a number of modifications to the template. Modifications included the range of amendments that King (2015) suggests may occur: *insertion, deletion, changing scope, changing higher order-classification* (see Appendix F). The third iteration of the template was then applied to scripts 9 -12 where modifications were made on completion and a fourth iteration applied to scripts 13-16. Application of the fourth iteration of the template proceeded through transcripts 13-16. No new codes were identified in the final three transcripts indicating saturation (Patton, 2002). The resulting template was then used to analyse all remaining transcripts through a process of constant revision where definitions were refined, codes added and removed and the hierarchical structure of the template themes and codes adjusted and a draft final template produced. The flexibility of template analysis permits as many levels of themes and sub-themes as the researcher finds useful. In the case of the current study three levels of coding emerged. This enabled sufficient levels to capture individual differences at the lower-order code levels whilst maintaining a sufficiently focused number of levels to support clarity of data organisation and interpretation (King, 2012). A sample of two transcripts was given to the experts for independent scrutiny via application of the template and the scrutiny and reflexivity process (see Section 4.4.3.2 above) repeated. This phase resulted in a slight wording and structure change only, and a final template structure was produced. Tracked changes to each iteration of the template can be viewed in Appendix F.

4.5 Findings and discussion

Presentation of analysis under thematic headings is recommended by Burman (1994) and is often adopted in template analysis (see King, 2012). The final coding template serves as an organising framework that facilitates presentation and interpretation of the results and enables focus on the area of inquiry. The scope of this thesis prevents extensive exploration of the findings at the sub-coding levels. First level themes and/or second level codes are used to structure the findings with selected sub-code exploration and inclusion of illustrative quotes from participants. Whilst this approach prevents full and equal representation of all transcripts the aim has been to strike a pragmatic balance of a succinct and salient focus that recognises the positioning of this qualitative component within the overall thesis structure. Illustrative quotes are anonymised to protect participant and organisation identities and are extracted verbatim from original transcriptions.

4.5.1 Theme 1 change antecedents

First level theme	Second Level Code	Third Level sub-code
1 Change antecedent	1.1 Nature of change	1.1.1 Unprecedented nature of change
		1.1.2 Rapid pace of change
		1.1.3 Repetitive/Unrelenting nature of change
		1.1.4 Large scale change
		1.1.5 Radical/transformational influence on organisation
		1.1.6 Protracted period(s) of uncertainty
	1.2 Change recipient factors	1.2.1 Previous history of organisational change
		1.2.2 Existing level of trust in managers of change
		1.2.3 Disposition e.g. "enjoy change" , "change averse"
		1.2.4 Level of role – e.g. whether or not a manager
	1.3 Change management process	1.3.1 Timeliness of communications
		1.3.2 Communication – openness /availability of information
		1.3.3 Level of involvement in change process
		1.3.4 Procedural justice in implementation
		1.3.5 Level of support for workforce/individuals
		1.3.6 Competence of change managers
		1.3.7 Time management - overly quick or too protracted

Figure 4.1 Hierarchy of Codes under Major Theme of Change Antecedents.

4.5.1.1 Nature of change

The nature of change being experienced by participants was frequently described as being on a scale of impact never before encountered. The study organisations were public and third sector organisations, sectors that were at the time of the study in 2011 particularly affected by the economic circumstances prevailing at the time. The scale of government budget and funding cuts meant that organisations and employees were experiencing transformational changes, the loss of complete departments or services for example as opposed to budget tightening and service adjustments. The scale of such changes was reported by some participants as requiring a radical mind shift in thinking about how services were delivered:

“there was a whole new way of how we were going to work with young people” (p1, female staff member third sector organisation).

Extended periods of uncertainty were also reported to be one of the most common and challenging characteristics of change experienced:

“.....they started to make us aware of things last October and as a service we were informed properly at the beginning of February so it went on for some time when we were going through that uncertain process” (p16, male middle manager local authority).

4.5.1.2 Change recipient factors

A range of individual traits have been found to impact upon employee receptivity to organisational change including: tolerance for ambiguity (Jack Walker, Arkemanis & Bernerth, 2007), neuroticism and conscientiousness, (Rafferty & Griffin, 2006), risk aversion (Judge et al., 1999) and locus of control (Holt et al., 2007). Within the

current study some participants cited dispositional attitudes towards change as potentially impacting upon relative levels of comfort with the organisational change. In particular being open to change (experience) as found by Jones et al. (2008) and Judge et al. (1999) or conversely dispositional resistance to change (Oreg, 2003) were a feature of some narratives.

“people know that we need to do things differently and some are more forward with that than others” (p8, male senior manager local authority).

4.5.1.3 Change management process

Characteristics of effective change management processes designed to facilitate employee engagement with change are well documented (see for example Aarons, Hurlburt & Horwitz, 2011; Kotter, 1996; Rafferty, Jimmieson & Armenakis, 2013). Given the adversity focus of the research question, factors that emerged under this code were related to negative experiences of change implementation. Reported inadequacies relating to timeliness of implementation, communication, levels of individual support and a perceived lack of procedural justice all featured in accounts of participants' descriptions of change implementation. The majority of participant narratives included reference to at least one of these.

“I think some of the way it as handled was done very insensitively ... and in a very crass way and very much cloak and dagger and I, I just, I think a lot a, a lot of managers were protected in that process” (p2, female supervisor third sector organisation).

4.5.2 Theme 2 change impacts

First level theme	Second Level Code	Third Level sub-code
2. Change impacts	2.1 Organisational Impacts	2.1.1 Loss of workforce –redundancies
		2.1.2 Restructured/re-configured organisational structure
		2.1.3 Transformed modes of operation/service delivery
	2.2 Impacts on relationships	2.2.1 Loss of colleagues and valued relationships
		2.2.2 Changes in reporting and other relationships
		2.2.3 Competitive interviewing amongst colleagues
		2.2.4 Requirement to establish new relationships
		2.2.5 Changes to customer/service user relationships
	2.3 Impacts on individuals	2.3.1 Threat to employment – potential job loss
		2.3.2 Changes to nature of role or work
		2.3.3 Increased workload – scope/scale or responsibility
		2.3.4 Downgrading – e.g. status , hours
		2.3.5 Negative impact upon career progression /prospects
		2.3.6 Negative financial impacts
	2.4 Impacts on managers	2.4.1 Requirement to be a role model or champion for change or resilience
		2.4.2 Dealing with staff anxieties and challenges with change
2.4.3 Dealing with change resistance		
2.4.4 Having to Support others through change		

Figure 4.2 Hierarchy of Codes under Major Theme of Change impacts

4.5.2.1 Organisational impacts

Given the radical nature of change described in code 1.1 unsurprisingly participants unanimously described transformational impacts at the organisation level ranging from significant downsizing of the organisation to significant changes in ways in which the organisation operated:

“you know there has been no time like it when the pace of change and when we say change the architecture within the framework, environment within which we work has been on a large scale dismantled, the national and local policy reform is coming at us left, right and centre and at a pace that we’ve not seen before and the financial framework in which we operate has been completely overhauled” (p8, male senior manager local authority).

4.5.2.2 Impacts on relationships

Almost all study participants described the loss of colleagues as a typical change impact. Other altered relationships included reporting lines where participants found themselves having to establish new reporting and /or team relationships.

“I am now sort of subservient to another manager” (p16, male middle manager local authority).

Participants from organisation A who had experienced competitive interviewing as a result of downsizing reported this to be particularly challenging to workplace relationships.

“The stress and the strain of going against your colleagues and an interviewto say I’m gonna have to do that again in January and then possibly again come the end of April next year and you just think for what?” (p6, male staff member third sector organisation).

Finally, relationships with service users were also reported to be negatively impacted by the few participants who had a direct service user interface role.

4.5.2.3 Impacts on individuals

All participants experienced some direct impact upon the nature or characteristics of their role at work as a consequence of organisational change. Organisational change was reported by participants to create a number of potentially adverse impacts ranging from financial loss, to negative role and wider career impacts. The most commonly reported impact included increased workloads and/ or responsibilities due to reductions in staff and/or changes in the way services were now delivered.

“One of the posts that was deleted was my deputy.....my job has become very reactive dealing with two people’s work” (p11, female senior manager local authority).

Individual participants also experienced other work role changes such as changes in hours worked, reporting lines (new line manager) and working relationships. A couple of participants reported roles that had been downgraded in a change/restructuring exercise.

4.5.2.4 Impacts on managers

The manager impacts code includes issues identified by participants with a management role who described particular experiences and challenges as a result of being in a position of managing others and particularly managing others through the challenges of change. Issues identified here went beyond the relational and individual impacts already described to include a set of factors indicating that being a manager at the time of organisational change brought a particular set of

challenging impacts related to managing the tensions of a management role in an environment of complex change:

“you have concern for yourself and your future..... (and) the potential of the impact on their (staff) life...so it's about caring and wanting to do the best for a group of people you have worked for a long time with, it's about being able to maintain morale, deliver a good service but be realistic about what the outcomes could be”
(p14, male middle manager local authority).

4.5.3 Theme 3 change reactions

First level theme	Second Level Code	Third Level sub-code	
3 Change Reaction	3.1 Negative change appraisals	3.1.1 Sceptical or cynical interpretations of change management process	
		3.1.2 Negative appraisal of change managers	
		3.1.3 Viewing change as personally detrimental	
		3.1.4 Doubting the viability/ tenability of new modes of delivery or new roles	
		3.1.6 Assessing change as having a negative impact on nature/quality of service delivery	
		3.2 Difficult emotions	3.2.1 Feeling challenged/overwhelmed in dealing with change
		3.2.2 Feeling uncertain/unstable e.g. about personal future	
		3.2.3 Feeling uninformed – kept in the dark	
		3.2.4 Feeling disempowered - lack of control or choices	
		3.2.5 Experiencing negative emotions, anger, distress	
		3.2.6 Feeling devalued, de-professionalised or rejected	
		3.2.7 Feeling victimized - taking change personally	
		3.2.8 Feeling unsupported or isolated	
		3.2.9 Feeling concerned for service delivery e.g. quality	
		3.2.10 Regret or sadness for losses	
	3.3 Behavioural reactions		3.3.1 Seeking the support of others
			3.3.2 Providing support to others
			3.3.3 Seeking information or reassurance about the change(s)
			3.3.4 Attempting to manage feelings and emotions
			3.3.5 Resisting change
		3.3.6 Seeking to leave the organisation	
		3.3.7 Challenging the change	
		3.3.8 Withdrawing from contact	
		3.3.9 Lacking focus - distracted	

Figure 4.3 Hierarchy of Codes under Major Theme of Change Reaction

4.5.3.1 Negative appraisal of change

The current study found appraisal of the change to occur at a number of levels. At an organisational level of appraisal there was a theme involving a level of cynicism or scepticism concerning the change and/or change managers. At the level of change itself, cited negative perceptions included viewing the change itself as potentially no-viable or detrimental to service delivery models. Finally, at the personal level some participants described how their reactions to change had involved assessing the potential impacts as personally detrimental.

4.5.3.2 Difficult emotions

Almost all of the participant group described the challenges of dealing with difficult emotions as one of the consequences of the changes generating the greatest number of codes within the template. This included a range of emotional challenges such as dealing with uncertainty or the “*up and down*” nature of daily emotions in the face of change or having to overcome negative and potentially destructive feelings such as anger or feeling completely overwhelmed by change. This theme gives considerable insight into the adverse impacts of organisational change as expressed through the accounts of challenging emotions experienced by participants.

“emotionally it just makes you feel rubbish There’s such a breadth of emotions that one has to manage in that sort of situation to allow you to actually come out of it at the end” (p4, male senior manager third sector organisation).

Jimmieson, Terry and Callan (2004) observe that uncertainty is the most frequent psychological state resulting from organisational change due to its non-linear nature. This was confirmed by participants from both organisations.

“for a certain amount of time it was almost like being in no-man’s land.....just treading water not quite knowing what would happen and that would probably be the most uncomfortable I felt about it and obviously not knowing whether or not I would have a job at the end” (p1, female staff member third sector organisation).

4.5.3.3 Behavioural reactions

At the onset of change implementation, participants described a range of behavioural reactions that typify behavioural coping strategies (Gardner, Rose, Mason, Tyler & Cushway, 2005). These included reaching out to others to obtain or provide support, informational strategies such as seeking information about the change, resistance of the change and in some cases consciously seeking to leave the organisation. There was significant variability in the nature of behavioural reactions described by individuals see figure 4.3.

Theme 4 change consequences

First level theme	Second level code	Third level sub-code
4 Change Consequences	4.1 Work related consequences	4.1.1 Withholding or reducing labour or effort
		4.1.2 Lacking commitment – ambivalent towards organisation
		4.1.3 Presenteeism
		4.1.4 Reduced work engagement/motivation
		4.1.5 Absenteeism
	4.2 Personal consequences	4.2.1 Compromised health or well-being – illness
		4.2.2 Reduced self-confidence , self-esteem
		4.2.3 Pervasive personal negative attitude
		4.2.4 Negative impacts on home life
		4.2.5 Distraction – loss of focus
		4.2.6 Withdrawal (from others)

Figure 4.4 Hierarchy of Codes under Major Theme of Change Consequences

4.5.3.4 Work related consequences

Based on their review of the change literature Oreg et al. (2011) describe two types of change consequence, work related consequences such as performance and commitment impacts and personal consequences such as withdrawal and well-being impacts on the current study the theme covers both type of consequence as an exploration of evidence of adversity rather than an attempt at comprehensive categorisation. Participants who were experiencing one of the negative consequences such as being disengaged tended to report negative consequences in other areas too e.g. reduced well-being This is in line with previous change

studies where survivors of layoffs have been found to experience a range of negative psychological responses such as increased job insecurity and reduced creativity, trust and commitment (Grunberg, Moore, Greenberg & Sikora, 2008).

When employees perceive a reduction in decision latitude and an increase in job demands as described by many (code 2.3.3) in the case of the current study cohort, sickness absenteeism is a more likely organisational consequence of change (Head et al., 2006). Sickness absenteeism following organisational change had occurred for two of the participants. Other consequences of change at the organisational level included consequences that would indicate varying levels of reduced engagement with the organisation including:

- A lack of commitment to the organisation

“you start kind of like becoming kind of cynical and becoming like, kind of anti the organisation” (p6, male staff member third sector organisation).

- Reduced work engagement

“it becomes like any other job where you just kind of like go and do what you need to do and go home” (p6, male staff member third sector organisation).

- A reduction in effectiveness

“I used to take a lot of pride in doing my very best at a job, now I just do it to get it out of the way and say “I’ve done this” and I find that very dissatisfying from a professional point of view but I feel I haven’t got the time to do it” (p11, female senior manager local authority).

- A withholding of labour

“...I suppose there was an element of well I’m only going to do now what I’m paid to do” (p2, female supervisor third sector organisation)

4.5.3.5 Personal consequences

The practical impacts of change and emotional responses of individual employees have been addressed under themes 2 and 3. The theme of personal consequences of change relate to the wider and more pervasive outcomes such as impacts upon health and well-being and home life .These were varied across the participant group ranging from sleeplessness, impacts on home life to reduced self-esteem to compromised health or well-being:

“it made me quite ill. I didn’t want to be off work long term so I struggled onmy health deteriorated. I ended up going to the doctors and I have been on anti-depressants” (p5, female staff member third sector organisation).

Not all participants reported either work or personal consequences but the two consequences tended to occur in parallel with affected participants reporting both.

4.5.4 Theme 5 resilience factors

This theme consisted of six second level codes (see Figure 4.5) In terms of changes to the initial template; the a priori codes were retained with some modifications. Social support was replaced with the code “*connecting*” to reflect the wider role of the importance of supporting others that was evident in the interviews.

A review and refinement of the positive emotions cluster resulted in the a priori label being replaced with the code “*positive personal resources*”. This was applied because the emergent set of sub-codes appeared to better match conceptualisations of personal resources such as that of Van den Heuvel (2013) which include beliefs about self for example self-esteem and beliefs about the wider

world such as faith and optimism. Southwick et al's. original (2011) view of positive emotionality is somewhat narrower focusing largely upon optimism and humour. Finally the higher order code *managing emotions* was inserted into the template as this emotional regulation role was an evident new theme in the resilience narratives.

First level theme	Second Level Code	Third Level sub-code
5 resilience factors	5.1 Positive personal resources	5.1.1 Pride in one's achievement or conduct
		5.1.2 Courage in facing challenges
		5.1.3 Showing determination or perseverance in facing a challenge
		5.1.4 Optimism - being a "positive person"
		5.1.5 Hope – holding a positive view of future
		5.1.6 Confidence –self-belief
		5.1.7 Use of humour
		5.1.8 Identifying own strengths as resources or offer
	5.2 Cognitive flexibility	5.2.1 Positive reappraisal, reframing or sensemaking
		5.2.2 Identifying personal boundaries or limitations e.g. capacity, responsibility, influence
		5.2.3 Noting progress /successes
		5.2.4 Choosing one's attitude – recognising choice in doing so
		5.2.5 Focusing upon realities and practicalities
		5.2.6 Drawing on learning from personal history of change/adversity
		5.2.7 Gaining perspective via comparisons e.g. to others circumstances or previous scenarios
		5.2.8 Acceptance
	5.3 Meaning	5.3.1 Connecting to core personal values or principles such as e.g. professionalism
		5.3.2 Committed to "making a difference"

	5.3.3 Commitment to others – being a good parent, good partner etc.
	5.3.4 Holding a vision of or striving for ideal self
	5.3.5 Identifying or focusing upon what is important in one's life
5.4 Managing emotions	5.4.1 Detaching not taking change personally
	5.4.2 Exercising self-awareness - tuning in to emotional responses
	5.4.3 Consciously taking steps to actively manage emotions
	5.4.4 Exercising awareness of impact of self on others
5.5 Connecting	5.5.1 Having supportive colleagues
	5.5.2 Utilising supportive external relationships – partner family etc.
	5.5.3 Getting the support of one's manager
	5.5.4 Providing support to others
	5.5.6 Sharing experiences with others
	5.5.5 Uniting with others – pulling together
5.6 Active coping	5.6.1 Taking decisions – not procrastinating
	5.6.2 Focusing on task in hand “getting on with it”
	5.6.3 Preparation or planning – e.g. preparing strategies/approaches to challenging scenarios
	5.6.4 Rising to a challenge – taking it on
	5.6.5 Exercising self-care – exercise, leisure use, switching off etc.
	5.6.6 Managing personal –boundaries –setting limits

Figure 4.5 Hierarchy of Codes under Major Theme of Resilience Factors

4.5.4.1 Positive personal resources

Participants discussed a range of personal resources in terms of their experiences of being resilient during organisational change. These included hope, pride mastery,

confidence, humour, courage and perseverance. Some participants cited the importance of their taking stock of positive personal resources in facilitating a resilient response to challenge.

“it’s the internal pep talks, it’s the recognition around what your strengths are and then what you have to offer” (p4, male senior manager third sector organisation).

“...the biggest thing about resilience is understanding yourself and understanding about what you’ve got and what you’re bringing with you and what are your barriers to being resilient and...what are your strengths and how can you draw on those strengths ..to help you be resilient” (p3, female senior manager third sector organisation).

4.5.4.2 Cognitive flexibility

Consistent with “*second wave*” approaches to resilience Inquiry (Richardson, 2002) where the resilience process is seen as one where resilient qualities and protective factors develop as a result of coping with adversity, half of the participant narratives contained reference to the connecting to past experiences to fortify resilience in the current day change scenario.

“I found it challenging but I’ve been through it beforeyou get things in perspective, I am a survivor already” (p16, male middle manager local authority).

“I was also going through a divorce at that time.....but you learn from those situations and if you can get through those situations and those difficulties then when you come back to something else it’s much easier and it’s about relativity” (p14, male middle manager local authority).

This finding would support Luthar and Cicchetti’s (2000) view that resilience is strengthened via the experience and transcendence of previous adversity.

In some participant narratives there was a clear indication of a decision point or moment of acceptance of a situation or a “*letting go*”, typically this came after a period of some angst and/or resistance but participants who identified this within their resilience narratives tended to indicate that this was an important part of their resilient stance in the situation they were describing, and that the acceptance had brought them to a place where they were better able to manage the challenges and adversities being experienced.

“I think I have just told myself it’s part ofthe bigger picture and it’s part of a bigger plan and I just need to accept (it)” (p3, female senior manager third sector organisation).

“I think we get embroiled where things are fair and not fair where a lot of it is sometimes just accepting that and saying right well I’m gonna make the best of the cards I’ve been dealt” (p14, male middle manager local authority).

Cognitive flexibility strategies were utilised in a range of ways to facilitate the attaining of perspective with respect to challenges and adversities including focusing on realities/practicalities:

“it’s perspective again so you know in the scheme of things in the review (of services) nobody died, nobody is ill, everybody is safe they possibly might not have the job they want but they will have a job, we will settle down and then you can start to manage your career again” (p15, female middle manager local authority).

This theme covers a large range of examples provided by participants in their resilience accounts. Participant examples were largely in line with Southwick et al’s. (2005) explanatory style, cognitive reappraisal, and acceptance components of their cognitive flexibility construct. Sub-codes allocated to this category had in common a

sense of fluidity and reflexivity in thinking about and responding to change and in particular was characterised by descriptions by participants of ways in which they had obtained a sense of perspective in the face of challenges. A cognitive appraisal, fluidity and adjustment theme (Southwick et al., 2005) is evident.

4.5.4.3 Meaning

Conceptualised as the drawing on one's beliefs, values and/or sense of purpose to sustain coping and well-being during a challenge (Folkman, 2008), meaning making played a role in the resilience narratives of some of the interviewees, it was not present in all. In particular it was more evident in the scripts of participant employees of the third sector organisation (organisation A) than in those of the local authority employees where it was typically expressed as a desire to maintain professional levels of support and/or to make a difference to the lives of service users despite the challenges being presented by the organisational changes:

“you know chaos can reign around us but as long as I get to the end of the day and I know that I've helped somebody to get accommodation for the night or...get their benefitsor feels a bit more confident at the end of the daythen that's what I focus on” (p1, female staff member third sector organisation).

Other manifestations of meaning making which were cited by participants from both organisations included focusing upon the importance of familial and/or wider life importance in the midst of challenges and uncertainties:

“ ...it's about relativity, what's important and what's not important in your life” (p14, male middle manager local authority).

The meaning making examples from the participants illustrated the ways in which some people find meaning by contributing to society, providing for their family or striving for worthy work-related goals (Southwick et al., 2005).

A sense of meaning or purpose is consistently noted in the literature to promote resilience. Frankl's (1985) observations on concentration camp life and the development of the psychological means to survive it provide a seminal text on the importance of the transcendence role played by the ability to connect to something meaningful in adverse situations. Day and Schmidt (2007) for example observed head teachers levels of resilience to be related to the strength of their moral purpose. Finding positive meaning has been linked to positive adjustment outcomes when dealing with adversity, such as disease, bereavement and trauma (e.g. Linley & Joseph, 2004; Schok, Kleber, & Lensvelt-Mulders, 2010).

4.5.4.4 Managing emotions

The management of challenging and turbulent emotions was identified explicitly by some participants along with descriptions of ways they attained it. Such accounts tended to include reference to the role of reflection and self-awareness in enabling the management of difficult emotions.

“Such a breadth of emotions that one has to manage.....all these things are floating in the air and you got to try and like put lead weights on them so you can actually look at managing them, managing your emotions in a sensible way otherwise it just becomes too overwhelming” (p11, female senior manager local authority).

4.5.4.5 Connecting

Over half of participants described the role of supportive relationships as a key factor in enabling them to feel resilient in the face of organisational change and the accompanying personal challenges and adversities. Being “*in it together*” was often described as part of a key way in which the value of a supportive colleague network operates.

“I think usually in the process when you’ve gained kind of strength it’s been through discussions with colleagues like after meetings...a lot of how I managed to get through was the support of my colleagues...a coming togetherness...like we’re in it together and lets kind of battle our way through it” (p6, male staff member third sector organisation).

In addition having a network of people available for support, comfort, or providing a sense of perspective were also valued, this included family, friends and managers. A number of participants also saw their role of providing support to others as being significant in terms of their own personal resilience.

Whilst this theme was particularly evident in the scripts of participants who were in a management or supervisory role it was not exclusive to them. In addition this appeared to go beyond merely being a management role or competence to a sense that altruism offers something of benefit to the giver of support.

“this is happening what can I do about it....how do I look after people....other people that have been affected by it, it’s almost like focusing upon other people rather than what you’re kind of personally going through” (p7, female middle manager third sector organisation).

In Meredith et al's. (2011) review of resilience factors for military employees an expert panel suggested altruism be included due to its contextual relevance as an aspect of the sacrifice required by military personnel and its links to reductions in grief and survivor guilt. Whilst the current study group were employees of public and third sector organisations and not military personnel, the context of their organisational change setting appears however to have some parallels in terms of social responses to adversity.

4.5.4.6 Active coping and problem solving

Over half of the interviewees reported incidents of using action or approach oriented strategies faced with the challenges created by changes within their organisations. Strategies individuals described included being decision or action focused rather than procrastinating, focusing on the "*task in hand*", planning and preparation and engaging decisively in self-care strategies.

"I realised that it got to the point where it couldn't go on and I had to make some changes....I do that better now, go to the gym and I try not to take work home on a weekend" (p10, female supervisor local authority).

An active (approach and or problem focused) coping style has been found to correlate with resilience and well-being (for example see Moos & Schaefer, 1993; Werner & Smith, 1992; Southwick et al., 2005). Such approaches are typified by individuals who use an approach versus avoidance coping style when dealing with stressful life situations (Southwick et al., 2005). In his examination of factors accounting for resilience variations in health care settings, Mallak (1998) identified "*Goal-directed solution seeking*" to account for more than a quarter of the variance. In a study specifically relating to organisational change, Cunningham et al. (2002) found that change recipients who adopted a problem-focused coping style reported

greater readiness for organisational change, increased participation in the change process and an overall greater level of contribution to the change.

This theme also manifested as a problem solving approach where participants described strategies they utilised in order to support action and approach oriented stances to the challenges they faced. This included strategies for considering options and/or getting focused.

"It's ...learning to say stop, and not take work home, I need to turn off" (p6, male staff member third sector organisation).

"I do that better now.....go to the gym and I try not to take work home at the weekend" (p10, female supervisor local authority).

This is consistent with Stevenson, Phillips and Anderson (2011) who found clear boundary setting around work-life to be a defining characteristic of the resilience of doctors working with disadvantaged patients. Consciously selected strategies for exercising self-care and managing work/life boundaries are also included in this strategy category (Southwick et al., 2005).

4.5.5 Theme 6 resilience definitions

First level theme	Second Level Code	Third Level sub-code
6 Resilience Definitions	6.1 Coping	6.1.1 Surviving
		6.1.2 Being strong/tough
		6.1.3 Coping
	6.2 Adaptation	6.2.1 Getting through
		6.2.2 Moving forward
		6.2.3 Bouncing back
		6.2.4 Acceptance
	6.3 Growth	6.3.1 Coming out stronger
	6.4 Positivity	6.4.1 Positive frame of mind
		6.4.2 Looking for opportunities/influence

Figure 4.6 Hierarchy of Codes under Major Theme of Resilience Definitions

Initial use of the a priori resilience definition codes (Table 4.2) the “*basic*” theme relating to a view of resilience as a process of adaptation over time did not feature in the participant definitions and so was removed. Although this theme did not emerge in response to the specific question relating to definition, evidence of this process is present in a majority of the participant narratives relating to their resilience examples, this was true even of those participants who presented a comparatively narrow “*coping*” classification of definition. This would suggest that individuals may not have well developed constructs relating to personal resilience and/or are not aware that certain actions are linked to, or facilitate their resilience. Supporting individuals in making these connections could be beneficial. Military resilience programmes such as the CSF for example (see Section 2.13, Chapter 2) tend to include an educational component concerning what resilience actually involves and

what it does not. This is likely to be important in facilitating participant motivation and resilience skill development.

Resilience definitions ranged from those that focused upon a “*coping*” element to those with a more explicit recognition of a growth element to resilience. These themes were not mutually exclusive, participants may have provided definitions which contained more than one element .The labels assigned and frequency of occurrence is noted below:

Coping (9 participants)

Adapting (8 participants)

Growth (4 participants)

Positivity (10 participants)

The emergent categories parallel the diversity of resilience conceptualisation existent in the literature in line with Robertson and Cooper’s (2013) observation “The scope of different definitions vary from quite narrow conceptualizations that focus exclusively on recovery from trauma, through to wider definitions that see resilience as an ongoing protective capability that enables(learning and growth)” (p. 175).

4.5.5.1 Coping

Resilience can refer to effective coping and adaptation with loss or adversity (Tugade et al., 2004). This is consistent with the view of Lazarus and Folkman (1984) where coping is seen to be managing specific external demands that are appraised as taxing or exceeding the person’s resources. Participant coping

focused definitions were sometimes accompanied with a reference to strength *“being strong”* and/or maintaining health or *surviving*.

“it means.....to be strong, to cope.....to keep a strong steady stream” (p12, female middle manager local authority).

“staying alive” (p4, male senior manager third sector organisation).

4.5.5.2 Adaptation

Newman (2003) promotes resilience as a process of adaptation to adversity. Similarly Masten, Best and Garmezy’s (1990) view resilience as the process of successful adaptation despite challenging or threatening circumstances. Such a view of resilience was evident in the definitions of a number of participants:

“about adaptability, flexibility and being able to deal with internal ramblings and anxieties around something new or unexpected or unplanned” (p3, female senior manager third sector organisation).

Whilst the *“bounce back”* theme of resilience typifies many definitions within the literature the *“popular view of resilience”* (Neenan, 2009) It was cited by only two participants in their personal definitions of resilience and was incorporated into the adaptation theme:

“ability to bounce back like an elastic band”(p16, male middle manager local authority).

“bounce back ability” (p14, male middle manager local authority).

4.5.5.3 Growth

The growth element of resilience whereby there is a perception of emerging wiser, fortified or transformed in some way by the process of dealing with challenge and adversity was present in the definitions of four participants.

“you feel like hell but you come out of it stronger” (p11, female senior manager local authority).

“working through a challenge to change it into something that actually has benefitcoming out at the end with a vision” (p4, male senior manager third sector organisation).

All of these participants were senior managers whose perspectives may be influenced by their comparatively advantaged position with respect to organisational change. Bridges (1995) for example describes a *“marathon effect”* where senior managers may be significantly further progressed in dealing with the personal challenges of organisational change compared to employees who typically encounter the impacts later. These participants may simply be further on in the change process rendering the growth element more salient.

4.5.5.4 Positivity

The theme of positivity was included in the definitions of the largest number of participants of any one single definition theme. Definitions and conceptualisations typically included references to positive or motivational mind states in dealing with the challenges of change:

“trying to get through with a positive frame of mind” (p1, female staff member third sector organisation).

“seeing that things are going to get better in the future, keep going motivating yourself” (p9, male senior manager local authority).

This is supported by the review findings of Meredith et al. (2011) who *found “positive coping” “positive affect” and “positive thinking”* to be the top three factors from 18 *“evidence informed factors that promote resilience”* (p. 15).

4.6 Study discussion

Research question 1: In what ways does organisational change create adversity for individual employees?

The current study provides support for the notion that the impact of organisational change on individual employees constitutes adversity in line with those definitions that view adversity as common hardship and suffering linked to difficulty, misfortune or trauma (Fletcher & Sarkar, 2013). To the authors knowledge this is the first study of its kind to highlight such findings and builds on the body of knowledge that recognises the role of commonplace adversity within the resilience process (Windle, 2013; Luthar, Cicchetti & Becker, 2000; Luthar & Cicchetti, 2000), captured by Davis et al. (2009):

For most of us the adversities we encounter do not constitute major disasters but rather are more modest disruptions that are embodied in our everyday lives. (p. 14).

Organisational change is a common event in today’s economic landscape and one, according, to the current study, that has the potential to bring about disruption, challenges and suffering. The impacts that participants described i.e. the loss of valued resources, colleagues or status and the challenges of increased workloads whilst dealing with negative or challenging emotions would indicate that organisational change has the potential for adverse impacts at both the practical

and emotional level. This is indicated by the consequent negative emotional, well-being engagement and performance impacts described. Adverse impacts appear particularly pronounced in cases where procedural justice aspects to change management are perceived to be lacking and /or where values relating to professionalism and the psychological contract are challenged by change (Jacqueline & Kessler, 2003). This was most evident in the data from the third sector organisation participants and provides support for the body of knowledge relating to effective change implementation. Third sector employees can often have a values based motivational orientation to their choice of vocation and organisation, when change challenges those values such employees may experience it hardest.

Managers appear to incur an additional set of challenges when change impacts their organisation. Particular challenges include managing others through change and dealing with the anxieties and resistance that employees may present whilst managing one's own responses to the challenges of the situation. Managers may also be required to maintain a change champion or role model persona. Although, these change manager challenges are evident in the literature (see for example Conway & Monks, 2011), their inclusion here is noteworthy in relation to their potential resilience requirements above and beyond those of an individual employee facing change.

Research question 2: How do employees define personal resilience in an organisational change context?

Participants described resilience in terms that ranged from short uni-dimensional *bounce back* or *coping* focused definitions to richer constructs involving elements relating to a growth and development facet of resilience. This is in line with Grant and Kinman (2013) who in one of the few explorations of the resilience construct in

a vocational context found considerable variations existed when exploring personal representations of resilience in UK student and experienced social workers. Grant and Kinman further identified that the more experienced professionals generated more complex and multi-faceted articulations of the personal resilience construct. Whilst a rigorous demographic analysis of the current study sample in terms of role, tenure, profession etc. was not a component of the methodology, the *growth* definitions came from senior managers in the current study suggesting there may be support for the relationship found by Grant and Kinman (2013). An important additional finding from the current study relates to the observation that participants' definitions of resilience were not consistent with their descriptions of resilient actions and behaviours. Definitions typically lacked the depth and scope of the participants reported repertoire of resilience strategies and resources. Whilst participants often described the nature of their resilience as a process that had developed over time, this was not reflected in their definitions. This has implications for the current thesis in considering how this finding can be used to enable the design of effective resilience interventions that enable participants to develop an enhanced awareness of personal resilience and its components and contributors. Enabling participants to appreciate the links between their actions and resilient outcomes may form a functional component of resilience interventions.

Research question 3: What psychosocial strategies do employees utilise when displaying resilience in the face of organisational change?

The current study provides support for Wright et al's. (2013) assertion that the protective factors founded on the developmental literature have credence for situations requiring resilience in adults. Participants described a range of well supported strategies including flexibility in thinking, the use of social support and the

drawing on personal strengths and positivity as central to their experiences of resilience. A key contribution from the current study relates to the focus on resilience specifically within the context of organisational change an area previously neglected in the literature (see Chapter 2).

4.6.1 Study limitations

Study limitations need to be acknowledged. The sample was recruited from a limited geographic and sector pool via the purposive sampling approach. The sample is relatively small and does not include participants from private sector organisations. Whilst generalizability of findings was not the intent of the study, extending implications beyond a group of participants from the public and third sector is however restricted. As the participants were also volunteers, the experiences and narratives of a self-selected sample may differ from those of colleagues who did not come forward for the research indicating further potential sample restrictions.

The aim of some qualitative work is to have generalizability or transferability and, thus, sample size is important (Onwuegbuzie, 2003). In some qualitative approaches such as grounded theory however the notion of saturation does not refer to the point at which no new ideas emerge, but rather means that categories are fully accounted for, the variability between them is explained and the relationships between them are tested and validated (Green & Thorogood, 2004). Whilst issues relating to generalizability of the findings from a restricted sample size are noted, given that generalizability is not the object of the study and that the template analysis approach employed a level of rigour that ensured categories were fully accounted for and validated means that the results have credibility within the context of the overall thesis aims. The qualitative data and findings are to be utilised

alongside other data sources specifically a relevant literature base to inform intervention design.

The use of a priori coding in the template analysis approach may have limited the focus of the inquiry and restricted coding scope, an alternative set of a priori codes may for example have generated an alternative final template. The researcher was mindful of exercising reflexivity and a level of scrutiny throughout the coding process to facilitate robust analysis grounded in the data. Additionally the aim was to explore the salience of the existing literature to an original context of resilience in an organisational change setting, rather than to challenge its theoretical validity.

4.7 Conclusions and link to next chapter

The main purpose of this study was to identify employee resilience factors of salience in an organisational change setting a context which has not been addressed in the literature. At a research level, the study sought to contribute knowledge relating to the literature gap concerning employee resilience during change and additionally to generate information that could inform the design of a framework for resilience intervention i.e. to apply findings. The following contributions are offered. The study :

Provides support for the commonplace adversity characteristics of organisational change.

Identifies adult resilience factors pertinent to employees experiencing change in a third sector and public sector context.

Offers an original contribution concerning insights into employee conceptualisation of resilience in an organisational change context.

Considering application of the study findings, a wide range of psychosocial resilience factors utilised by a sample of organisational employees experiencing organisational change has been generated. Establishing the relative effectiveness of the various factors i.e. how and to what extent do they serve to promote individual resilience is beyond the scope of the current study. Taken with the existing literature relating to adult resilience factors however (see section 2.13), the findings present potentially informative results for the design of personal resilience intervention for employees in public and third sector organisations experiencing organisational change. This will form the focus of the next phase of the thesis. The findings relating to employee resilience factors will be carried into the next phase of the thesis where they will be utilised in the design of a framework for employee resilience development. An evidence based approach (Briner & Rousseau, 2011) will be taken where findings from the current study provide *contextual* and *stakeholder* evidence sources which will be combined with "...practitioner expertise and judgement ...and best available research evidence" (Briner, Denyer & Rousseau, 2009, p.19). Factors identified in the current study will be considered along with a relevant literature and evidence base to inform framework design outlined in Chapter 5 which follows.

Chapter 5: Development of initial intervention framework

5.1 Chapter overview

The overall aim of this thesis was to create and test a development framework to promote resilience in employees in an organisational change context. This chapter outlines the evidence based practitioner approach applied to an initial framework development process. Seven components drawn from the literature and the findings of Study 1 were included in the framework. Modes of delivery were selected and training and development activities for initial trialling were formulated. This chapter describes the process of development of the first framework draft. Testing and iteration of the framework is described further in chapters 6 and 7. Figure 5.1 illustrates the timeline for the process of testing and refining the framework.

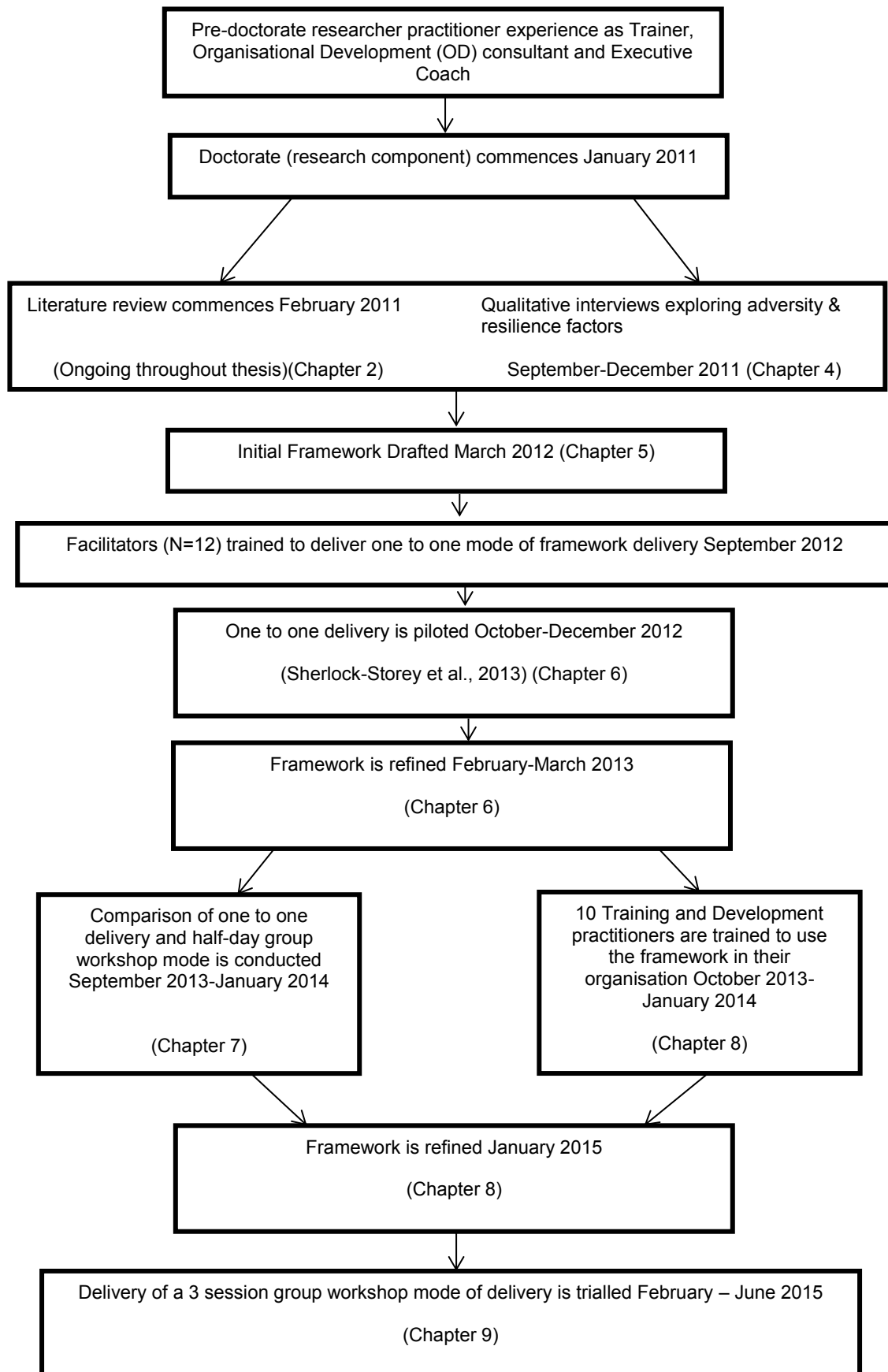


Figure 5.1 Timeline for Process of Developing and Testing the Resilience Development Framework

5.2 Evidence based design

In line with the professional doctorate context, this thesis adopted an evidence based practitioner (EBP) approach to the development of intervention and practice (Briner & Rousseau, 2011). An EBP approach seeks to utilise a range of sources of evidence in making decisions about intervention selection and design. Rousseau and Barends (2011) outline four sources of evidence to use: 1) Best available scientific evidence such as systematic reviews; 2) contextual information such as context of the organisational setting for the intervention; 3) practitioner reflection and judgement; 4) stakeholder views. The inclusion of components of the framework developed in this thesis were informed largely by evidence from the literature relating to resilience factors (see chapter 2) and supported by the findings from Study 1 (Chapter 4).

The literature review in Chapter 2 identified a clear gap with regard to resilience intervention during organisational change which this thesis attempted to address. Within EBP, practitioner experience and judgement is one of the sources of evidence. The researcher drew on her practitioner experience, awareness of the stakeholder and organisational contexts and utilised reflexivity to make decisions about how to translate the literature and qualitative findings into the proposed framework of interventions. Feedback from stakeholders was gathered prior to a final iteration of the framework (Chapter 7).

5.3 Practitioner considerations

The development of the framework was influenced by contextual considerations of practice i.e. *who is the framework intended for?* that led to the following design aims:

- Allows for brief *microintervention* delivery - to provide a resource efficient approach that would be practicable for the target organisations (public and/or third sector).
- Needs to be accessible and engaging for intervention participants –engaging materials and activities that facilitate retention and training transfer.
- User friendly for practitioners- a framework that is easy for training and development practitioners and/or trainee Occupational Psychologists to master, not dependent upon high levels of psychological expertise.

5.4 Brief intervention

In the clinical field, microinterventions are described as “discrete, time-limited applications of a single psychotherapeutic technique” (Strauman, Goetz, Detloff, MacDuffie, Zaunmuller & Lutz, 2013, p. 544). A microintervention is often utilised to enable practitioners/researchers to apply an empirical approach to the evaluation of a therapeutic treatment impact within a relatively short space of time. Luthans et al. (2006a, 2008) have applied the concept of microintervention to PsyCap using an approach which they describe as:

...short, highly focused interventions use a pre-test (the PsyCap questionnaire PCQ) post-test (PCQ) control group experimental design. These microinterventions consist of 1 to 3 hours ...workshops generally follow the PsyCap Intervention (PCI) model and ...content. (p.213)

Luthans and colleagues have demonstrated the successful impact of microinterventions using web-based PsyCap delivery (Luthans, Avey & Patera, 2008) and one to two hour facilitated sessions (Luthans et al., 2006b). The PsyCap microintervention studies found an increase of around 2% in employee PsyCap that is claimed to have significant performance and potential financial gains for organisations (Luthans et al., 2007, p. 217). The microintervention approach was

considered consistent with both the empirical requirements and the practitioner aims of the thesis to design and validate resource efficient interventions.

5.5 Modes of delivery: group workshops and one to one sessions

The dominant mode of workplace resilience programme delivery is often group based, for example around 70% of the studies identified in recent reviews of workplace resilience programmes (Chapter 1) utilised group formats of delivery. The same reviews however also identified one to one delivery modes to offer the most effective mode of delivery (Vanhove et al., 2015). This thesis set out to test alternative forms to examine the relative efficacy of both group and a one to one delivery modes. This was in order to contribute both to the literature relating to knowledge concerning programme efficacy and to address the practitioner considerations (see Section 5.3).

5.6 Framework development

The selected components of the framework were based on; a comprehensive review of resilience factors conducted by Meredith et al. (2011), findings from Study 1, and Psychological Capital (PsyCap) (Luthans et al., 2006, 2007). Table 5.1 illustrates the sources and the selected framework components, these are expanded upon in the sections that follow.

Table 5.1

Evidence Sources underpinning the Framework components

Meredith et al. (2011) factors	Psychological Capital Luthans et al. (2007)	Resilience themes from qualitative study (chapter 4)
Positive affect	Optimism	Positive personal resources
Positive thinking	Self-efficacy	Cognitive flexibility
Behavioral control	Hope	Meaning
Realism	Resilience	Managing emotions
Positive coping		Connecting
Support		Active coping
Connectedness		
Altruism		
Physical fitness		

Resilience Framework Design

- Optimistic style*
- Using Strengths*
- Getting Perspective*
- Self-efficacy*
- Goal setting*
- Support networks*
- Self-care*

Meredith et al's. (2011) resilience factors are based on the most comprehensive available review of resilience factors in adult populations involving examination of 270 studies. The review also included input from an expert panel. A wider *individual*, *family*, unit and *community* resilience focus was taken within the review. This was consistent with the military focus that aimed to strengthen soldier and wider operational and family unit resilience not purely focusing at an individual level. All of the *individual* factors were considered relevant for guiding the development of the framework in this thesis. Two relating to social support were drawn from the *family* and *community* domains and were included due to the salience of social support in the literature (Chapter 2) and as confirmed by findings from Study 1 (Chapter 4).

Table 5.2 outlines the selected Meredith et al. factors:

Table 5.2

Selected Resilience Factors from Meredith et al. (2011) (p. 21)

Resilience Factors

Individual factors

Positive Coping: *The process of managing taxing circumstances, expending effort to solve personal and interpersonal problems and seeking to reduce or tolerate stress or conflict, including active/pragmatic, problem focused and spiritual approaches to coping.*

Positive affect: *Feeling enthusiastic, active and alert, including having positive emotions, optimism, a sense of humour (ability to have humour under stress or when challenged), hope, and flexibility about change.*

Positive thinking: *Information processing, applying knowledge, and changing preferences through restructuring, positive reframing, making sense out of a situation, flexibility, reappraisal, refocusing, having positive outcome expectations, a positive outlook and psychological preparation.*

Realism: *Realistic mastery of the possible, having realistic outcome expectations, self-esteem and self-worth, confidence, self-efficacy, perceived control and acceptance of what is beyond control or cannot be changed.*

Behavioral control: *The process of monitoring, evaluating and modifying emotional reactions to accomplish a goal (i.e., self-regulation, self-management, self-enhancement).*

Physical fitness: *Bodily ability to function efficiently and effectively in life domain.*

Altruism: *Selfless concern for the welfare of others, motivation to help without reward.*

Social support factors

Support: *Perceiving that comfort is available from (and can be provided to) others, including emotional, tangible, instrumental, informational, and spiritual support.*

Connectedness: *The quality and number of connections with other people in the community; includes connections with a place or people of that place; aspects include commitment, structure, roles, responsibility, and communication.*

PsyCap is consistent with the thesis proposition of resilience both as a personal resource and as a POB (see Chapter 2). Previous research also supports PsyCap having capacity for development and the potential for workplace application and relevance during organisational change (Avey, Wernsing & Luthans, 2008). Whilst PsyCap in itself is a higher order construct with resilience as a component, its positioning within the framework is in line with Luthans et al's. (2006b) view of

resilience which suggests the other elements of PsyCap may act as pathways to resilience. Based on this view hope, optimism and self-efficacy were included as components of the framework with resilience positioned as the target outcome. PsyCap constructs are also in line with certain resilience factors identified by Meredith et al. (2011), see Table 5.2.

5.6.1 Framework and intervention content

The sources of evidence informed selection of components of the framework. Final inclusion was guided by the contextual parameters of the intended framework and interventions. The aim was to balance the inclusion of those factors proven to facilitate adult resilience along with a consideration of the criteria relating to application i.e. involving accessible, relatively brief programmes for public/third sector employees experiencing change. Developing the framework and intervention activities required contextualisation of the evidence based factors for the study settings. Some contextualisation of the selected resilience factors was required so that there was a fit for the target audience of employees experiencing change. For example, physical fitness is a factor in the Meredith et al. (2011) list of resilience factors and of significant importance to soldier resilience in a military setting. This served to guide the inclusion in the framework of a wider construct of paying attention to personal health and well-being which included attention to physical activity rather than an explicit and exclusive emphasis on physical fitness per se. This “*self-care*” factor provides a more contextually relevant fit for the target audience.

Following consideration of the literature, findings from Study 1 (Chapter 4) and the practitioner considerations, seven components were selected for inclusion in the framework:

- Optimistic style
- Using Strengths
- Getting perspective
- Self-efficacy
- Goal setting
- Social support
- Self-care

These seven components provided the topic areas for the intervention designs. Information relating to each component is described along with a rationale for inclusion. Information relating to models and approaches that informed the content of the intervention and finally a brief outline of activity or approach proposed within the resilience intervention is discussed.

5.6.1.1 Optimistic style

The role of an optimistic explanatory style can be identified consistently in the resilience literature (see Table 2.2, Chapter 2). Within Study 1 resilient participants confirmed the value of what Southwick et al (2005) termed “*cognitive flexibility* “ which includes: (1) *explanatory style* “a specific explanatory style that allows (individuals) to persevere, embrace challenges and grow from failure”; (2) *cognitive reappraisal* “the ability to cognitively reappraise ,reframe or find positive meaning in an adverse event” (p. 270). Optimism features in both Meredith et al’s. (2011) list of resilience factors and is a component of PsyCap. The concept of optimism was well supported for inclusion in the framework.

Although Scheier and Carver (1985) maintain optimism can be conceptualised as a personality trait the concept of *learned optimism* offers an alternative view (Seligman, 2011). This latter view suggests that an optimistic explanatory style may

be cultivated. This thesis adopts Seligman's view of optimism in the context of a development intervention.

The notion of *thoughts lead to emotions* has long been a principle underpinning the cognitive behavioural paradigm which has prevailed as a model of therapeutic intervention for some time (Beck, 1972). The "ABC" model of thinking (Beck, 1972; Neenan, 2009) was selected as an appropriate model for intervention content. The ABC model is a central component of the Penn Resilience Programme (PRP), (Gillham et al., 1990), and the Comprehensive Soldier Fitness programme (CSF), (Cornum et al., 2011), (see Section 2.13, Chapter 2). Through use of the ABC model individuals are encouraged to understand how their emotional responses (Consequences) to an event (Antecedents) are impacted by their thinking (Beliefs and self-talk). Intervention participants completed exercises that illustrate examples of the ABC of thinking and emotion, and then considered examples of their own where they may have displayed functional or non-functional thinking patterns. This process is designed to facilitate greater awareness of thinking patterns and their links to emotional states.

5.6.1.2 Using strengths

The use of character strengths (Peterson & Seligman, 2004) was considered a viable means to address the resilience factor of *positive affect* (Meredith et al., 2011) or *positive emotions* (Study 1) due to the links between the use of strengths and experience of positive emotions and/or well-being (Proctor, Maltby & Linley 2011; Seligman et al., 2005). In Study 1 use of strengths emerged as a major theme. Individuals displaying a resilient response in the face of organisational change described using elements of themselves which enabled them to deal with the challenge or found that focusing upon the use of a strength or virtue (for

example helping others, tapping in to humour) detracted or distracted from the current challenge or adversity. Some study 1 participants described the role of strengths such as humour as an important resource in dealing with challenges faced during change. The use of individual strengths is also thought to operate as a mechanism to facilitate engagement and meaning (Harzer & Ruch, 2013).

In line with the desire to utilise accessible and engaging materials and models within the interventions, the *VIA strengths* model (Via Organization, 2015) which includes access to a free on-line character strengths profile was used. The VIA strengths model is based upon the character strengths and virtues work of Peterson and Seligman (2004). Participants identified their *signature strengths* i.e. those top five or so individual strengths from the potential 24 in the VIA strengths framework and were prompted and supported in considering how to make greater use of these.

5.6.1.3 Getting perspective

The ability to gain a helpful perspective such as a state of acceptance was described by participants in Study 1 and captured in Meredith et al's. (2011) definition of *realism* (Table 4.2) which represents a consolidation of perspective related factors found to be prominent in the literature. Attaining perspective can promote resilience by enabling individuals to avoid being overwhelmed by their circumstances, creating a sense of containment, diffusing emotional impact and/or facilitating the focusing of energies. Perspective may be attained via a number of strategies such as *scaling* a challenge relative to other challenges or other people's circumstances, tapping into *spirituality* e.g. the belief that *things happen for a reason* or consciously, considering possible outcomes and *worst case scenarios*.

Within the application of the framework, intervention participants were introduced to a range of strategies people use when faced with a challenging situation or

adversity and were encouraged to reflect upon their own strategies. An adapted version of the “*circle of influence*” (Covey, 1990) was utilised as an easy to use visual and summative aide memoir for participants enabling them to focus energies on things that can be influenced rather than ruminating on things outside their control.

5.6.1.4 Self-efficacy

Self-efficacy is a component of PsyCap “having confidence to take on and put in the necessary effort to succeed at challenging tasks” (Luthans et al., 2007, p. 3) and is included in Meredith et al’s. (2011) concept of realism (see Table 5.2). Additional confirmation for the relevant inclusion of efficacy in the resilience framework also came from findings in Study 1. Participants cited examples of how personal confidence in their ability to take on a challenge or setback had been a key factor in their resilience experience. Within study interventions, the term “*can-do thinking*” was utilised as a more accessible and meaningful label for self-efficacy for the employee audience.

Intervention participants were encouraged to identify a recently experienced workplace situation where they experienced self-efficacy (*can-do thinking*). Through articulation and sharing of these experiences and including input from facilitators, participants become aware of a range of potential self-efficacy strategies and gain insight into their own “*default*” approaches.

The approach taken here aimed to draw upon Bandura’s (1997) conclusions about how to develop self-efficacy i.e. through opportunities to experience mastery/success, vicarious learning/modelling, social persuasion and positive feedback and psychological and physiological arousal and well-being. By encouraging participants to generate examples of success and mastery, to relive

positive experiences and to share examples with others it is anticipated self-efficacy may be promoted.

5.6.1.5 Goal Setting

The goal setting element of the framework was included because of its presence as a key facet of PsyCap and the links to a positive or proactive coping style identified in Meredith et al. (2011) review and in Study 1. Within PsyCap, *hope* is defined as “persevering towards goals and, when necessary redirecting paths to goals” (Luthans et al., 2007c, p. 3). PsyCap hope is in turn based upon Rick Snyder’s extensive work on the construct of hope: “a positive motivational state that is based on an interactive derived sense of successful agency (goal-directed energy), and pathways (planning to meet goals)” (Snyder, Irving & Anderson 1991, p. 91).

Within the resilience interventions participants were encouraged to focus on resilience/well-being goals. A goal setting template based on Snyder’s (1995, 2000) hope concept comprised of *goals*, *pathways* and *agency* was utilised to facilitate this process (see Appendices G & H).

5.6.1.6 Social Support

The role of social support has a long tradition in the stress literature where socially supported individuals i.e. those with family and friends who provide valued emotional and material resources perceive stressful situations to be less threatening (Cohen & Wills, 1985). In adult resilience studies, meaningful relationships and support have been found to co-exist with important individual resilience outcomes (Flach, 1997; Richardson 2002). Specifically, Masten and Obradovic (2008) state that “social groups hold the potential for providing social capital and augmenting the adaptive capacity of the individuals in the group” (p. 8) when resilience is needed.

Social support emerged in Study 1 to be a prevalent theme of the resilience strategies and responses of participants (Chapter 3). Many participants described the role of supportive colleagues or a caring and cohesive family network as having been an important variable in enabling them to display a resilient response to an organisational change related challenge or setback.

Intervention participants were required to consider their social support network and ways in which it may be strengthened. A support network checklist was developed by the researcher for inclusion in the resilience interventions. The checklist drew upon instruments available in the social support literature (Sarason, Levine, Basham & Sarason, 1983; Sherbourne & Stewart, 1991) combined with Meredith et al's. (2011) construct of *connectedness* (see Table 5.2) which points to the importance of quantity but more importantly quality of connections. The checklist encourages reflection on the nature of the individual's network i.e. *Who is in it? What gaps exist?*, as well as encouraging individuals to reflect upon their own approach and behaviours in utilising a network e.g. *"I am able to ask for help when I need it"*. The checklist also includes reflecting on the role of helping others, included in order to enhance the resilience factor of *altruism*. Individuals are encouraged to consider actions they may take to strengthen their use of a network e.g. *"It would be good to spend more time with X... ?"*.

5.6.1.7 Self-care

Strategies for self-care that facilitated resilience were evident in the resilience narratives of the Study 1 participants. These were incorporated as a sub-code of *active coping* within the Study 1 qualitative template (see figure 4.5). This is in line both with Southwick et al's. (2005) concept of *active coping style* which is a broad construct including both physical exercise and functional coping behaviours, and

Meredith et al's. (2011) *positive coping*. Self-care has been demonstrated to be linked with resilience, particularly in high demand occupational settings (McCann, Beddoe, McCormick, Huggard, Kedge et al., 2013; Mealer, Moss & Jones, 2012).

An aim within the design of the framework at the level of intervention content was to utilise models or approaches that would be engaging and memorable for participants in order to enhance impact. For the purposes of self-care, a framework developed from evidence gathered in the UK government's Foresight Project on Mental Capital and Wellbeing was utilised (Kirkwood, Bond, May, McKeith & Teh, 2008). The Foresight Project, drew on state-of-the-art research about mental capital and mental well-being through life and resulted in the "*Five ways to well-being*" led by the New Economics Foundation (NEF):

The Five Ways to Well-being are a set of evidence-based actions which promote people's wellbeing. They are: Connect, Be Active, Take Notice, Keep Learning and Give. These activities are simple things individuals can do in their everyday lives. (New Economics Foundation, 2015)

The credible evidence base for the *five ways* along with its engaging format and accessible website of resources rendered this model appropriate as a way of facilitating exploration and goal-setting in the area of self-care. In developing and evaluating the framework in this thesis participants were asked to consider their current performance in each of the five areas and what actions they may take in the five suggested areas to strengthen well-being.

5.7 Overview and links to next chapters

This chapter has outlined the underpinning theoretical, evidence and practitioner base that informed the design of an initial framework for resilience development and the design of interventions. Chapter 6 briefly outlines an initial pilot study involving a first application of the framework. This is followed by Study 2 in Chapter 7 which compares a group workshop and one to one mode of delivery.

Chapter 6: Testing the initial framework, pilot study and stakeholder feedback

6.1 Chapter overview

This chapter briefly outlines the initial piloting of the thesis framework. Research findings from a pilot study were published (Sherlock-Storey et al., 2013). This chapter additionally includes information relating to stakeholder feedback and researcher reflections that informed the subsequent iteration of the framework for use in Study 2 (Chapter 7).

6.2 Piloting a one to one delivery mode

The pilot study which took place during October – December 2012 involved a small scale exploratory study with N=12 middle managers in a local authority experiencing significant organisational change. At the time of the study participants were required to implement budget cuts of thirteen million pounds and were involved in making cuts to service delivery, restructuring departments, making staff redundant and in some cases faced potential redundancy themselves. The study piloted a brief three session one to one programme of resilience development based upon the framework (see Chapter 5). Facilitators were trained by the researcher to deliver the programme. Participants completed pre-work activities, maintained weekly logs and met with a trained one to one facilitator for ninety minutes three times over a period of six weeks. Results indicated that the intervention was effective in raising participants' levels of hope, optimism, resilience and change-efficacy. There was a positive trend for improved self-efficacy but this was not significant. The pilot study was used to inform the next iteration of the development framework through consideration of stakeholder feedback and researcher reflection.

6.3 Stakeholder feedback

Following the delivery of the pilot programme feedback was sourced from two stakeholder groups, intervention participants in the pilot and feedback from one to one facilitators involved in the piloting of the framework.

6.3.1 Participant feedback

Qualitative feedback was obtained from participants (N=6) involved in the pilot (Timson, 2015). The study concluded the following:

- Participants generally found the programme materials useful relevant and practical, the area of optimistic explanatory style however was described as more difficult to understand.
- Participant engagement with the materials was mixed not all completed pre-work and some found the completion of weekly logs a challenge.
- Participants particularly valued the “*time-out*” reflective space created by the sessions with a one to one facilitator.
- The “*safe*” and “*supportive*” environment created by a facilitator who was external to the organisation was seen to be a positive feature of the programme.
- “*Realisation*” or personal insights for example around the *circle of influence* had been a key outcome for some participants.
- Participant reported behavioural outcomes from the programme included, increased focus, “*stepping back*” (getting perspective) and improved interactions with others.

6.3.2 Facilitator feedback

Informal feedback was gathered by the researcher using telephone or face to face interviews. Four of the five facilitators who were involved in the pilot study provided feedback on their experiences of delivering the one to one intervention. Feedback relating to programme format and content was sought; the following themes were relevant to the current framework review focus:

6.3.2.1 Materials and content

Facilitators reported positively on their experience of using the programme workbook. The structure provided by the materials was particularly valued. All facilitators reported the importance of participants having undertaken pre-work and coming to the session prepared. Where participants had not completed any pre-work this was seen to impact negatively on the efficient use of time in the relatively brief three session programme and was also taken as a potential sign of participant relative level of engagement with the programme. Weekly logs were not always completed by participants and some facilitators suggested these could be refined to be more accessible to participants.

6.3.2.2 Session length and intervals

Facilitators indicated that the ninety minute delivery mode for the first session was challenging but adequate for sessions two and three. Although most facilitators indicated they had managed the first session effectively some suggested that additional time would be beneficial. The three weekly intervals between sessions was indicated to have been effective and created a focus and momentum for the programme.

6.3.2.3 Goal setting

A key element of the one to one programme involved the participant setting a personal resilience or well-being related goal that would be progressed over the duration of the programme. Facilitators suggested the majority of goals were directly linked and/ or flowed from the seven resilience areas of the framework. The nature of the goals set by participants had considerable variability ranging from practical and quite focused short term goals such as “*taking a regular lunch-break*” to broader developmental goals such as career progression. Where goals were involved, the facilitator would support the participant in framing and working on initial steps towards a wider goal. All facilitators confirmed that participants had made progress against goals set for the period of the programme.

6.4 Researcher reflections and conclusions

Following the pilot (where the researcher was involved as a facilitator), and considering feedback from stakeholders the following reflections were noted:

- The pre-work handbook provides a useful structure for the programme and is highly facilitative to session 1 when it has been completed by the participant.
- Ninety minutes is challenging but manageable for session 1 where participants have completed pre-work, where not completed this renders session 1 an introduction and initial exploration of the materials. Ninety minutes is adequate for sessions two and three.
- 3 week intervals seem brief but appear to allow adequate time for progress and not too much to allow lack of focus.
- Logs are not used by all coachees and perhaps not as straightforward as they could be.

- Participants and facilitators are positive about the workbook content and the programme overall.
- Optimistic style appears to be the area that participants engage with less and may require more input/explanation from the facilitator. Facilitators themselves may be less comfortable with this component of the framework?

6.5 Framework modifications and iteration

The following iterations were made following this pilot study:

Changes were made to the weekly log utilised within the one to one programme. In the pilot version the log was driven by the seven components of the resilience framework with participants required to note their use and application. The modified version now required participants to note any work challenges or setbacks experienced and which if any of the resilience factors they had utilised (see Appendix H).

Although feedback suggested optimistic style to be more challenging in terms of delivery and utilisation, a decision was taken not to modify content or materials at this point. The feedback at this juncture did not enable the researcher to distinguish clearly whether reported challenges were as a consequence of the programme content or a lack of facilitator competence and confidence in applying this element of the programme. It was decided to provide feedback and further briefing to facilitators in subsequent studies to enhance their understanding of the role of this component and their confidence in applying it. One to one facilitators in future programmes would be required to include a more explicit input on *the ABC model* in session one for intervention participants and to work through pre-work examples with participants to ensure the concept was understood.

6.6 Conclusion and links to next chapter

This chapter has presented feedback from an initial pilot of the resilience development framework and identified required amendments. Chapter 7 presents Study 2, a quantitative study comparing a group workshop delivery mode with a refined one to one delivery mode based on the learning and conclusions presented here. The most recent literature suggests that a one to one element to employee resilience intervention may be beneficial (see section 2.21). This was supported by the pilot study which both preceded and contributed to the 2015 literature outlined in chapter 2. A practitioner aim of the doctorate is however to develop effective evidence informed interventions that are as resource efficient as practicable hence the focus upon comparing the two delivery modes.

Chapter 7: Comparison of workshop and one to one delivery of resilience intervention

7.1 Chapter overview

This chapter presents the methodology and findings of a quantitative study that examined the impacts of two forms of resilience development intervention based on the framework described in Chapter 5. Analyses were conducted in order to assess whether a workshop and one to one mode of the framework had a positive impact on participant resilience, change efficacy, and well-being. Following a description of the study methodology the results of the analyses are presented. This chapter concludes with summary conclusions drawn from the study and the results and implications for the subsequent and final phase of the thesis study. A wider discussion is included in Chapter 10 where the position of this study is considered in the context of the wider thesis.

7.2 Study rationale

The literature review in chapter 2 positioned the overall thesis rationale by outlining the contextual theoretical and empirical foundation and highlighting the knowledge gap concerning employee resilience in organisational change contexts. The current study rationale is based upon conclusions and observations identified within chapter 2 and in some areas supported by the quantitative exploration of employee resilience in study 1 (Chapter 4). The specific tenets are outlined here;

- Organisational change may constitute a situation of adversity for individual employees (Jimmieson et al 2004; Oreg et al 2011; see also study 1, section 4.5.2)
- Employee resilience may impact upon the success or otherwise of organisational change efforts (Wanberg & Banas, 2000; Shin et al 2012)

- Resilient employees may experience a range of well-being and performance benefits (see section 2.11)
- Resilience may be conceived as a positive organisational behaviour (POB) capable of development (Luthans 2006, see also section 1.5)
- Interventions involving relatively short and resource efficient delivery may provide effective ways for developing employee resilience(Luthans et al 2007)
- Interventions involving elements of one to one delivery and/or support may be expected to have a more positive impact on employee resilience compared with other interventions.(Sin & Lyubomirsky, 2009, see also section 2.22)
- Workplace applications of resilience currently lacks a body of focus in the literature particularly with respect to empirical studies in an organisational change context.(Robertson et al., 2015; Vanhove et al., 2015; see also section 2.14 and section 2.21)

7.3 Study aim and hypotheses

The study sought to inform the literature gap relating to employee resilience intervention in an organisational change context by addressing two of the thesis research questions (see section 1.8):

RQ5: Can relatively brief interventions based upon the thesis resilience development framework impact positively on employees who are experiencing organisational change?

RQ6: Which mode of delivery, group or one to one is most effective for promoting resilience, efficacy and well-being outcomes?

Specifically this study sought to examine the comparative impacts on participant self-reported levels of resilience, well-being, and change efficacy following participation in one of two resilience interventions either a group workshop or a one to one programme.

The study took place in 2013 prior to the availability of the Vanhove et al. (2015) and Robertson et al. (2015) reviews of workplace resilience interventions outlined in chapter 2. These reviews have since integrated available empirical findings and highlighted the potential (albeit based on a limited number of studies) for one to one interventions to be a more consistently effective mode of delivery than group training which has a more variable profile in terms of positive impacts on study variables (see sections 2.22 & 2.25). Extant literature relating to other areas of training and development such as positive psychology interventions (see section 2.20) along with the available workplace resilience studies (see Table 2.4) including the thesis pilot study (chapter 6) informed the current study design and hypotheses. Whilst it was anticipated that both forms of microintervention utilised within the study would positively impact participant outcomes, the one to one delivery mode was anticipated to lead to enhanced outcomes as presented in the study hypotheses:

H1 Resilience micro interventions consisting of group workshops or one to one programme delivery will positively impact participant levels of resilience, well-being and change-efficacy.

H2 One to one resilience programme delivery will produce greater increases in participant levels of resilience, well-being and change efficacy when compared to a group based delivery mode.

H3 One to one resilience programme delivery will produce more sustained post programme increases in participant levels of resilience, well-being and change efficacy when compares to participants receiving a group based delivery mode.

7.4 Method

7.4.1 Design

The study involved a quasi-experimental design. Volunteer participants were randomly allocated to one of two treatment conditions, either a half-day resilience workshop or a six week, three session one to one resilience development intervention. Resilience intervention formed the independent variable with two levels, workshop, or one to one delivery modes. Dependent variables included self-assessed measures of resilience process, well-being, and change efficacy. Volunteer participants were randomly allocated to one of the two intervention conditions. The relatively small numbers of volunteer participants and study time constraints rendered a control or waiting list control group non-viable.

Ethical approval to proceed with the proposed study was sought and obtained from Northumbria University's Faculty of Health and Life Sciences Ethics Committee prior to the commencement of the study.

7.4.2 Participants

Purposive sampling was employed to enlist participants who were employees of two Social Housing Organisations based in the North East of England. The organisations volunteered participation in the research project in response to a request from the researcher through a professional social networking site and were included because they met the criteria of being organisations experiencing change (see Chapter 1, Section 1.7). Each organisation employed around 120 employees at the time of the study.

An initial request for participants resulted in $n = 62$ volunteers who completed the study questionnaire at baseline and gave consent for participation. Of the initial

volunteers, n = 54 progressed to the intervention stage of the study of these, n = 48 completed the study questionnaires at all three time points thereby forming the total final sample for the study and analysis, this equates to an attrition rate of 18.5% following intervention. Participants were equally divided between the two study conditions, group workshop n= 24 and one to one delivery n = 24. Participant demographics are provided in Table 7.1.

Table 7.1

Study 2 Participant Demographics

	One to one condition (n = 24)					Workshop condition (n= 24)				
Org	A 13 (54.2%)		B 11 (45.8%)			A 14 (58.3%)		B 10 (41.7%)		
Sex	Male 9 (37.5%)		Female 15 (62.5%)			Male 5 (20.8%)		Female 19 (79.2%)		
Age	18-25 0 (0%)	26-40 7(29.2%)	41-55 17(70.8)	55+ 0(0%)		18-25 1(4.2%)	26-40 9(37.5%)	41-55 12(50%)	55+ 2(8.3%)	
Role	non- mgr 13 (48.1%)	supervisor 39 (11.1%)	mgr 7 (25.9%)	senior mgr 1 (3.7%)	other 3 (11.1%)	non- mgr 11 (45.8%)	supervisor 3 (12.5%)	mgr 6 (25%)	senior mgr 3 (12.5%)	other 1 (4.2%)

Organisation A set an upper limit of 35 employees being involved in the interventions in order to minimise operational impacts. Executives of Organisation B were satisfied for all employees to have the opportunity to volunteer for involvement in the study. Following the initial communications and volunteering process, the procedure was consistent for all participants.

In Organisation A employees were encouraged to volunteer by registering their interest to the Director of Finance and Support. Employees were advised that accepted volunteers would be supported by the organisation to take the necessary time out of operations to participate in the study. This call resulted in a volunteer group of n = 35. The Director of Finance sent an email to all volunteers confirming their participation and included with this confirmation the research participant brief

document (see Appendix I) which participants were advised to read before proceeding with their involvement. The e-mail also contained the link to the on-line study questionnaire which participants were advised to click once they had read the full participant brief.

In Organisation B the Assistant Director of Housing distributed an e-mail to all employees which briefly described the research study and the Executives support for it. Employees were advised to look out for an email from the researcher to follow in the next couple of days. The researcher posted a group e-mail to all organisation employees. The email contained a brief introduction and invitation to participate in the research. Employees were advised to read the participant brief (Appendix I) which was attached to the e-mail to find out more information and inform their decision to participate. The link to the on line study questionnaire was contained within the email. Volunteers were required to click the link should they wish to proceed with involvement in the study.

7.4.3 Measures

The study sought to test the extent to which intervention can enhance resilience in employees. Examination of the concept of resilience as a personal resource with POB qualities was also a feature of the study. Selected variables for measurement included a measure of the resilience process in order to assess the impact of intervention on participants' resilience and to address the key study question as to whether resilience programmes can make a difference to levels of resilience. Well-being was included to assess the extent to which resilience may facilitate enhanced well-being through the *resource caravan* principle for example (Hobfoll, 2002). Finally a measure of change-efficacy was included to examine whether resilience operates as a functional personal resource for organisational change through

facilitation of a positive orientation towards change in line with Van den Heuvel et al's (2010) personal adaptation model (see Figure 2.1, Chapter 2) Change efficacy is linked to positive organisational change outcomes through employees adaptation to change and supports individuals in functioning well in the workplace despite changes (Wanberg & Banas, 2000).

Data was requested from all participants at three time-points pre and post intervention using on-line questionnaires comprised of the following measures:

7.4.3.1 Workplace Resilience Inventory (resilience process measure)

The Workplace Resilience Inventory (WRI) McLarnon and Rothstein (2013) is a recently developed measure selected for inclusion in the current study because of its contextual appropriate workplace specific application. The WRI is based upon King and Rothstein's (2010) resiliency model where resilience is conceptualised as *the protective factors and processes by which well-being is restored rather than the end point one arrives at following an adverse event*. The King and Rothstein conceptualisation was deemed to be consistent with the current study aim to explore ways in which participants resilience processes may be enhanced via participation in an intervention. The WRI has been designed with a focus upon a specific and isolated adversity; many items are prefixed with "*Since the adverse event...*" where adversity is positioned as a discontinuous or discrete event. The nature of change experienced within the study organisations at the time of the study was not that of an isolated event but of a continuous and ongoing change (see section 1.7). The notion of the change or adversity as a discrete event was not therefore considered appropriate. The WRI authors were consulted about a possible modification to some of the items to ensure contextual fit for the study. The authors confirmed that modifying those items which contained "*Since the adverse event...*"

to replace the “*adverse event*” with “*change or prospect of change at work ..*” would be appropriate. This change was applied to the WRI items containing the reference to an adverse event.

In the completion of the WRI participants respond to individual items using a five-point Likert-style scale 1 (strongly disagree) to 5 (strongly agree). The WRI is the only assessment designed to assess resiliency as proposed by the King-Rothstein (2010) model. It has demonstrated good internal consistency, convergent and discriminant validity amongst the scales that comprise it (McLarnon & Rothstein, 2013). Three scales from the WRI were included in the current study measuring affective, behavioural and cognitive self-regulatory processes. Selected scales were consistent with the targeted outcomes of the resilience interventions which were designed to bring about changes in participant *resilience processes*. The WRI measures other, additional aspects of resilience such as personal and support characteristics which King and Rothstein (2012) refer to as *protective factors* within their model. Reactions/attitudes to adversities are also included in the Inventory. These scales were considered less pertinent to the current study and/or potentially overlapping with other study measures such as *change efficacy*.

7.4.3.1.1 Self-Regulatory Processes Affective (SRPA)

Mechanisms related to controlling and regulating emotions: the content of this domain includes processes associated with emotion based decision making, analysing one's affective state and emotional regulating processes, 5 items.

Example item: *Since the adverse event I have paid closer attention to the causes of my emotions.*

Author $\alpha = .76$.

7.4.3.1.2 Self-Regulatory Processes Behavioural (SRPB)

Mechanisms related to understanding and controlling negative and ineffective behaviours: the content of this domain includes processes associated with impulse control, planfulness, self-discipline, and self-observation, 9 items.

Example item: *since the adverse event I have often jumped into things without thinking through them.*

Author $\alpha = .82$.

7.4.3.1.3 Self-Regulatory Processes Cognitive (SRPC)

Mechanisms related to understanding and controlling negative and ineffective thoughts and thinking patterns: the content of this domain includes processes associated with resourcefulness, cognitive flexibility (willingness to compromise, accommodate, and consider others' perspectives), seeing experiences in a positive light and minimizing intrusive thoughts, 9 items.

Example item: *Since the adverse event it has been easy for me to look on the "bright side."*

Author $\alpha = .86$.

7.4.3.2 IWP Multi-Affect Indicator (Well-being measure)

The IWP Multi Affect scale comprises 12 items to measure affective well-being in the workplace: six positive feelings (*comfortable, calm, relaxed, motivated, enthusiastic and optimistic*) and six negative feelings (*tense, anxious, worried, depressed, melancholic and unhappy*). Respondents are asked to assess how often their job has made them experience any of the twelve feelings over the past weeks e.g., “*In the past few weeks, to what extent has your job made you feel?*” on a 6-point Likert scale (1 = *Never* to 6 = *All the time*).

The scale was selected specifically for its workplace focus. As Grant et al. (2009) point out the measurement of outcomes of interventions using clinically derived psychopathology based instruments may not be appropriate in organisational settings where levels of stress, anxiety and depression are more likely to be within the normal range. The six positive items were utilised to provide a measure of positive well-being, the six negative feelings items provided a measure of negative well-being. See table 7.2 for study α .

7.4.3.3 Change efficacy

Items from the Readiness for Change Scale (Holt et al., 2007) were utilised to measure participants' levels of confidence in dealing with Organisational Change. Holt et al propose that change readiness includes a “change specific efficacy” dimension. Change specific efficacy relates to the extent to which an individual believes they are capable of implementing a proposed change. The efficacy dimension was included as it was deemed to be the most appropriate dimension of change readiness/change acceptance to be potentially impacted by resilience based interventions. Six items from the readiness for change scale relating to

efficacy were utilised within the current study. Participants responded to the items using a six-point Likert scale ranging from strongly agree (6) to strongly disagree (1), example “When we implement change I feel I can handle it with ease”. Holt et al (2007) report a coefficient of .79 for the change efficacy scale.

7.4.3.4 Study Reliability

Table 7.2 below illustrates internal consistency coefficients for the present study.

Table 7.2

Scale Reliability Alphas for All Study Time Points: α =

Scale	Time Point 1	Time Point 2	Time Point 3
Change Efficacy	.665 *	.802	.832
SRPA	.643*	.797	.838
SRPB	.599*	.760	.676*
SRPC	.884	.892	.947
Wellbeing Positive	.850	.916	.928
Wellbeing Negative	.875	.917	.906

** falls below .7*

Whilst the alpha value for some study variables fell below the conventionally accepted desired level of .7 (Devellis, 2012), the decision was taken to retain these within the study due to their relatively marginal differential and the fact that all scales were relatively short. Scales with fewer than ten items as in the case of all the current study measures can typically produce Cronbach values as low as .5 (Pallant, 2013).

7.4.4 Procedure

The study was administered during the period September 2013 to January 2014.

Table 7.3 illustrates the process of involvement for participants in both conditions.

Table 7.3

Participant Timeline and Process for Both Conditions

One to one group	Workshop group
Participate in 3 x 90 minute one to one resilience sessions spanning six weeks with intervals of three weeks	Attend 1 x 3½ hour Resilience workshop
Complete on-line study questionnaire at :	Complete on-line study questionnaire at :
<ul style="list-style-type: none"> • T1 baseline time point • T2 one week after completion of the six week programme • T3 four weeks after completion of the six week programme 	<ul style="list-style-type: none"> • T1 baseline time point • T2 one week after attending workshop • T3 four weeks after workshop attendance

Participant briefing information was provided via email. Briefing details about the study provided information on how participant information would be handled, how participants could withdraw from the study and information relating to how to progress any questions or concerns (Appendix I). Participants proceeded to volunteering for participation in the study by completing the study questionnaire on-line. Participant consent was established via the on-line medium with participants being required to indicate their consent by ticking an appropriate box before progression to the study questionnaire was permitted. Participants were randomly allocated to either the one to one or workshop condition by alternate allocation based on their order in the questionnaire completion schedule.

Participants were contacted by email and advised of their allocated intervention and asked to indicate their availability from a range of potential dates for their workshop or one to one programme. An on line meeting scheduler was utilised to enable date availability and preferences to be notified and coordinated electronically. Once preferred dates had been established, participants were contacted with an email confirming their allocated intervention date and advising them of joining instructions and next steps.

On completion of the allocated intervention, participants were emailed a request to repeat the study questionnaire one week and four weeks after participating in the intervention. The email contained a link to the on line questionnaire. Participants were requested to complete the questionnaire within one week of receipt of the email. Up to two reminder emails were sent to participants who did not complete the questionnaire within the indicated timescale. A reminder was sent one week after the suggested completion deadline and a further reminder approximately one week later where the first reminder had not resulted in questionnaire completion.

7.4.4.1 Data collection time points

Applying consistent time points for follow up questionnaire completion was not appropriate given the differing amount of time taken to participate in interventions i.e. a half day for the workshop and six weeks for the one to one programme. It was considered appropriate given the timescale for the overall study to collect follow up data one week and four weeks after intervention participation. There is support for a one month distal follow up threshold being both practical in terms of administration whilst also being sufficient to capture diminishing effects of workplace development interventions (Arthur, Bennett, Stanush & McNelly, 1998).

7.4.4.2 Study interventions

Details of the underpinning resilience programme design framework are provided in Chapter 5. Procedural details for the administration of the two interventions are provided here.

7.4.4.2.1 One to one programme

The researcher (facilitator 1) plus four volunteer facilitators from a pool of those trained by the researcher (see Chapter 5) were involved in the delivery of the one to one programme. Facilitators were varied in experience and qualifications and were volunteers drawn from the researcher's network of development and coaching professionals and Occupational Psychology Masters graduates. Further information relating to facilitator experience and number of participants in the study is detailed in Table 7.4.

Table 7.4

One to One Facilitator Demographics

Facilitator	Age	One to one facilitation or related experience	Qualifications/Training	Number of participants
1 female	45-55	10 years plus	Chartered and Registered Practitioner Occupational Psychologist Diploma in performance coaching plus completion of various non-accredited coaching programmes	15
2 female	55-65	10 years plus	Diploma in Performance Coaching Professionally Certificated Coach Training with CTI and The School of Coaching	3
3 female	25-35	3-5 years	MSc Occupational Psychology ILM Level 5 Certificate in Coaching and Mentoring in Management	3
4 male	55-65	3-5 years	Coaching for Organisational Consultants course at Ashridge Business School	2
5 female	25-35	Less than 1 year	Chartered and Registered Practitioner Occupational Psychologist	1

Volunteer facilitators were provided with a one day training programme to equip them with an understanding of the programme content and process and to familiarise them with the programme materials.

Participants who had been assigned to the one to one intervention were contacted prior to commencement of the intervention phase of the study to establish a preferred intervention schedule from a selection. An allocated facilitator contacted the participant by email approximately two to three weeks before intervention commencement. In the email the facilitator introduced themselves confirmed meeting dates, times and venues and provided the participant with the resilience

programme workbook (Appendix H) and a copy of the programme terms of engagement (Appendix J).

The programme workbook outlined the key areas of the resilience development framework (see Chapter 5 for background to development) and indicated required pre-work. Participants were required to work through activities relating to each of the resilience areas and encouraged to draft initial resilience and well-being related goals in advance of the first meeting with their facilitator. The workbook also contained log pages where participants could record notes of their progress between sessions and note any issues they wished to discuss with their facilitator at forthcoming meetings.

The programme consisted of three one to one sessions of 90 minutes duration over a six week period, giving a three week interval between sessions. Meetings took place at the participants' workplace. Session one was focused upon helping participants to understand the various resilience framework areas, reviewing insights from the pre-work activities and supporting the participant in setting resilience and/or well-being related goals which could be progressed during the period of the programme. Sessions two and three involved reviewing participant progress in utilising the various resilience related behaviours (making use of their support network for example) drawing on participant notes and reflections on their weekly logs of challenging situations and use of the resilience behaviours and reviewing progress against goals set. In addition to the review of logs and goals, the final session focused upon setting future goals to extend beyond the facilitated programme and supporting participants in preparing for progressing and maintaining their resilience and well-being without the support of a facilitator. The format of the one to one delivery is illustrated in Table 7.5 further information relating to the

development of content can be located in Chapter 5.

Table 7.5 Framework – Outline of activities in one to one and workshop formats

Framework component	One to one programme	Workshop
Optimistic Style	<i>ABC model</i> introduced pre-programme and briefed by facilitator at first meeting. Participant records any examples of negative thinking /overcoming negative thinking in weekly logs and discusses with facilitator at meetings.	<i>ABC model</i> introduced by trainer, examples worked through in plenary. Individuals identify own examples and discuss in pairs/small groups.
Using Strengths	Participants complete <i>VIA strengths</i> survey in advance of first meeting. Strengths are discussed at first meeting, participants log any use of strengths in weekly logs for discussion at meetings.	Trainer provides input on role of strengths. Participants work in pairs/trios to identify and discuss individual signature <i>character strengths</i> using strengths cards.
Getting perspective	Pre-programme workbook introduces perspective and the <i>circle of influence</i> . Participants complete own circle of influence for discussion in first meeting with facilitator. Weekly logging of any use of <i>circle of influence</i> for discussion at meetings.	Trainer provides input on role of perspective and describes strategies before introducing <i>circle of influence</i> . Individuals complete own blank circle of influence re. change. Pairs work together to help each other add to <i>circle of influence</i> .
Social Support	Participants complete social support checklist as pre-work for discussion in first meeting. Facilitator provides brief input on role of social support. Participant maintains weekly log of social support use for discussion at one to one meetings.	Trainer provides input on role of social support. Participants complete social support checklist. Pairs discuss insights.
Self-efficacy	Participants reflect upon a situation of self-efficacy in advance of first meeting. Facilitator provides brief input on role of self-efficacy and the range of strategies. Participant maintains weekly log of self-efficacy examples for discussion at one to one meetings.	Participants are asked to identify a situation where they experienced self-efficacy. Plenary sharing of factors that enabled individuals to reach self-efficacy. Trainer provides brief input on self-efficacy strategies. Individuals identify personal “default” strategies.
Self-care	Participants complete <i>five a day</i> activity as pre-work for discussion in first meeting. Facilitator provides brief input on role of self-care. Participant maintains weekly log of self-care activities for discussion at one to one meetings.	Brief input from facilitator re the importance of self-care to resilience and outline of the <i>five a day</i> . Individuals self-assess against the <i>five a day</i> and discuss in small groups actions they could take.
Goal setting	Participants are encouraged to draft one or two resilience related goals at the end of the pre-work. Preliminary goals are discussed and refined with facilitator in session1. Progress on goals is discussed in each of the two subsequent meetings. Participant is supported in identifying ongoing goal(s) in final session.	At the end of workshop participants’ complete action planning proforma where they identify insights from the workshop and actions they can take to support them in being resilient in the face of changes. Pairs/trios share goals.

7.4.4.2.2 Group workshop programme

The resilience workshop consisted of a half-day (3½ hours) workshop. The content of the workshop focused upon the thesis resilience development framework and consisted of inputs from the workshop facilitator, individual and group discussion and exercises based upon the framework areas and outlined briefly below (see Chapter 5 for further details).

Participants were issued with a workshop participant handbook (Appendix G) containing the workshop materials and exercises. All workshops were delivered by the researcher. A total of three workshops were delivered for the study, one for participants from Organisation 2 (n = 10) and two for participants from Organisation 1 (n = 14) group size ranged from 7 to 10. Workshops were delivered in appropriate training rooms on premises belonging to participants employing organisations.

7.5 Analysis and results

Table 7.6 illustrates correlation coefficients amongst study variables. Correlations between variables at t1 were anticipated and in line with the hypothesized notion of resource caravans whereby personal resources are anticipated to aggregate (Hobfoll, 1989, 2002).

Table 7.6

Means Standard Deviations and Correlation Coefficients amongst all Study Variables – all time points

	M.	SD	1	2	5	6	7	8	9	10	13	14	15	16	17	18	21	22	23	24
1. PWB t1	28.1	8.1	-																	
2. NWB t1	47.1	4.8	.56**	-																
3. SRPA t1	17.2	2.2	.00	-.12	-															
4.SRPB t1	29.4	3.2	.14	.09	.43**	-														
5.SRPC t1	29.4	6.1	.52**	.49**	-.10	.13	-													
6.CE t1	25.1	3.27	.10	.19	.12	.26	.48**	-												
7.PWB t2	30.7	9.7	.42**	.09	.11	.06	.33*	.15	-											
8..NWB t2	48.2	6.5	.21	.28	-.00	.08	.42**	.18	.62**	-										
9..SRPA t2	18.0	2.8	.11	.03	.38**	.52**	.05	.14.	.38*	.21	-									
10.SRPB t2	31.7	4.3	.15	.06	.19	.51**	.07	.10	.47**	.28	.70**	-								
11.SRPC t2	33.5	6.3	.32*	.50**	-.00	.39*	.64**	.51**	.57**	.71**	.32*	.48**	-							
12.CE t2	27.6	4.36	-.04	-.06	.07	.13	.25	.61**	.337*	.23	.27	.16	.36*	-						
13.PWB t3	29.5	9.9	.25	.01	.22	.07	.09	-.04	.76*	.49**	.21	.31	.32	.35*	-					
14. NWB t3	48.1	6.6	.33*	.33*	-.06	-.04	.28	.17	.61**	.72**	.16	.04	.47**	.30	.51**	-				
15.SRPA t3	17.5	2.9	.07	.12	.30*	.49**	-.12	-.08	.38*	.20	.37*	.42**	.27	.16	.42**	.21	-			
16.SRPB t3	31.5	3.9	.04	.10	.29	.51*	-.00	-.00	.37*	.20	.45**	.61**	.35*	.22	.54**	.09	.74**	-		
17.SRPC t3	33.3	7.0	.33*	.45**	.08	.08	.54**	.29	.58**	.59**	.22	.18	.64**	.38*	.58**	.56**	.37*	.40**	-	
18.CE t3	27.7	3.9	-.06	.00	.14	.00	.32*	.52**	.39*	.32*	.10	.14	.36*	.83**	.42**	.32*	.23	.35	.55**	-

*= significant at .05, **= significant at .01

PWB = positive well-being
 NWB = negative well-being
 SRPA = self-regulatory processes affective
 SRPB = self-regulatory processes behavioural
 SRPC = self-regulatory processes cognitive

7.5.1 Analysis strategy

A series of mixed between-within subjects analysis of variance (ANOVAs) were conducted to assess the comparative impact of the two study interventions on study variables across three time periods (Time: pre-intervention, post-intervention-1 week, post-intervention 1 month). All variables were scored in a positive direction so that a higher mean score indicates a more positive rating. Table 7.7 outlines descriptive statistics for study variables across 3 study time points. Data plots are included to illustrate trends for all variables; analysis further examines statistical significance.

Table 7.7

Means and Standard Deviations for Intervention and Control Group over 3 study time points

Measure	Time 1 M	SD	Time 2 M	SD	Time 3 M	SD
Self-regulatory affective	O 17.1 W 17.3	2.1 2.2	O 17.9 W 18.1	2.4 3.2	O 18.5 W 16.6	3.2 2.4
Self-regulatory behavioural	O 29.2 W 29.7	3.8 2.7	O 32.0 W 31.5	4.4 4.3	32.2 30.9	4.8 2.8
Self –regulatory cognitive	O 30.7 W 28.0	5.6 6.4	O 35.2 W 31.8	6.0 6.4	O 36.5 W 30.4	5.0 7.4
Positive well-being	O 29.4 W 27.0	8.2 8.0	O 34.8 W 27.4	10.1 8.2	O 33.2 W 26.2	11.2 7.5
Negative well-being	O 48.2 W 46.0	4.7 4.7	O 51.4 W 45.3	5.0 6.5	O 51.3 W 44.9	4.47 6.9
Change efficacy	O 25.4 W 24.7	3.1 3.4	28.8 26.4	4.1 4.3	29.4 26.1	3.8 3.4

O = one to one group, W = workshop group

7.5.1.1 Resilience

7.5.1.1.1 Self-Regulatory Processes Affective (SRPA)

There was no significant interaction effect for time and condition, Wilks' Lambda = .90, $F(2, 40) = 2.22$, $p = .12$, partial eta squared = .10. There was no significant main effect for time, Wilks' Lambda = .94, $F(2, 40) = 1.15$, $p = .32$, partial eta squared = .05. The main effect for condition was not significant $F(1, 41) = 1.26$, $p = .26$, partial eta squared = .03.

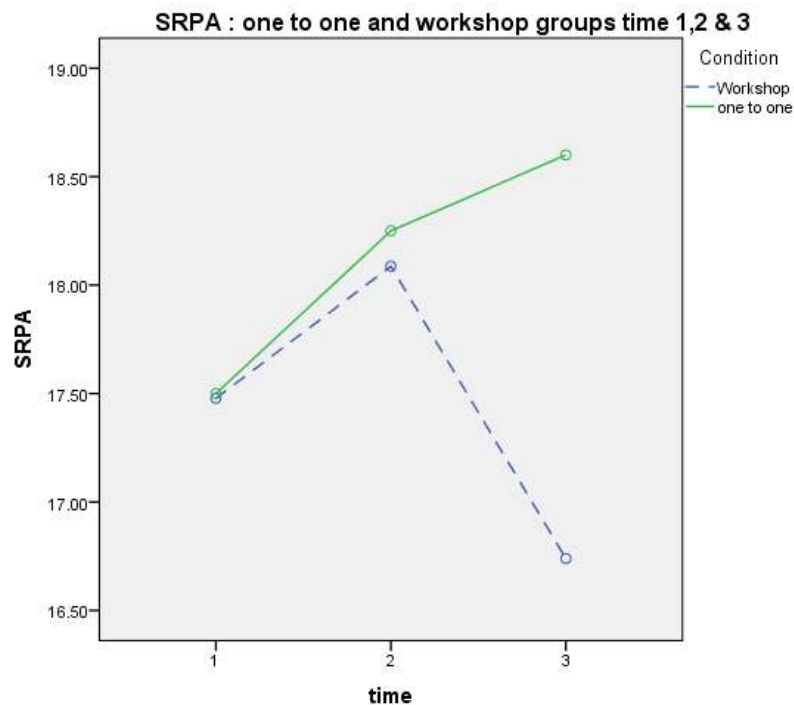


Figure 7.1 Self-regulatory Processes – Affective Levels across Study Time Points for Both Conditions

7.5.1.1.2 Self-Regulatory Processes Behavioural (SRPB)

There was no significant interaction effect for time and condition, Wilks' Lambda = .94, $F(2, 34) = .98$, $p = .38$, partial eta squared = .05. There was a significant main effect for time, Wilks' Lambda = .60, $F(2, 34) = 11.09$, $p = .001$, partial eta squared = .38.

.39 (see Table 7.8) indicating changes across time points for the participant group. Mean SRPB increases from t1 to t2 and again slightly from t2 to t3. The main effect for condition was not significant $F(1, 35) = .26, p=.61$, partial eta squared =.007.

Table 7.8

Mean Levels of SRPB Scores for all Participants across Study Time Points

Time period	N	Mean	Standard deviation
Time 1 (pre-intervention)	37	29.13	3.46
Time 2 (1 week post intervention)	37	31.70	4.59
Time 3 (1 month post intervention)	37	31.83	4.22

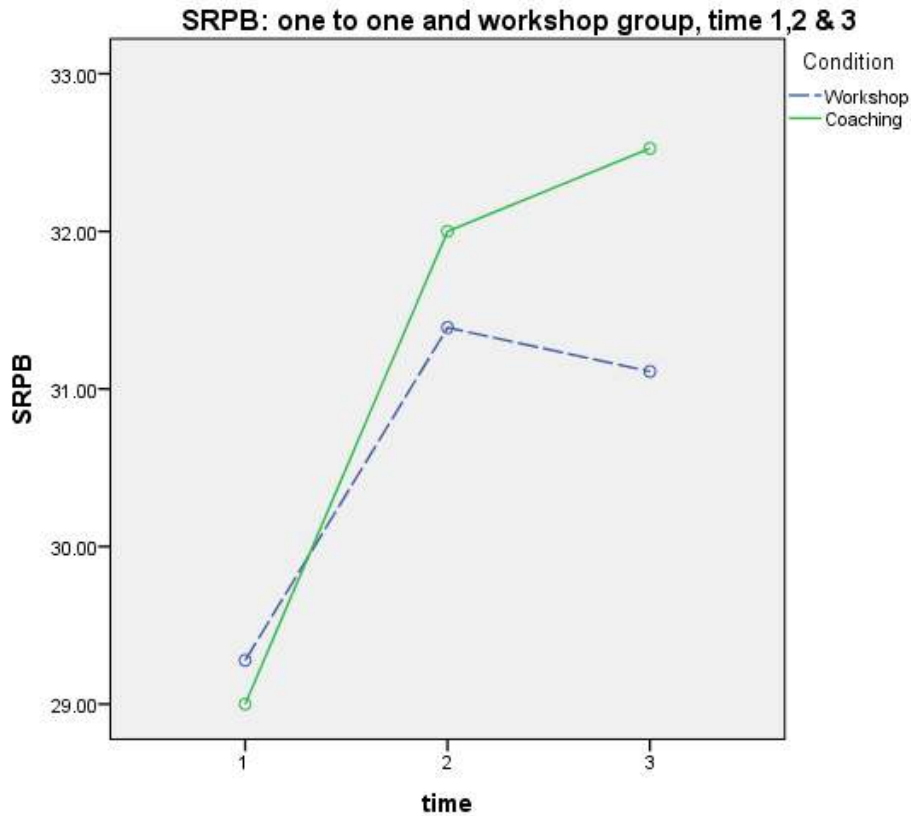


Figure 7.2 Self-regulatory Processes –Behavioural Levels across Study Time Points for Both Conditions

7.5.1.1.3 Self-Regulatory Processes Cognitive (SRPC)

There was a significant interaction effect for time and condition, Wilks' Lambda = .81, $F(2, 32) = 3.67$, $p=.03$, partial eta squared = .18. There was a significant main effect for time, Wilks' Lambda = .56, $F(2, 32) = 12.68$, $p=.000$, partial eta squared = .44. The main effect for condition was also significant $F(1, 33) = 6.73$, $p=.01$, partial eta squared = .17.

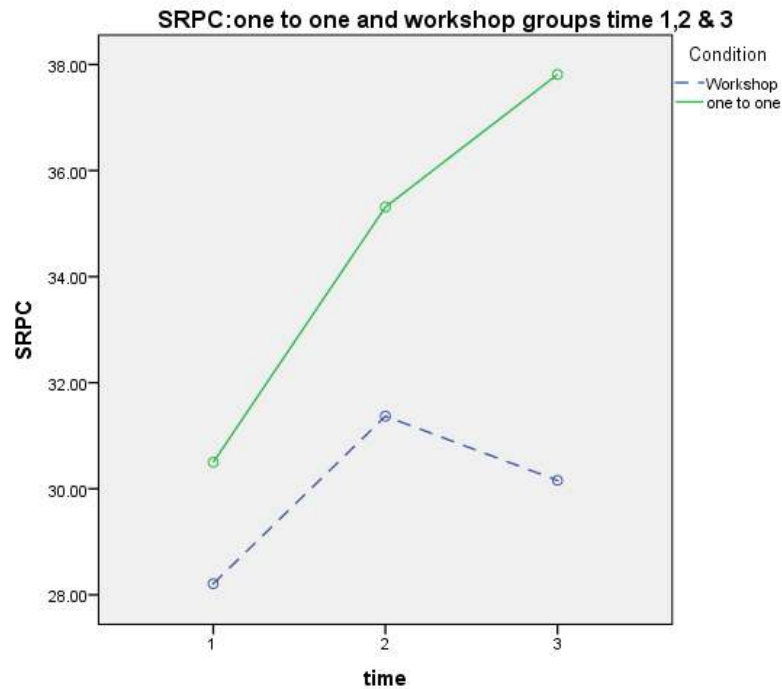


Figure 7.3 Self-regulatory Processes – Cognitive Levels across Study Time Points for Both Conditions

7.5.1.1.3.1 Post hoc analyses

One-way repeated measures ANOVAs were conducted to compare within subjects SRPC scores across time points before (time1) and after (time 2 and 3) intervention. The means and standard deviations for both conditions are presented in Table 7.9. There was a significant main effect for the one to one condition for time Wilks' Lambda = .414, $F(2, 14) = 9.92$, $p=.002$. Pairwise comparisons revealed a significant difference between time 1 and time 2 ($p=.015$) and between time 1 and time 3 ($p=.000$). The difference between time 2 and time 3 approached but did not achieve significance ($p=.073$).

The main effect for the workshop condition for time was not significant Wilks' Lambda = .94, $F(2, 18) = .541$, $p=.59$.

Table 7.9

Descriptive Statistics SRPC Scores Time 1, Time 2 and Time 3 for Both Conditions.

Time period	N	Mean	Standard deviation
One to one condition			
Time 1 (pre-intervention)	16	30.50	6.03
Time 2 (1 week post intervention)	16	35.31	5.88
Time 3 (1 month post intervention)	16	37.81	4.07
Workshop condition			
Time 1 (pre-intervention)	19	28.21	6.43
Time 2 (1 week post intervention)	19	31.37	6.46
Time 3 (1 month post intervention)	19	30.15	7.25

Independent t-tests were conducted to analyse differences between subjects from the two conditions at the three study time points. There was a significant between conditions difference at time point 3 with participants in the one to one condition ($M = 36.57$, $SD = 5.03$) having significantly higher SRPC scores than participants in the workshop condition ($M = 30.43$, $SD = 7.49$), $t(42) = -3.16$, $p = .009$, two-tailed (Bonferonni corrected) see Figure 7.3. No other between conditions comparisons were significant.

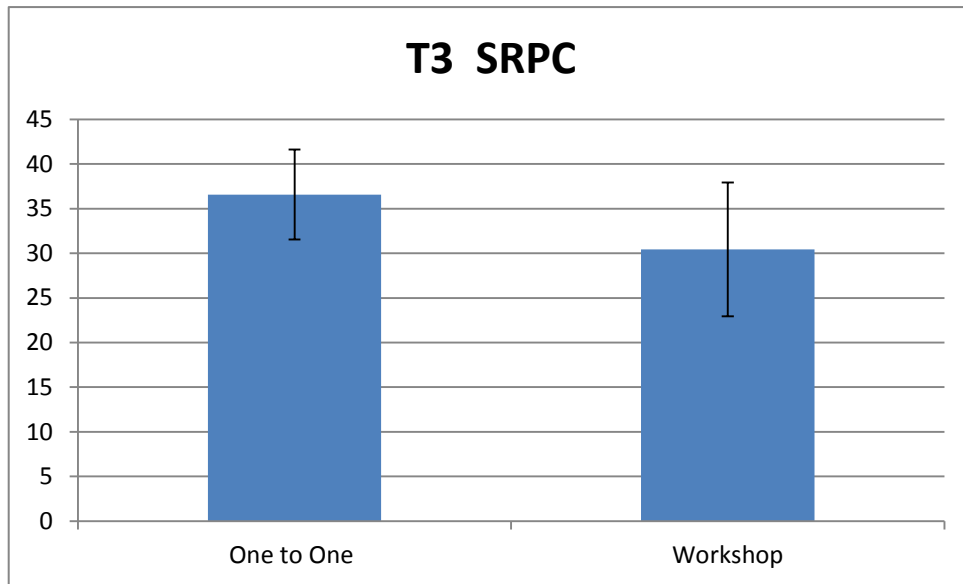


Figure 7.4 Mean Levels of SRPC at Time 3 for Both Conditions. Error Bars Represent Standard Errors

*p.05

Results suggest the one to one condition had a sustained impact on participant's cognitive self-regulatory processes across the proximal and distal follow up points, the workshop did not impact participants SRPC significantly differences between the conditions at the distal time point were significant.

7.5.1.2 Well-being

7.5.1.2.1 Positive Wellbeing

The analysis revealed a significant interaction between time and condition Wilks' Lambda=.79, $F(2, 30) = 3.857$, $p=.032$, partial eta squared = .20 see Figure 7.5. There was a significant main effect for time, Wilks' Lambda = .78, $F(2, 30) = 4.32$, $p=0.22$. The main effect comparing the two conditions was also significant, $F(1, 31) = 5.641$, $p=0.24$, partial eta squared = .15 .

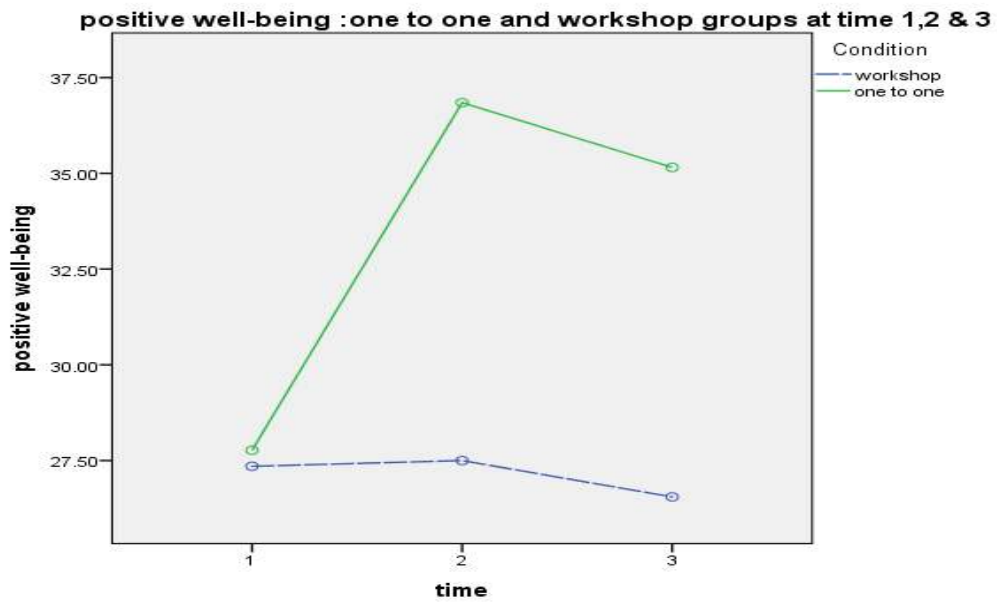


Figure 7.5 Levels of Positive Well-being across Study Time Points For Both Conditions

7.5.1.2.1.1 Post hoc analyses

One-way repeated measures ANOVAs were conducted to compare within subjects positive-wellbeing scores across time points before (time1) and after (time 2 and 3) intervention. The means and standard deviations for both conditions are presented in Table 7.10.

Table 7.10

Descriptive Statistics - Positive Well-being Scores Time 1, Time 2 and Time 3 for Both Conditions.

Time period	N	Mean	Standard deviation
One to one condition			
Time 1 (pre-intervention)	13	27.77	7.95
Time 2 (1 week post intervention)	13	36.85	9.45
Time 3 (1 month post intervention)	13	35.15	11.9
Workshop condition			
Time 1 (pre-intervention)	20	27.35	8.50
Time 2 (1 week post intervention)	20	27.50	8.26
Time 3 (1 month post intervention)	20	26.55	7.61

There was a significant main effect for the one to one condition for time Wilks' Lambda = .457, $F(2, 11) = 6.53$, $p = .013$. Pairwise comparisons revealed a significant difference between time 1 and time 2 ($p = .004$). The difference between time 1 and time 3 approached but did not achieve significance ($p = .088$). The difference between time 2 and time 3 was not significant ($p = .53$).

The main effect for the workshop condition for time was not significant, Wilks' Lambda = .94, $F(2, 18) = .541$, $p = .59$.

Independent t-tests were conducted to analyse differences between the two conditions at the three study time points. There was no significant difference between conditions at time point 1 (workshop $M = 27.04$, $SD = 8.05$, one to one $M =$

29.38 $SD = 8.24$), $t(42) = -.95$, $p=.99$ (Bonferonni corrected). There was a significant between conditions difference at time point 2 with participants in the one to one condition ($M = 34.82$ $SD = 10.15$) having significantly higher positive well-being scores than participants in the workshop condition ($M = 27.45$, $SD = 8.2$), $t(37) = -2.50$, $p=.05$, two-tailed (Bonferonni corrected). The difference at time point three approached but did not achieve significance once adjusted (workshop $M = 26.28$, $SD = 7.52$, one to one $M = 33.21$, $SD = 11.23$), $p=.09$ (Bonferonni corrected).

Post hoc analyses indicate the one to one intervention to have impacted positive well-being proximally one week post-intervention but this impact was not sustained distally four weeks later to a significant extent although there was a trend towards a positive gain from baseline. The workshop intervention did not create any significant changes in participant positive well-being across the baseline to follow up time points.

7.5.1.2.2 Negative well-being

The interaction effect between time and condition approached but did not reach significance, Wilks' Lambda = .84, $F(2, 32) = 3.07$, $p=0.6$, partial eta squared = .16. There was no significant main effect for time, Wilks' Lambda = .97, $F(2, 32) = .53$, $p=.59$, partial eta squared = .03. There was a significant main effect for condition, $F(1, 33) = 13.61$, $p=.001$, partial eta squared = .29.

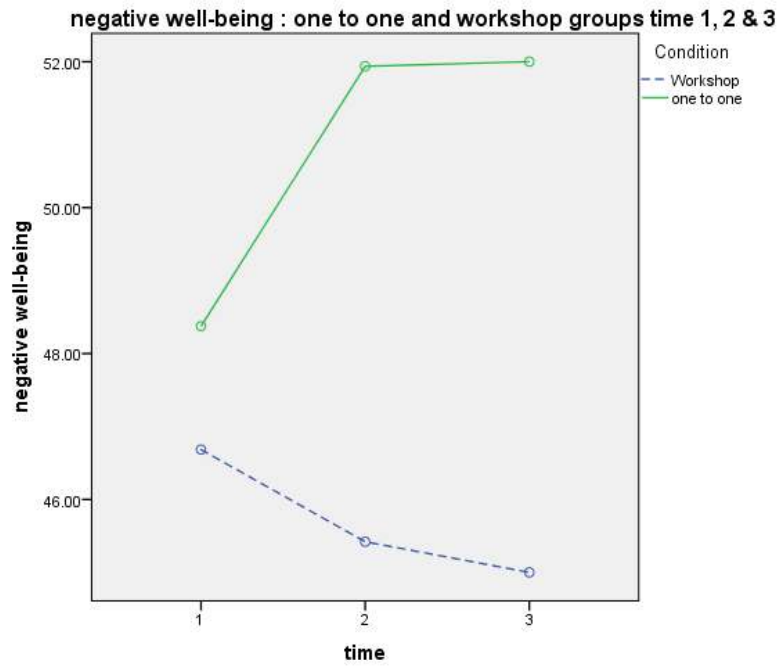


Figure 7.6 Negative Well-being Levels across Study Time Points for Both Conditions

7.5.1.2.2.1 Post hoc analyses

As the interaction effect approached significance post hoc analysis was conducted to explore the main effect for condition. One-way repeated measures ANOVAs were conducted to compare within subjects positive-wellbeing scores across time points before (time1) and after (time 2 and 3) intervention. The means and standard deviations for both conditions are presented in Table 7.11.

Table 7.11

Descriptive Statistics - Negative Well-being Scores Time 1, Time 2 and Time 3 for Both Conditions.

Time period	N	Mean	Standard deviation
One to one condition			
Time 1 (pre-intervention)	16	48.37	5.21
Time 2 (1 week post intervention)	16	51.93	3.17
Time 3 (1 month post intervention)	16	52.00	2.90
Workshop condition			
Time 1 (pre-intervention)	19	46.68	4.74
Time 2 (1 week post intervention)	19	45.42	6.94
Time 3 (1 month post intervention)	19	45.00	7.10

There was a significant main effect for the one to one condition for time Wilks' Lambda = .636, $F(2, 14) = 4.00$, $p=.042$. Pairwise comparisons revealed a significant difference between time 1 and time 2 ($p=.011$) and time 1 and time 3 ($p=.022$). The difference between time 2 and time 3 was not significant ($p=.940$), suggesting a sustained positive impact of the one to one intervention on participant negative well-being.

There was no significant main effect for the workshop condition for time Wilks' Lambda = .942, $F(2, 17) = .523$, $p=.602$.

7.5.1.3 Change efficacy

There was a significant interaction effect for time and condition, Wilks' Lambda = .79, $F(2, 39) = 5.20$, $p=.01$, partial eta squared = .21. There was a significant main

effect for time, Wilks' Lambda = .56, $F(2, 39) = 15.61$, $p < .001$, partial eta squared = .44. The main effect for condition was also significant $F(1, 40) = 7.9$, $p = .007$, partial eta squared = .16.

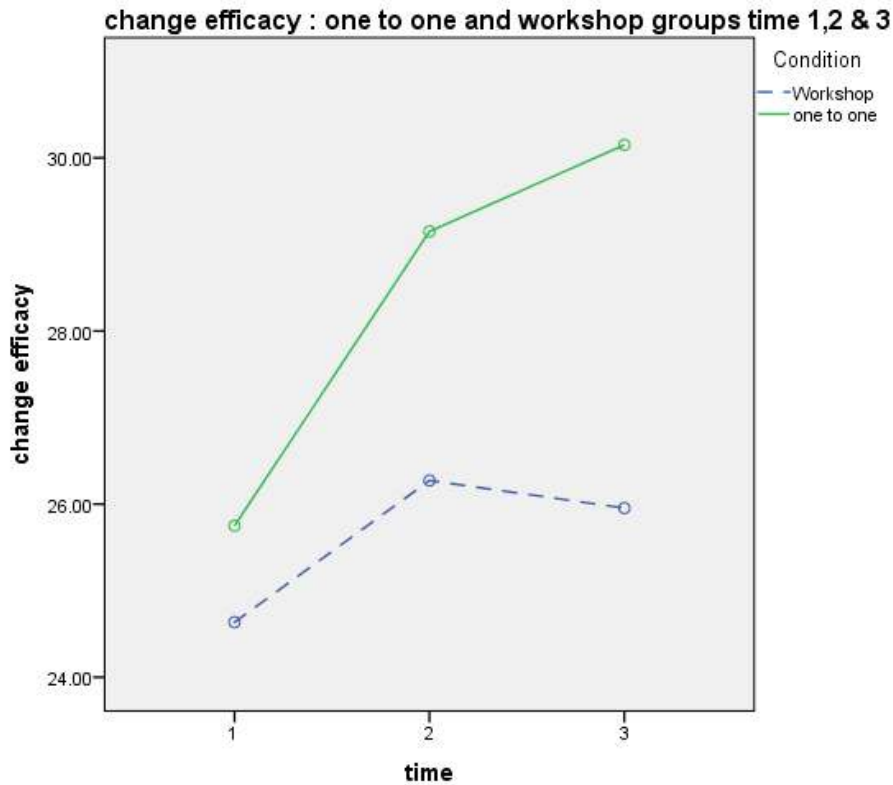


Figure 7.7 Change-efficacy Levels across Study Time Points for Both Conditions

7.5.1.3.1 Post hoc analyses

One-way repeated measures ANOVAs were conducted to compare within subjects change efficacy scores across time points before (time1) and after (time 2 and 3) intervention. The means and standard deviations for both conditions are presented in Table 7.12. There was a significant main effect for the one to one condition for time Wilks' Lambda = .387, $F(2,18) = 14.28$, $p < .001$. Pairwise comparisons revealed a significant difference between time 1 and time 2 ($p < .001$) and time 1

and time 3 ($p < .001$). The difference between time 2 and time 3 approached but did not achieve significance ($p = .066$).

The main effect for the workshop condition for time approached but was not significant Wilks' Lambda = .75, $F(2, 20) = 3.29$, $p = .058$.

Table 7.12

Mean Change Efficacy scores Time 1, Time 2 and Time 3 for Both Conditions

Time period	N	Mean	Standard deviation
One to one condition			
Time 1 (pre-intervention)	20	25.75	2.82
Time 2 (1 week post intervention)	20	29.15	3.98
Time 3 (1 month post intervention)	20	30.15	3.15
Workshop condition			
Time 1 (pre-intervention)	22	24.64	3.47
Time 2 (1 week post intervention)	22	26.27	4.34
Time 3 (1 month post intervention)	22	25.95	3.51

Independent t-tests were conducted to analyse differences between subjects from the two conditions at the three study time points. There was a significant between conditions difference at time point 3 with participants in the one to one condition ($M = 29.45$, $SD = 3.77$) having significantly higher change efficacy scores than participants in the workshop condition ($M = 26.12$, $SD = 3.45$), $t(44) = -3.12$, $p = .009$, two-tailed (Bonferonni corrected). No other comparisons were significant.

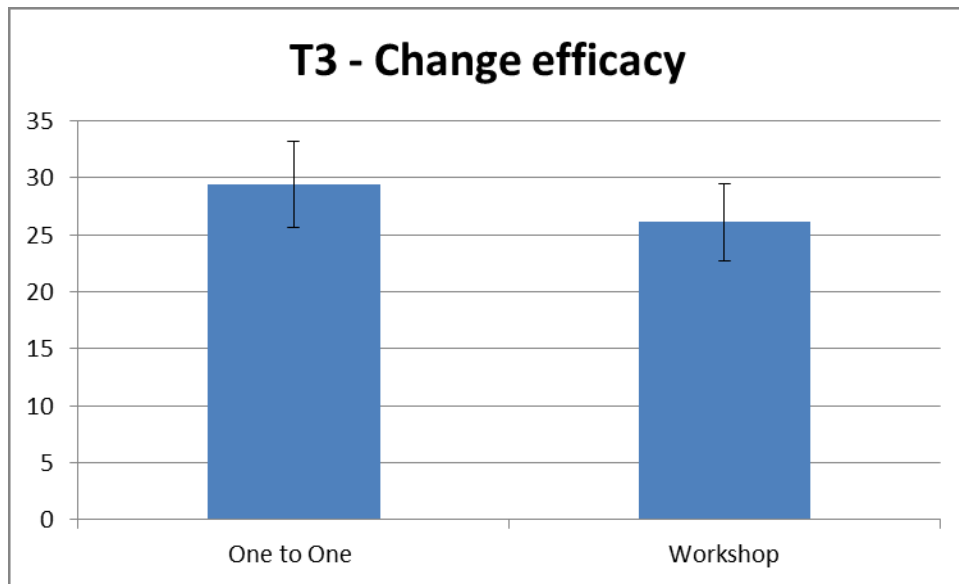


Figure 7.8 Mean Levels of Change Efficacy at Time 3 for Both Conditions. Error Bars Represent Standard Errors *p.05

7.6 Discussion

This phase of framework development sought to trial two modes of resilience programme based on the resilience development framework and to compare their relative effectiveness in terms of impact upon resilience, well-being and efficacy variables. Whilst the sample size, restricted sector sampling and the lack of a control group impact upon the generalisability of the findings, some support for the impact of resilience intervention on the range of variables (resilience process, well-being and change efficacy) for the one to one condition was obtained, providing partial support for study hypotheses (see section 7.3). The increases in participants self-regulatory cognitive processes, well-being and change efficacy indicate the one to one resilience programme to have potentially positive impacts. These were also found to be largely sustained effects with results found both proximally at one week, and distally one month post intervention.

The findings provide some support for the impact of resilience intervention and potential validation for the framework content when using a one to one delivery mode with participants in a public sector setting. The positive increase in participant regulation of negative thinking and enhanced cognitive flexibility (SRPC) would appear to offer some validation of the intervention content with its emphasis on aspects of resilience such as optimistic explanatory style (see Chapter 5). In turn increased SRPC may serve as the mechanism by which well-being and change-efficacy were enhanced (see section 2.11).

With the exception of the well-being variables which appear largely unchanged (see figures 7.7 and 7.8), the workshop condition means and data plots illustrate a general trend for proximal impacts of the intervention which then reduce at the distal level of measurement (see section 7.5). Although no significant findings were established for the workshop condition, this pattern is of interest in considering both research and intervention design factors. From a research perspective the question relates to how research design may be enhanced to provide a more rigorous exploration of the trend. From a practitioner point of view the questions concern how intervention design may be strengthened to maximise and sustain positive impacts. Issues of practice distribution may be an important issue for example. One off training interventions where learning trial is massed into a single block may not provide for the distribution of practice effect that facilitates the embedding and transfer of learning (Baddeley, 1999).

7.6.1 Limitations

The current study contains a number of limitations which have implications both for the findings and in terms of impact for the subsequent stage of framework testing that follows in the next phase.

The restricted (public sector, social housing employees) and relatively small sample size impacts upon the extent to which findings may be generalised. In addition whilst participants were drawn from organisations within the same sector and geographical location, organisational differences particularly relating to the nature of the organisational change context were not controlled for within the current study. The *real world* nature of the research meant the study took place in organisations motivated to participate in a resilience intervention as opposed to having a primary motivation to participate in resilience research. This presented some challenges and constraints. Whilst a waiting list control group would have been a desirable design feature of the research, the relatively small size of the organisations and restricted number of participant volunteers rendered a control group non-viable.

The measures utilised within the study involved self-report measures with the potential for common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In addition, the study involved multiple measures. In the social sciences where measurement is considered to lack the precision of the natural sciences, multi-operationalization of concepts and/or use of multivariate statistics to assess treatment effects is commonplace (Cole, Howard, & Maxwell, 1981). The current study sought to examine intervention effects on a range of variables including participant resilience levels as well as more outcome related measures specifically change efficacy. The use of multiple measures can be problematic however and may either hinder the possibility of finding a significant effect due to low power or conversely result in spurious findings due to chance (Bray & Maxwell, 1986).

Whilst author reported alphas for all measures and scales utilised were within the conventionally accepted parameters some study alphas fell below this. At time point one, two of the resilience variables cronbach alphas fell below .7. These variables

self-regulatory processes affective and *self-regulatory processes behavioural* subsequently failed to yield any clear results within the study. This may be due to inconsistencies in participant response rather than a true effect. Similarly the comparatively low alpha of the change efficacy scale at the baseline time point could have impacted the effects found at follow up, although at .66 the measure was considered to be demonstrating relatively credible evidence of consistency. It is possible therefore a degree of measurement error could be a feature of the current study.

Measures were selected to be contextually appropriate for workplace studies alternative measures particularly relating to resilience could have been utilised however. The selection of the WRI was in line with the desired aim to measure the extent to which interventions may enhance participant's deployment of mechanisms and processes that facilitate resilience such as use of social support, adaptive thinking styles etc. The current study lacked an outcome measure of resilience for example the extent of *coping*, *bounce-back* or *growth* in the face of adversity. An outcome focus may strengthen study design.

Delivery of the interventions themselves introduces elements of variability within the study design. Variations in timescales for delivery of a workshop versus staged one to one programme and variations in the facilitators may have introduced random effect elements that compromised the fidelity of the intervention in the context of a research methodology.

Finally variations in the extent to which individual participants were experiencing the potentially adverse impacts of organisational change may be considered an important variable which was not factored in to the current study. Whilst the study organisations were experiencing and anticipating further change as noted in

Chapter 1, change both impacts and is perceived by individuals differently (see Chapter 2). The experience of adversity may be required for the programme content to be perceived as salient and/or learning to be enacted, considerable variability in the individual participant experience of adversity may have been a potential confound.

In conclusion whilst the study findings provide some support for the potential positive impact of the one to one intervention, design and methodological limitations would indicate that these findings should be viewed as preliminary and interpreted with caution. The findings from the current phase in the overall programme of work have implications at both the research and practice level within the next stage of the framework iteration.

7.6.2 Implications for research: designing Study 3

The next phase will aim to address limitations identified within the current study specifically a controlled trial approach will be utilised within a single organisation. A control group will be utilised with participants being randomly assigned to an intervention or waiting list control group. Well-being and efficacy measures utilised in the current study will be retained, an alternative established measure of resilience which provides a potential *resilience as an outcome* measure will replace the WRI. In addition a measure of change impact will be included to assess and control for the level of individual change impact as a variable. Finally a measure of change adaptation will be included to provide a contextually relevant performance measure within the battery of measures.

7.6.3 Implications for practice (framework modification-designing intervention)

Limitations within the current study mean it is not possible to distinguish whether the mixed findings reflect true effects or limitations within either the intervention itself or the research methodology. Inconsistent findings relating to the efficacy of different delivery modes have been found within the existing literature (Robertson et al 2015) with group delivery for example yielding positive results in some studies and not in others. Robertson et al (2015) conclude from the available studies that it is not possible to draw conclusions about the most effective design and delivery of resilience training and maintain further investigation of the various delivery modes is required. In order to further examine the potential for group based resilience intervention using the resilience development framework a modified approach will be trialled. This is also in line with the practitioner focused aims of the thesis which sought to identify approaches that are resource efficient and practically feasible as well as empirically sound (see section 5.3). The next phase will seek to trial an intervention involving group delivery that is extended over a number of weeks. This will investigate whether potential trends identified in the current study workshop group could be strengthened via a model of delivery that includes a more sustained focus on programme content over a number of weeks rather than the *one hit* approach of a half-day workshop. The aim is to deliver the framework content in three short sessions (90-120 minutes) over a period of four weeks. Refinements to intervention content/activities are detailed in Chapter 8 which follows.

7.7 Chapter summary and links to next phase

As a programme of work, the thesis aims to develop and test a framework for employee resilience development. Findings from study two presented in this chapter

have provided some tentative support for the concept of employee resilience as being capable of development via short interventions, with participants in a one to one resilience programme showing proximal and/or distal gains in the cognitive regulation elements of their resilience process along with enhanced well-being and change-efficacy. The workshop programme did not yield any significant results although some positive trends were evident in aspects of participant's resilience process and change-efficacy, these trends were not present in the well-being variables.

Limitations in the current study research methodology relating specifically to the lack of a control group, confounds relating to multiple study organisations and change contexts and study measures will be addressed in Study 3. Study three will also include refinements to the resilience development framework which are outlined in chapter 8.

Chapter 8: Final framework iteration

8.1 Chapter overview

This chapter briefly outlines the final iteration of the development framework. The final moderations made to the developmental framework are based on researcher reflections on practice, findings from Study 2 and stakeholder feedback. Changes were made at the level of delivery and content/ activity. The chapter concludes with the recommended final iteration of the framework.

8.2 Stakeholder feedback

Stakeholders providing feedback at this phase of the framework development process consisted of six training and development practitioners. The six practitioners were volunteers from a group of ten who had been trained over the period October 2013 to January 2014 to utilise the framework within their own organisation a Social Housing organisation not involved in any of the thesis empirical studies. Training had focused upon preparing the practitioners to deliver the one to one mode of the framework primarily but also to utilise components of the framework as a “*toolkit*” where selective elements could be incorporated into other related training and development interventions.

Evaluation feedback was gathered one year post training via a questionnaire (see Appendix K). Follow up informal interviews took place with four of the group members who further volunteered. In addition to evaluating the training received to use the framework, evaluation examined practitioner use of the activities and materials with a view to informing improvements for Study 3.

Evaluation examined participant's level of mastery and application of the framework. Four areas were examined corresponding to: cognitive outcomes (understanding), skill-development, affective /motivational outcomes and application (Noe, 2008; Bloom, 1956). Participants provided self-assessment of: 1) understanding of the theoretical basis of the framework, 2) confidence in using the framework, 3) competence levels in using the framework and 4) level of use. A summary of the stakeholder feedback is located at Appendix K. Key points of feedback were:

- Respondents were making good use of the framework content within training and development interventions within their organisation. This more typically involved utilisation of selected elements of the framework rather than delivery of the entire content.
- The practitioners had all progressed in competence and confidence in the period since training.
- The areas of *social support*, *getting perspective* and *self-efficacy* appeared to be the most readily mastered and widely utilised components of the framework.
- *Optimistic style* had the most variability in terms of the practitioners reported level of mastery and use. Interviews indicated divided views with some indicating they had found this area of the framework less accessible and others indicating opportunities for use to be less prevalent, whilst others reported making use of the *ABC model*.

8.3 Researcher reflections

Following reflections on Study 2, stakeholder feedback and the framework overall the following researcher conclusions were noted:

1. The area of optimistic style requires addressing, themes identified in the pilot study (Chapter 6) have not yet been adequately addressed, this component of the framework still appears less accessible and or utilised. It is possible that the lower use of the *ABC* model relative to other areas of the framework may be due to the facilitators' relative lack of experience and expertise with cognitive models. The cognitive principles underpinning the model may be relatively more complex or abstract than other areas of the framework and less accessible to both practitioners and participants. Alternatively the examination of personal thinking styles may be less amenable to microintervention. Optimistic style may possibly take longer for participants to grasp, consolidate and apply, and may require more support for the motivation to do so.
2. Study 2 workshop findings whilst disappointing do show some positive trends. Attempts should be made to explore further group based modes of delivery to establish the most resource efficient interventions. A multi-event group programme over a longer period (beyond a single half-day) may provide the opportunity to improve impact through enhanced goal-focus.
3. Considering ways in which components of the framework could be strengthened, the area of *meaning* could prove to be a potentially fruitful area of focus. Meaning making/seeking is evident in the literature as a resilience factor and occurred as a theme in Study 1. Although there is a reference to spiritual approaches to coping under the *positive coping* factor (see Table 5.2, Chapter 5) meaning per se does not feature explicitly in the Meredith et al. (2011) list of personal resilience factors. Meaning was not included at the higher level of the framework i.e. as one of the seven components but was initially addressed via the *character strengths*

component which offers a potential pathway link to meaning (see Section 5.6.2, Chapter 5). A more explicit emphasis could be incorporated into intervention content.

8.4 Framework modifications

Three modifications were made to the framework following review:

8.4.1 Modification 1: Delivery mode – 3 x group workshops over 4 weeks

Modifications to the delivery mode for Study 3 focused on a group based design that involved three short workshop sessions over a period of four weeks. The one to one modes of delivery in both the pilot and in Study 2 had presented positive findings. Whilst the one to one nature of the delivery may have been a contributory factor, the opportunity to focus upon and review goals over a period of time may have also been beneficial. It was anticipated that by spreading a group based programme over a period of time the sustained focus on programme content and personal resilience and well-being goals may enhance the positive impact. The promotion of a supportive social climate through multiple interactions with group members in a three session programme was also considered to offer an enhanced design element of the resilience framework over that of the comparative *one hit* nature of the single half -day workshop utilised in Study 2.

8.4.2 Modification 2: Content, optimistic style inclusion of Thinking Traps

As an aim was to produce a resilience development framework that was accessible and functional it was considered important to refine this area for both potential facilitators and participants in light of feedback and reflection. In the pilot and Study

2, the *ABC* of thinking and emotion was utilised to address optimistic explanatory style. In the final study the *ABC* model is to be supplemented with a focus upon *Thinking Traps* (see Appendix M). Thinking traps were considered to provide a more tangible framework to facilitate participants understanding and support them in identifying ways in which patterns of thinking influence emotions and behaviour. Thinking traps are based upon the *cognitive errors* or *distortions* identified by Beck (1972) and consolidated by Burns (1999), they include *catastrophizing* and *black and white thinking* for example. Following facilitator input, participants will utilise a Thinking Traps hand-out to identify and discuss relevant personal examples.

8.4.3 Modification 3: Content, goal setting meaningful goals focus

Researcher reflection on the framework content with respect to pertinent resilience factors led to a decision to include more focus on *meaning* within the iteration of the framework. A more explicit focus on meaning was incorporated into a final goal setting activity in a proposed three session programme. Participants are facilitated in developing a personal "*provocative proposition*" based upon a vision of themselves at their best and at peak in terms of resilience, well-being and life balance (see Appendix N). A provocative proposition bridges the best of what is with a speculative vision of what can be (Cooperrider & Whitney, 2005). Through the sharing of examples of themselves at their best with other participants it is anticipated that individuals may be supported in developing a vision or goal statement that will reflect that which is personally meaningful. Following the crafting of the proposition, participants are required to identify and share with their peers, tangible actions that can be taken to progress them towards their broader vision.

8.5 Conclusion and links to next chapter

This chapter has presented a review of the resilience development framework following final feedback and reflection. Required framework modifications including changes to delivery pattern and intervention content have been outlined. The following chapter presents Study 3, a quantitative study examining a controlled trial of a three session group workshop delivery programme which includes modified content outlined in this chapter.

Chapter 9: Study 3 A controlled trial of a resilience development group workshop programme

9.1 Chapter overview

Findings from the comparison of alternative modes of the resilience development framework indicated delivery involving a one to one mode to have greater impact upon the study variables than a group workshop mode of delivery. The current study sought to address methodological limitations and utilise a controlled and randomised approach, to trial an alternative intervention pattern, a group delivery mode spread over four weeks. Refinements and adjustments to both the research methodology and the intervention approach are outlined below.

9.2 Modifications to research methodology

Following review of Study two and the findings the following improvements were identified and incorporated into an enhanced design approach for Study 3:

9.2.1 The use of a design involving a control group

Whilst the comparison of two treatment groups in Study 2 produced some encouraging findings, the discussion highlighted some of the limitations in the design created by the lower level of variable control within a quasi-experimental approach. The use of more rigorous designs involving randomized controlled approaches is called for generally within the field of workplace resilience development (Robertson et al., 2015). Study 3 utilised a more robust design that involved a single organisation, a control group (waiting list) and randomized allocation to the treatment or control conditions in order to both strengthen the thesis and to contribute to the empirical evidence base.

9.2.2 Factoring in change impact

A limitation of Study 2 was the inability to establish the extent of change impact at an organisational level and more importantly to factor in potential differences in the extent to which individual participants are impacted by organisational change (actual or perceived). Given that adversity is a pre-requisite for resilience, and individual employee responses to change can vary considerably (see Chapter 2) the inclusion of a measure of participant change impact in Study 3 was considered to offer an enhanced approach to assessing the impact of interventions. A measure of how individual participants were impacted by change was included prior to intervention. The measure was then factored in as a potential covariate to examine the extent to which level of change impact may impact intervention outcomes.

9.2.3 Change adaptation – inclusion of a performance measure

Study 2 focused upon the impacts of resilience interventions on participants' resilience process and potential related benefits of enhanced well-being and change efficacy that may be facilitated via the principle of resource caravans (Hobfoll, 2002, see Chapter 2). Study 2 did not however include a performance measure to assess whether enhancing resilience and/or *caravan* variables through interventions may enhance performance. The case for measuring change related performance via assessment of how much the individual is adapting to change has been positioned as the most appropriate performance measure in an organisational change context (Van den Heuvel et al., 2010, see Section 2.15, Chapter 2), as a consequence a measure of change adaptation was included in Study 3.

9.2.4 Measuring resilience as an outcome

Study 2 utilised the McLarnon and Rothstein measure of Resilience (2013) selected because of its workplace focus and its measurement of the individual's resilience

process. The thesis resilience interventions are designed to enhance the resilience process of participants so the measurement of gains in those areas is appropriate. The measure does not however provide indices of resilience as an outcome, i.e. did an intervention enhance participants' actual levels of resilience? The inclusion of an established measure of resilience as an outcome (CD-RISC 10 item, Campbell-Sills & Stein, 2007) was considered an appropriate step for the final study in order to establish whether participant levels of resilience were increased by the intervention.

9.2.5 Retaining well-being and change efficacy measures

The study retained measures of well-being and change efficacy utilised in Study 2 (see Section 7.4.3, Chapter 7) in order to provide continuity in the exploration of the personal resource role of resilience for example to examine whether increased resilience enhanced other personal resources and/or change orientation.

9.3 Method

9.3.1 Design

The study involved a randomised controlled approach. Volunteer participants were randomly allocated to one of two conditions, either a resilience intervention condition or a waiting list control condition. The resilience intervention formed the independent variable. Dependent variables included self-assessed measures of resilience well-being, change efficacy and change adaptation. Level of change impact at time 1 pre-intervention was included as a covariate and examined as a potential mediator of the intervention impact on study outcome variables.

Ethical approval to proceed with the study was sought and granted from Northumbria University's Faculty of Health and Life Sciences Ethics Committee prior to the commencement of the study.

9.3.2 The study organisation

The organisation offered an opportunity sample having approached the researcher in her practitioner capacity with a request for resilience training for staff. The organisation was offered and was agreeable to involvement in a research project involving the delivery of a resilience programme for staff.

The organisation was a local authority in the North of England employing 5622 staff. At the time of the study (February-June 2015) the authority had experienced significant budget cuts over a preceding period of 5 years. The extract from the organisation's strategic plan for 2015/2016 in Figure 9.1 provides an indication of the challenges faced:

Over the last five years, xxxxx has faced the biggest financial challenge in its history. We have had to make some difficult decisions in the face of severe funding cuts. In conjunction with this, significant demographic pressures continue to have major cost implications for social care services; rendering xxxxxx one of the hardest hit areas in the country.

Having already made cuts of over £100million since 2010 (including saving £18million in 2014/15), we face a further 16% reduction in core Government funding for 2015/16. Due to the continuation of our strict budget management controls, we are confident that we will be able to achieve £22million of efficiencies in 2015/16. Staff numbers have reduced by 25%. There has been no significant impact on frontline services.

Figure 9.1 Extract from Study Organisation's Strategic Plan for 2015/2016

9.3.3 Participants

Participants were volunteers from a group of targeted employees who had responded to the study organisation's invitation to participate in a well-being and resilience training intervention. Participants were employees drawn from divisions within the organisation's Children and Adult Services (CAS) and Business and

Resources (B & R) departments. These divisions were selected by the organisation for targeting as they were areas of the organisation experiencing most significant changes. Staff downsizing had already occurred and the target divisions faced ongoing changes created by changes to systems and procedures and the taking over of new responsibilities as functions were lost merged or reconfigured. The final participant group comprised 54 participants who completed all three study point questionnaires and all intervention components (those in the treatment group).

Table 9.1 illustrates participant demographics:

Table 9.1

Participant Demographics

	Intervention group (n = 27)					Control group (n = 27)				
Sex	Male 5 (18.5%)		Female 22 (81.5%)			Male 5 (18.5%)		Female 22 (81.5%)		
Age	20-30 3 (11.1%)	31-40 14(51.9%)	41-50 7(25.9%)	51-60 3(11.1%)	60+ 0	20-30 5(18.5%)	31-40 5(18.5%)	41-50 9(33.3%)	51-60 6(22.2%)	60+ 2(7.4%)
Years in org.	0-1 0	1-5 4(14.8%)	5-10 6 (22.2%)	10-15 7(25.9%)	15+ 10(37%)	0-1 1(3.7%)	1-5 1(3.7%)	5-10 7(25.9%)	10-15 13(48.1%)	15+ 5(18.5%)
Dept.	CAS 18 (67%)		B & R 9 (33%)			CAS 21 (78%)		B & R 6 (22%)		
Role	non-mgr 13(48.1%)	supervisor 3(11.1%)	mgr 7(25.9%)	senior mgr 1(3.7%)	other 3(11.1%)	non-mgr 13(48.1%)	supervisor 5(18.5%)	mgr 6(22.2%)	senior mgr 0(0%)	other 3(11.1%)

9.3.4 Randomisation

144 employees responded to the organisations invitation to participate in resilience training. These employees were randomly allocated to the research conditions which were formed by two programme commencement dates 10 weeks apart. Randomisation was administered by a training co-ordinator within the organisation who allocated individuals to either the treatment or waiting list control time points alternatively as she processed the applications in order of receipt. Operational constraints of the organisation which required training participants be given a minimum of two to three weeks' notice of training dates to allow for manpower planning and release scheduling coupled with the timescale for the research meant that random allocation to condition occurred on receipt of participants expressing an interest in attending the programme rather than after volunteers completed the first baseline questionnaire. Employees opted in to training first and then opted in or out of the research element. The process is represented in the flow diagram Figure 9.2.

The practical and ethical challenges of achieving randomisation of allocation in applied field experiments are well acknowledged (Pawson & Tilley, 1997). The strategy employed here is in line with that advocated by Robson (2011) who states that it is random allocation of participants to experimental conditions that distinguishes "*true*" experiments from quasi-experiments and acknowledges the challenges of attaining this in real world settings. Robson encourages field experimentalists strive to attain randomisation via the pursuit of feasible and ethical means of doing so.

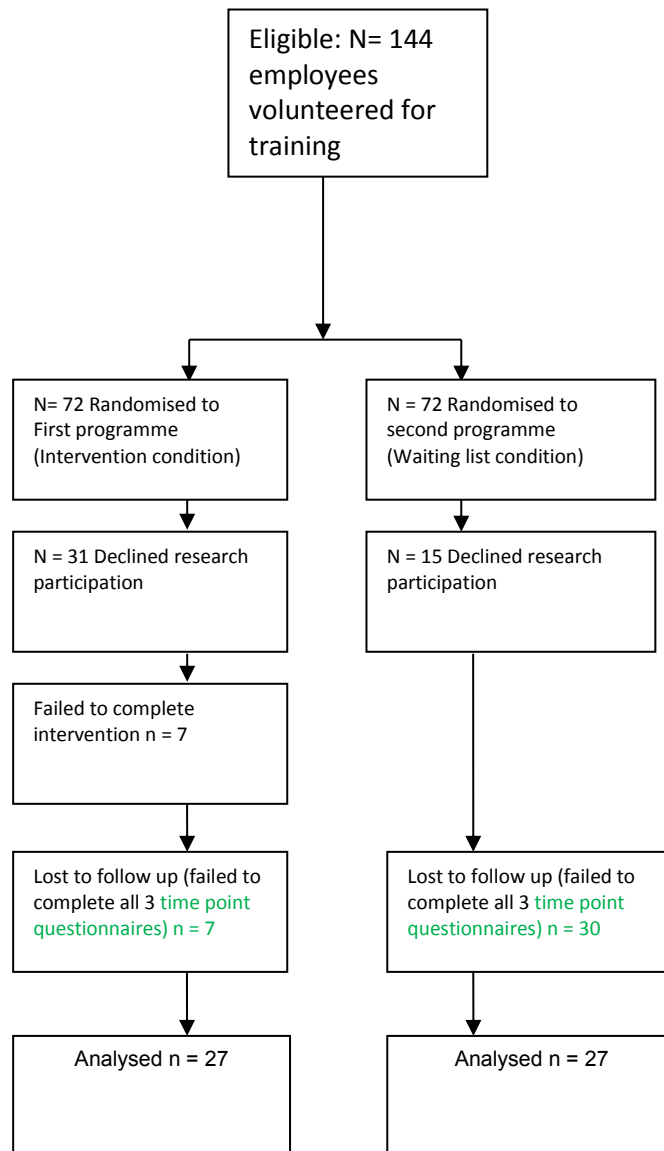


Figure 9.2 Participation Flow Diagram

After attrition a total n = 54 participants completed all three study questionnaires n = 27 treatment condition, n = 27 waiting list control condition.

9.3.5 Measures

9.3.5.1 Change Impact

A measure of individual change impact was included as a potential covariate. The change impact factor (CIF) (Saksvik & Tvedt, 2009) is a nine item scale measuring the extent to which respondents feel change is affecting them on a number of dimensions ranging from impacts on work tasks to impacts on feelings of professionalism or pride, example item: *This changesignificantly impacts the social work environment that concerns me.* Response is on a five point likert scale ranging from (1) strongly disagree to (5) strongly agree. Author $\alpha = 0.85$.

9.3.5.2 Change efficacy

Measured via seven items from the change efficacy scale from Holt et al. (2007) (see Section 7.4.3).

9.3.5.3 Well-being

Measured via the IWP Multi-Affect Indicator Warr and Parker (2010) (see Section 7.4.3, Chapter 7).

9.3.5.4 Resilience.

The 10 item version of the Connor-Davidson Resilience Scale (CD-RISC 10) (Campbell-Sills & Stein, 2007) was utilised as the resilience measure in the study. The scale is derived from the original 25 item CD-RISC (Connor & Davidson, 2003) which was developed from sources on hardiness, adaptability and response to stress, patience and faith. A sample item is, *"I have been able to adapt to change."* The response scale ranged from 0 (not true at all) to 4 (true nearly all the time). Author $\alpha = 0.85$.

9.3.5.5 Change Adaptation

Nine items from Griffin, Neal and Parker (2007) Work role performance model were utilised to measure change adaptation. Items assess change adaptation across three levels, task, team and organisational. Items were rated on a five point rating scale from *very little* (1) to *a great deal* (5). Example item: *In the past few weeks how often have you learned new skills to help you adapt to changes in your core tasks.* Author α for items range from 0.74-0.92.

Table 9.2

Measure Internal Reliability Coefficients for the three study time points

Scale	Time Point 1	Time Point 2	Time Point 3
Change Impact	.86	-	-
Change Adaptation	.85	.89	.93
Resilience	.87	.92	.91
Negative well-being	.88	.87	.94
Positive well-being	.91	.92	.93
Change efficacy	.79	.82	.85

9.3.6 Procedure

All employees who had signed up for the resilience programme in response to the organisation's invitation were emailed by the researcher and invited to participate in the research. A participant brief was attached to the e-mail. Briefing details provided information on how participant information would be handled, how participants could withdraw from the study and information relating to how to progress any questions

or concerns (Appendix O). Participants proceeded to volunteering for participation in the study by completing the study questionnaire on-line. A link to the study questionnaire was included in the email and participants were invited to click through the link to participate by the close of the week. The questionnaire was administered via *Qualtrics* a web-based questionnaire hosting platform. Participant consent was established via the on-line medium with participants being required to indicate their consent by ticking an appropriate box before progression to the study questionnaire was permitted. Participant e-mail addresses were collected in T1 questionnaire (to enable follow-up with subsequent questionnaires) but not in subsequent administrations where participants utilised a participant code generated at baseline administration. A follow up invitation to participate was sent at the end of the week extending the deadline for participation by three working days to enable questionnaire completion before the intervention commenced for the intervention group.

The study was administered during the period February 2015 – June 2015. Figure 9.3 illustrates the process of involvement for participants in both conditions.

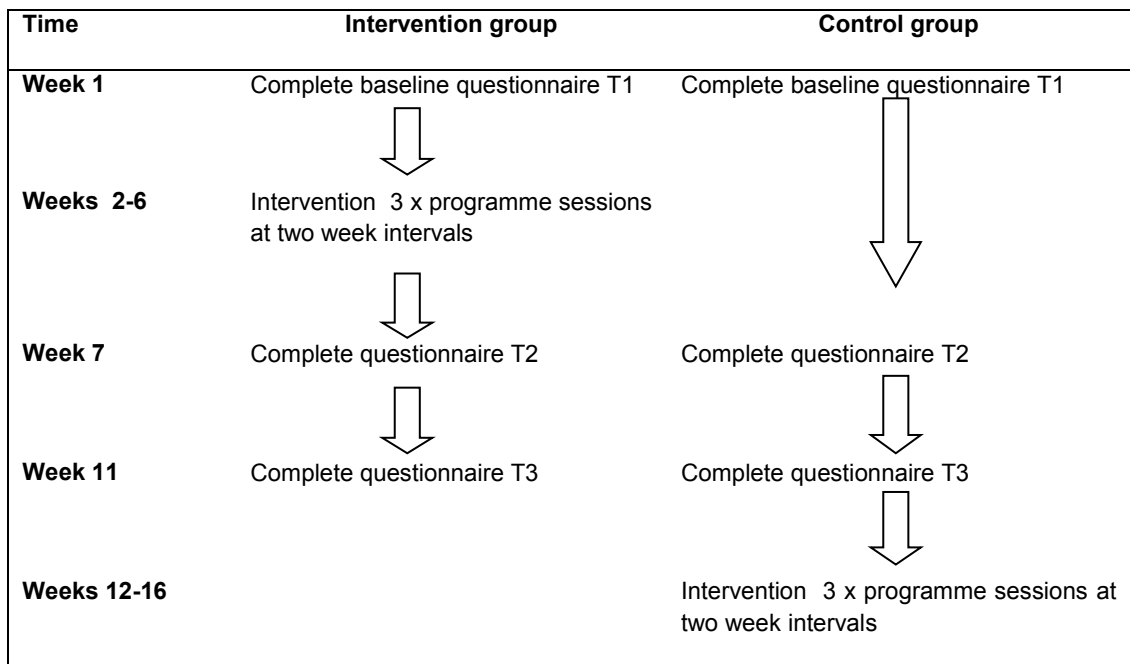


Figure 9.3 Participation Schedules for Intervention and Control Group

9.3.6.1 The study resilience Intervention

The intervention consisted of three short group sessions delivered at two weekly intervals. Details of the underpinning design framework for the study intervention are provided in Chapter 5. Procedural details for the administration of the intervention are provided here. The programme sessions were interactive in nature with participants working in small groups or pairs. Goal setting was a central theme to the programme with participants being required to set a goal in session 1 and session 2 and to progress these between sessions and review their goal with colleagues at the follow up session. The final session focused upon the setting of “*meaningful goals*” (see Section 8.4.3, Chapter 8) to support participants in extending a focus upon programme content beyond the final session. Figure 9.4 provides an outline of the programme and content linked to the framework components. Session 1 was longer than the other two sessions; this was to allow for

introduction of the seven framework content areas by the facilitator. As the programme progressed the input from the facilitator decreased. Session specific materials can be found in Appendices L, M, and N.

Session and duration	Framework elements of focus	Content/activities
1) week 1 2 hours	All elements covered at an introductory level plus specific focus on: <ul style="list-style-type: none"> • Strengths • Getting perspective • Self-care • Goal-setting 	<ul style="list-style-type: none"> • Exploring behaviours of resilient individuals • Identifying personal character strengths • Considering circle of influence • Setting a short term goal to enhance self-care
2) week 3 90 minutes	<ul style="list-style-type: none"> • Social Support • Optimistic style • Self-efficacy • Goal setting 	<ul style="list-style-type: none"> • Review of self-care goal • Spotting and addressing thinking traps • Identifying strategies for “can-do” thinking • “Auditing” and reviewing personal support network • Setting a short term goal to strengthen support network
3) week 5 90 minutes	Brief review of all elements plus specific focus on : <ul style="list-style-type: none"> • Strengths • Goal setting 	<ul style="list-style-type: none"> • Review of social support goal • Developing a personal wellbeing and resilience “provocative proposition” • Meaningful goals– progressing personal provocative proposition via goal setting

Figure 9.4 Outline of Study Three Session Resilience Intervention

Sessions were delivered in a training facility located within a community centre belonging to the study organisation. Participants in both conditions were given a choice of four programme schedules each containing the three session model across a period of four weeks. Group sizes ranged from 8 to 22 and were comprised of a mix of study participants and participants who had not opted in to the research component. All 24 sessions were delivered by the researcher 12 for the treatment group and 12 for the control group post data collection.

9.3.6.2 Time 2 and Time 3 questionnaire administrations

On completion of delivery of the resilience programme to the intervention group, all participants were emailed a request to complete the study questionnaire. A deadline of a one week return was stated. A reminder was sent one day before the deadline with notification of a three working day extension for completion. This process was repeated four weeks following completion of the resilience programme. The extension allowed an opportunity to maximise participation whilst also identifying a closure point for returns prior to the commencement of the control group programme of interventions (see Figure 9.3).

9.4 Analysis and results

9.4.1 Initial consideration of data

Table 9.3 illustrates correlation coefficients amongst study variables.

Table 9.3

Means Standard Deviations, Coefficient Alphas and Correlations for all Study Variables across both groups

	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. positive wb t1	28.8	9.6																
2. negative wb t1	43.4	7.4	.34*															
3. change efficacy t1	29.1	4.9	.35*	.45*														
4. change impact t1	32.2	6.9	-.29*	-.24	-.26													
5. change adaptation t1	35.2	5.5	-.02	-.09	.13	.25												
6. resilience t1	37.1	5.5	.37**	.40**	.52**	-.03	.29*											
7. positive wb t2	29.3	9.2	.69**	.14	.39**	-.08	.03	.40**										
8. negative wb t2	44.9	7.5	.20	.25	.24	-.22	-.32*	.29*	.37**									
9. change efficacy t2	28.7	4.9	.30*	.35*	.70*	-.22	-.06	.57**	.51**	.40**								
10. changeadaptation2	32.1	8.5	-.04	-.25	-.05	.23	.24	.09	-.03	-.33*	-.11							
11. resilience t2	37.3	6.7	.33*	.21	.489**	.08	.06	.75**	.52**	.33*	.63**	.20						
12. positive wb t3	29.9	9.7	.70**	.20	.38**	-.14	.04	.48**	.76**	.24	.54**	-.12	.45**					
13. negative wb t3	45.2	8.5	.28	.21	.17	-.17	-.31*	.27*	.37**	.75**	.45**	-.26	.44**	.42**				
14. change efficacy t3	29.7	5.6	.27	.21	.44**	-.14	-.06	.52**	.35*	.21	.75**	-.07	.58**	.59**	.49**			
15. change adaptation t3	31.3	10.5	.15	-.05	.19	.11	.19	.45**	.08	-.22	.19	.36**	.46**	.31*	-.06	.37*		
16. resilience t3	37.6	5.6	.10	-.05	.29*	.03	.13	.71**	.29*	.34*	.58**	.12	.72**	.43**	.49**	.58**	.26	

*Correlation is significant at the 0.05 level **Correlation is significant at the 0.01 level

9.4.1.1 Study variable intercorrelations

Within the intercorrelation matrix *resilience* demonstrates a consistently positive relationship with other study variables. This is consistent with Hobfoll's (1989, 2002) concept of resource caravans where personal resources are anticipated to aggregate. In particular *resilience* at time point 1 is related to all study variables at time point 3 and to all time point 2 variables with the exception of *change adaptation*. *Resilience* within a given time-point is also related to variable measures within the same timeframe the exception again being *change adaptation*.

Well-being measures show less consistency in the pattern of relationships as compared to resilience. *Positive well-being* demonstrates a degree of consistency of measurement across the three time periods, *negative well-being* however does not. *Negative well-being* at time point 1 is not significantly related to *negative well-being* at time point 2 or time point 3. This may be indicative of measurement error which can be a feature of subjective well-being measures particularly with smaller samples (Krueger & Schkade, 2008). Examination of well-being correlations within time points reveals a changeable pattern of relationships. *Positive well-being* at time point 2 shows a positive relationship with all variables except *change adaptation*. At time point 3 *positive well-being* is positively related to all time point 3 variables. *Negative well-being* at time point 2 is related to all variables, the relationship with *change adaptation* being a significant negative relationship. At time point 3 *negative well-being* is positively related to variables excluding change adaptation

The *change impact* variable which measured participant perceptions of the extent to which they were impacted by organisational change at time point 1, showed no relationship with variables at time points 2 or 3. *Change impact* is only measured at

time point 1 due to its inclusion as a potential covariate as opposed to focal study variable (see section 9.2.2).

Considering the study outcome related variables of *change efficacy* and *change adaptation*, *change efficacy* correlations indicate a degree of consistency in measurement across the three study time points, change adaptation demonstrates less consistency with only time point 2 and time point 3 measures being related. At time point 1 *change efficacy* shows a positive relationship with the well-being and resilience variables a pattern which is repeated at time point 2. *Change adaptation* is related only to *resilience* at time point 1 whereas at time point 2 a negative relationship with *negative well-being* is the only significant relationship. *Change efficacy* at time point 3 is positively related to all time point 3 variables, change adaptation is positively related to positive well-being and change efficacy.

The pattern of relationships concerning change efficacy supports the underpinning rationale for the study, that enhancing resilience will be associated with enhanced *change efficacy*. The pattern of *change adaptation* relationships is more complex and taken with a consideration of the pattern of means (see table 9.4) could indicate that the level of change adaptation across the different time points is characterised by high levels of individual variation. This may reflect variability in the nature of change occurring in participants' individual workplaces across the study time period or alternatively be due to variations created due to differences between those undertaking intervention during the study period and those who were not. Inferential statistics are utilised to further examine potential causal relationships.

9.4.1.2 Consideration of means and standard deviations

Table 9.4 illustrates means and standard deviations for both conditions across all time points.

Table 9.4

Means and Standard Deviations for Intervention and Control Group over Time

Measure	Time 1		Time 2		Time 3	
	M	(SD)	M	(SD)	M	(SD)
Change Impact	I 32.52	(6.99)				
	C 32.00	(7.10)				
Positive well-being	I 30.28	(10.07)	I 29.56	(10.13)	I 32.20	(10.07)
	C 27.33	(9.02)	C 29.03	(8.39)	C 27.68	(8.94)
Negative well-being	I 45.12	(6.2)	I 45.23	(8.17)	I 46.25	(7.56)
	C 41.64	(8.14)	C 44.62	(7.03)	C 44.03	(9.39)
Resilience	I 37.85	(5.72)	I 37.5	(7.21)	I 38.07	(5.76)
	C 36.34	(5.23)	C 37.04	(6.2)	C 37.19	(5.61)
Change efficacy	I 29.74	(4.52)	I 28.92	(3.74)	I 30.04	(5.59)
	C 28.42	(5.24)	C 28.42	(5.90)	C 29.38	(5.76)
Change adaptation	I 36.33	(4.45)	I 32.78	(9.38)	I 34.38	(9.70)
	C 34.00	(6.23)	C 31.44	(7.59)	C 28.08	(10.48)

I = Intervention group, C = Control group

The pattern of means shows the intervention group to trend towards higher mean scores on baseline measures. In order to verify randomisation to conditions had been successful a randomisation check was conducted using MANOVA with the intervention condition as the independent variables and baseline measures of the study variables as the dependent variables. The MANOVA revealed that there were no significant differences between conditions at baseline $F(6, 36) = .45, p = .84$; Wilks' Lambda = .93, partial eta squared = .07, indicating that participants had been successfully randomly allocated to conditions.

The intervention group shows a slight trend for a decline in scores from baseline to time 2 and increase from baseline to time 3 on a number of variables (*positive well-being, resilience and change efficacy*). At time 2, one week post intervention, the intervention group may have been experiencing varying levels of motivation and or competence in implementing insights, learning and behaviours from the intervention content. The pattern of means is more diverse in the control group, showing time 1 to time 2 increases in some variables and no change in others. With the exception of *change adaptation*, the intervention group shows a trend for time 1 to time 3 increases in all variable means albeit slight in most cases. *Change adaptation* in the intervention group shows a decline from time 1 to time 2 with a recovery at time 3 although recovery is not to pre-existing time 1 levels. The control group show an overall downward trend in mean *change adaptation* across the three time periods. Changes in standard deviations across time points for both groups indicate potentially increasing levels of individual variability in *change adaptation* levels across the study period. The overall group appear to become more diverse in the extent to which they perceive themselves to be adapting to change across the timespan. This could be due to changes in the extent to which organisational

change was impacting specific individual workplaces creating variations in the requirement to show adaptive behaviours or alternatively a function of changed awareness and perceptions of change and change adaptation behaviours in the intervention group following exposure to the intervention. Whilst it was hoped that the intervention would positively impact participant levels of change adaptation, the reflective emphasis of the programme could have caused participants to become less positive in their appraisal of the level of change adaptation behaviours they were engaging in. Overall the pattern of means suggests a degree of time related fluctuation in study variables for both groups. In order to establish whether the intervention led to any significantly positive changes over time for participants, inferential statistics were applied.

9.4.2 Analysis strategy

A series of between-groups analysis of covariance (ANCOVA) were conducted to assess impact of the resilience intervention on study variables across the three time points via comparison to the control group participant baseline Change Impact scores at time 1 were used as a covariate to examine the extent to which individual participants were affected by organisational change acted as a potential moderator of intervention impacts. Where the ANCOVA yielded a non-significant interaction of the *change impact* covariate, the covariate was removed and analysis proceeded to mixed between-within subjects' analysis of variance (ANOVA) to examine effects of time and condition on the study outcome variables. All between group comparisons were adjusted for using Bonferroni corrections.

9.4.2.1 Change adaptation

There was no significant interaction effect of Change Impact scores at time point 1 for change adaptation $F(1, 45) = 2.40, p=.13$ therefore analysis proceeded to ANOVA with the covariate removed.

A mixed between-within ANOVA found no significant interaction between time and condition Wilks' Lambda=.96, $F(2, 47) = .89, p=.42$, partial eta squared = .04.

There was a significant main effect for time, Wilks' Lambda = .87, $F(2, 47) = 3.57, p = 0.036$, partial eta squared = .13 with the total participant group showing a reduction in change adaptation across time points. The main effect for condition approached but was not significant $F(1, 48) = 3.56, p=.06$, partial eta squared = .07.

Table 9.5

Mean Levels of Change Adaptation Scores for All Participants across Study Time Points

Time period	N	Mean	Standard deviation
Time 1 (pre-intervention)	51	34.90	5.67
Time 2 (1 week post intervention)	51	31.78	8.42
Time 3 (1 month post intervention)	51	31.5	10.50

The lack of an interaction effect makes conclusions difficult to draw. There was a decline in change adaptation from time point 1 to time point 2 for combined participants from both conditions (see Table 9.4). Examination of condition means (Table 9.3) shows mean change adaptation continued to decline for the control group from time 2 to time 3 whilst the treatment group mean change adaptation recovered although not to time 1 levels. Standard deviations increased across time for both conditions suggesting variability in individual levels of change adaptation across the 10-12 week period of the study.

9.4.2.2 Resilience

There was no significant interaction effect of Change Impact scores at time point 1 for resilience $F(1, 46) = 1.81, p=.75$ therefore analysis proceeded to ANOVA with the covariate removed.

A mixed between-within ANOVA found no significant interaction between time and condition Wilks' Lambda=.98, $F(2, 48) = .54, p=.58$, partial eta squared = .02. There was no significant main effect for time, Wilks' Lambda = .99, $F(2, 48) = .18, p=0.84$,

partial eta squared = .01. The main effect for condition was also not significant $F(1, 49) = .51, p=0.47$, partial eta squared = .01.

9.4.2.3 Positive well-being

There was no significant interaction effect of Change Impact scores at time point 1 for positive-well-being $F(1, 39) = 1.67, p=.20$ therefore analysis proceeded to ANOVA with the covariate removed.

A mixed between-within ANOVA found no significant interaction between time and condition Wilks' Lambda=.97, $F(2, 41) = .59, p=.56$, partial eta squared = .03. There was no significant main effect for time, Wilks' Lambda = .96, $F(2, 41) = .89, p=0.41$, partial eta squared = .04 The main effect for condition was also not significant $F(1, 42) = 1.17, p=0.28$, partial eta squared = .02.

9.4.2.4 Negative well-being

The Change Impact covariate approached but did not attain significance $F(1, 43) = 13.14, p=.08$, therefore analysis proceeded to ANOVA with the covariate removed.

A mixed between-within ANOVA found no significant interaction between time and condition Wilks' Lambda=.96, $F(2, 45) = .89, p=.41$, partial eta squared = .03. There was no significant main effect for time, Wilks' Lambda = .97, $F(2, 45) = .67, p=0.51$, partial eta squared = .03 The main effect for condition was also not significant $F(1, 46) = 1.46, p=0.23$, partial eta squared = .03.

9.4.2.5 Change efficacy

There was a significant interaction effect of Change Impact scores at time point 1 for change efficacy $F(1, 44) = 4.62, p=.04$ suggesting a relationship between how much individuals were impacted by change at time point 1 and feelings of change

efficacy across the study time points, analysis therefore proceeded using the ANCOVA with change impact at baseline (time 1) factored in as a covariate. There was no significant main effect of condition $F(1, 44) = .67, p=.42$. The main effect for time approached but was not significant $F(2, 43) = 3.13, p=.054$.

9.5 Discussion

Whilst the results of the current study indicate the potential relationship between change impact levels and change efficacy and a potential time related pattern for all participants for change adaptation, overall the results do not provide any conclusive support for the positive impact of the resilience intervention utilised. The anticipated impact benefits from modifications to the framework delivery that included enhanced social support elements and a sustained and meaning based goal focus have not been realised within the current trial. Methodologically, the use of an enhanced research design involving a more rigorous randomised controlled approach has not surfaced any results suggested in the trends of the workshop group results in Study 2 (see Chapter 6).

The absence of significant findings relating to the effects of the intervention on study variables may be due to the relatively short time period of follow up involved. Interventions designed to enhance well-being for example can take some time to demonstrate an effect (Lindquist & Cooper 1999; Seligman, Steen, Park & Peterson, 2005).

Efforts to apply rigour to the design and analysis of the final study may have further impacted the findings. The inclusion of only participants who had completed all three study questionnaires and the application of statistical analyses that would further reduce those within the analysis due to incomplete data may have obscured some potential effects. Inclusion of participants who had completed baseline plus

one follow up time point for example may have provided an approach more sensitive to effects given the comparatively small sample size. Vanhove et al. (2015) observe that more rigorous resilience programme designs produce weaker effects but are more likely to estimate *true* effect sizes. They further argue that even small preventive effects at an individual level may yield significant benefits at an organizational level. Finally, a degree of measurement error may have masked any potential intervention impacts.

9.5.2 Limitations

As with Study 2 the sample size for the current study is small and indicative of the challenges of obtaining robust samples and sustained study involvement in the context of real world organisational research. Of approximately 700 employees who could have opted into the resilience intervention only 144 (around 20%) did so. Further the sample of 98 opting to complete the baseline questionnaire further diminishes the proportional representation being less than 15% of the target group. Those who self-select into training and development interventions may differ from those who do not, a typically experienced and frustrating phenomenon of employee training and development research and practice (Ouweneel, Le Blanc, & Schaufeli, 2013)

A potential confounding effect may be due to the fact that the study group shared workplaces with colleagues from the control group who were awaiting the intervention. This was not possible to control for given the nature of an organisational intervention and waiting list design it is possible however that a potential confounding effect may have occurred. PsyCap for example has been demonstrated to have a *contagion effect* where attendees of a PsyCap intervention positively impact others in the workplaces who have not attended (Hodges, 2010,

Norman, Luthans, & Luthans, 2005). In addition to the potential confounding affect created by the potential for participants to interact, all participants were given information about the intervention prior to participation. Concealing the nature of the study from participants was not feasible given the real world nature of the intervention study. The resilience intervention was promoted within the organisation as a training offering as opposed to a research project and therefore followed the organisations standardised procedures for training recruitment and joining instruction issue for example. In addition, due to the constraints relating to recruitment participant blinding to condition allocation was not possible. All participants were aware they would receive the intervention and when due to the waitlist control nature of the study. Lack of participant blinding to condition allocation coupled with awareness of the focus of the intervention and study could have created changes in some participant's awareness motivation and/or behaviours relating to organisational change and resilience, prior to commencing the intervention itself.

The randomisation process was managed by a member of the study organisation, whilst this may have removed any potential researcher confound, the process of randomisation may have been compromised. Similarly the recruitment process for promoting the research which was also managed by the organisation not the researcher may also have been a potential confounding factor. Although the key organisational contact for the research was made aware of the requirements for rigour within procedural elements and the importance of these to the research, the possibility of compromised procedural elements in the context of a real world research project is a possibility.

The differing size of the intervention groups (from 8-22) may have created a different group dynamic across groups. Some participants were in attendance as the solo representative of their division, in other sessions cluster groups of participants who worked together in the same team were in evidence. This dynamic could have impacted upon factors such as the level of participant openness, task focus and the quality of group discussions within the programme activities creating variability across the 4 separate programmes in the intervention group.

Finally although the extent to which individuals were affected by change was measured at time 1 as a potential covariate, the impact of organisational change at both an organisational level and individual level was not monitored throughout the study time period, a period spanning over ten weeks in total. Whilst the organisational climate was characterised by one of continuous change (see 9.3.2) fluctuations in change efforts and impacts would likely have occurred across the study time period. In addition the impact of change on individual participants at the operational, perceptual and emotional levels would also be subject to variation and difference (Oreg et al., 2011). Variability created by the organisational change context presents a challenge to interpretation of findings and could possibly have obscured intervention effects.

9.6 Conclusion

Study 3 sought to test a final version of resilience intervention informed by the framework that is central to this thesis. The study did not find support for the impact of a resilience intervention on participant resilience, well-being, change efficacy and change adaptation compared to a non-intervention control group. The findings from this final study will be considered within the context of the broader thesis aims and research questions in the general discussion chapter that follows.

Chapter 10: Discussion

10.1 Chapter overview

The thesis set out to investigate whether employee resilience could be developed using brief forms of intervention and to develop a framework to inform intervention design. The chapter presents the contributions of the thesis to knowledge and practice. The research questions (RQ's) are reviewed in the context of study findings and the previous literature. Given the overall focus upon the development of an intervention framework more comprehensive discussion is focused on the different results obtained for different modes of delivery (RQ6). Exploration of the thesis strengths and limitations are presented and the implications for practice and future avenues of research discussed. Finally the researcher reflects on the research process.

10.2 Thesis contributions

This thesis has made five contributions to knowledge in the area of employee resilience.

10.2.1 An examination of resilience in an organisational change context

Whilst an extensive literature exists relating to the impact of organisational change on employees, an examination of employee resilience in the context of organisational change represents a significant gap. The workplace resilience literature is currently dominated with a focus upon occupationally specific sources of stress and adversity such as those experienced in the military (see for example Harms et al., 2013) and health related vocations (see for example McCann et al., 2013). The thesis offers a contribution via a consideration of change as a source of

adversity for public and third sector employees a context in which resilience may be particularly relevant (see Section 1.7, Chapter 1).

10.2.2 Identification of contextually relevant adult resilience factors

The literature relating to adult resilience is less well developed in comparison to developmental research in the field. The thesis has contributed to an understanding of the resilience factors of salience to employees in changing organisations. Support has been provided for the proposed relevance to adult populations and specifically workplace applications of well-founded resilience factors including social support, optimism/positivity and proactive coping approaches (Masten & Wright, 2010).

10.2.3 A contribution to workplace resilience development literature

To date a limited number of empirical studies relating to building employee resilience in the workplace have been verified via meta-analytic or systematic reviews. (Vanhove et al., 2015; Robertson et al., 2015). The pilot study outlined in Chapter 6 has already made a contribution to the literature. Studies 2 and 3 have a further contribution to make here through findings relating to the trialling and comparison of alternative modes of delivery.

10.2.4 Support for the role of positive constructs in the workplace

Whilst the thesis studies are subject to limitations (see sections 7.6.1, 9.5 and 10.6) and exploratory in nature, support is provided for the concept of resilience as a positive organisational behaviour (POB) (Luthans, 2002) which may be developed. The pilot study and Study 2 have demonstrated that resilience may be enhanced through relatively brief one to one intervention and is related to well-being and change orientation outcomes. These findings also extend emerging work relating to

the role of employee personal resources in changing organisations (Van den Heuvel et al., 2010).

10.2.5 Contribution to practice: A framework for employee resilience development

Central to the thesis is the creation of a framework to guide the development of brief intervention programmes to enhance employee resilience. Insights from the thesis studies have informed the iterative design of the framework which includes a core *curriculum* of resilience factors established through an evidence based practice approach. Preliminary support is offered for one to one modes of delivery and insights from the thesis studies have informed recommendations for ways in which practitioners may utilise the framework and content.

10.3 Review of Research Questions

10.3.1 RQ1: What are the adverse impacts of organisational change for participant employees?

The first study examined the nature of organisational change as a potential source of adversity for employees' findings confirmed those in the literature relating to negative impacts of change (Bamberger et al., 2012; Oreg et al., 2011). Participants indicated a range of challenges in dealing with organisational change from tangible threats to resources such as loss of pay, loss of colleagues, through dealing with negative emotional responses to change, to potential wider impacts on health and well-being. Participant accounts of their change experiences were varied, emotional and behavioural responses differed, not all participants appraised change and/or the organisation negatively and not all participants experienced wider consequences such as well-being impacts for example. This provides support for the view of

change impact as influenced by a range of individual factors including traits, and experience for example (Caldwell et al., 2004; Fedor, Caldwell, & Herold, 2006). Change was confirmed in the study therefore as having the potential for adverse impacts with individual factors operating as a potential moderator.

Beyond the scope of study exploration was the way in which organisational change may be conceptualised as either a chronic or acute stressor/adversity. Distinguishing chronic and acute stressors is indicated by Pangallo et al. (2015) to be an important factor impacting resilience and adaptation through differential levels of disruption and adjustment trajectories. Participants in the current study typically described change as being a protracted process with ongoing impacts more in line with chronic stressor features. Some participants however also reported components of a change process that involved significant key events such as demotion or the loss of a job or role for example. Such events would more fittingly be viewed as acute stressors (Bonanno & Diminich, 2013). In conclusion whilst study one has provided support for the view of organisational change as a potential source of adversity the study also supports a potential complex and multi-level view of the relationship between organisational change and the individual employee experience of adversity and resilience.

10.3.2 RQ2: What resilience factors do participant employees utilise when dealing with organisational change?

The application of prominent resilience factors from the adult literature (Meredith et al., 2011) to the organisational change accounts of participants in study one was verified to be an appropriate framework. Participant accounts of personal resilience in the face of organisational change have confirmed the validity of characteristics and behaviours which have been traditionally found in the literature (Wright &

Masten, 2013). Factors reported to be functional for employees experiencing organisational change included the role of positive emotions, a flexible thinking style, social connectedness, a sense of purpose/meaning, emotional regulation and a proactive approach to challenges. Whilst participants did in some instances allude to potentially trait related aspects of resilience such as “*being a positive person*” the majority of characteristics and approaches described were examples of behaviours and processes which constitute potentially malleable factors, accessing social support, exercising self-awareness, managing home and work boundaries for example. This provides support for the approach taken to resilience in the current study as a positive organisational behaviour (POB) Luthans et al., 2002) that may be developed.

10.3.3 RQ3: How do employees define personal resilience in the context of organisational change?

Chapter 2 outlined the current lack of clarity concerning resilience conceptualisation and definition (Fletcher & Sarkar, 2013). The inclusion of a question relating to definition in the thesis qualitative study represented an attempt to examine a contextually specific view of resilience in line with recommendations (Robertson et al., 2015). *Positivity* was the most frequently cited element of resilience in participant definitions and *growth* components the least referenced. There was a discrepancy between participant definitions of resilience and their accounts of resilience. The view of resilience as an adaptive process that develops over time (Meredith et al., 2011) was evident in the narrative accounts of participants being resilient in the face of changes where they described for example utilising previous experience or attaining acceptance after a period of time, but this was not articulated in their definitions. Many participants instead, cited *coping* or *adapting*

related definitions suggesting that when considering resilience in the context of organisational change their focus may have been at the outcome level of resilience rather than process (Zautra et al., 2010). It may be that an employee's interest in and reflections upon the concept of resilience is likely to be fairly pragmatic i.e. considering resilience at the level of a functional resource that helps in the dealing with change rather than as a theoretical construct hence the different emphasis.

10.3.4 RQ4: What are relevant components/content of a resilience intervention for employees experiencing organisational change?

The reviews of workplace resilience development covered in Chapter 2 conclude that due to the current latent state of the field is not possible to identify the most effective components of resilience programmes (Robertson et al., 2015; Vanhove et al., 2015). Taken with the fact that to the authors knowledge there is no existing literature which examines employee resilience development specifically in the context of organisational change, the aspiration to develop an intervention framework was exploratory rather than validatory in nature. The “*relevance*” contained within the research question related to evidence informed factors. The thesis has consolidated a range of resilience factors into a development framework utilising an evidence based approach. Further validation of content is required.

10.3.5 RQ5: Can resilience well-being and performance outcomes be achieved by brief resilience programmes for participants experiencing organisational change?

Studies 2 and 3 sought to test the viability of enhancing employee resilience through relatively brief resilience programmes and demonstrating resultant well-being, change orientation and performance related outcomes. The findings from the one to one delivery programmes utilised in the pilot and study one where resilience was

enhanced, provide some support for the potential POB like (Luthans, 2002) nature of resilience. Support for the role of resilience as a functional personal resource for change adaptation (Van den Heuvel et al., 2010) was also provided through a demonstrated related enhancement of change attitudes (change efficacy). Well-being was also enhanced in the one to one delivery programme in Study 2. Brief group workshop based interventions failed to impact study variables significantly. Taken overall the findings from the studies are inconclusive for reasons that will be explored further in the limitations section.

10.3.6 RQ6: Which mode of delivery – group or one to one is most effective for promoting resilience, change efficacy, adaptation, and well-being outcomes?

The thesis provides support for the enhanced effectiveness of one-to-one resilience programmes over group delivery utilising the current thesis framework. This is in line with Robertson et al's., (2015) conclusion from their systematic review where they suggest a one to one element may enhance effects of workplace resilience programmes.

The pilot study (Chapter 6) found the one to one delivery programme to significantly enhance participant levels of hope, optimism, resilience and change-efficacy. Study 1 demonstrated participants in the one to one condition to show significant gains in well-being, change efficacy and aspects of their resilience process compared to peers in a group workshop condition. Whilst the workshop group showed trends towards gains in some study variables excluding well-being following intervention these tended to be immediate and not sustained and were not at a level of statistical significance. Study 3 which trialled a final group workshop version of intervention

utilising a more rigorous research design also failed to yield any significant impact on resilience, well-being and change adaptation variables.

The thesis findings do not however confirm conclusively that one to one delivery modes may be an effective means of resilience development. The design of the thesis studies does not enable mode of delivery to be separated from content variables making it difficult to draw conclusion as to the relative contribution of programme content relative to mode of delivery. The one to one facilitation itself may have enhanced resilience in participants for example Grant et al (2009) found a coaching element enhanced the resilience of a group of leaders attending a leadership development programme when compared to a colleague group who received other elements of the leadership development programme but no coaching.

10.4 Explaining the limited impact of group intervention.

The findings relating to the group workshops in Studies 2 and 3 may be usefully reviewed utilising training transfer theory. The theory may offer insights into the pattern of results and the lack of significant findings in the group workshop conditions. Training transfer generally refers to the use of trained knowledge and skill back on the job (Burke & Hutchins,2007). For transfer to occur “learned behavior must be generalized to the job context and maintained over a period of time on the job” (Baldwin & Ford, 1988, p.63). Baldwin and Ford (1988) present a model highlighting factors that facilitate transfer of training (see Figure 10.1).

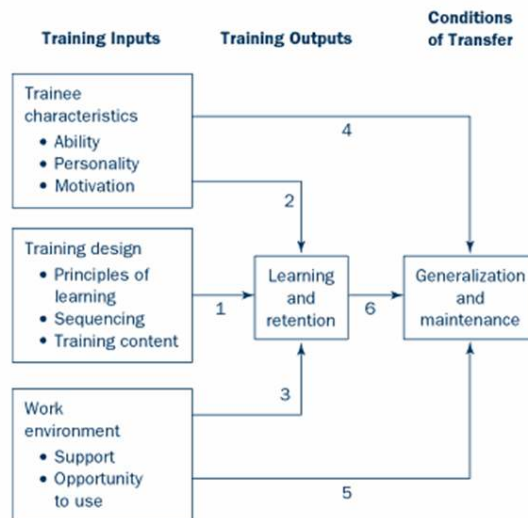


Figure 10.1 Baldwin and Ford (1988) Training Transfer Model

Considering *trainee characteristics* in the context of the thesis studies, all participants were volunteers for the resilience interventions which would indicate a level of positive motivation towards the programmes. Ouweneel et al. (2013) indicate that voluntary participants of self-enhancement programmes may paradoxically gain least from them due to enhanced level of self-awareness, motivation etc. that may distinguish such individuals from non- volunteering peers. The impact of the thesis resilience interventions may not have been maximised due to this potential bias in the participant group. Although practically and potentially ethically more challenging, such interventions may be more effectively targeted at those less likely to put themselves forward.

The area of *training design* may offer further insight into the mixed results obtained in the studies. The inability to identify most or least efficacious elements of the framework have already been discussed (see Chapter 9). The mode of delivery has however been identified as a potentially significant variable of training design. Training design directly impacts upon *learning and retention* as shown in Baldwin and Ford's (1988) model (see Figure 10.1). The one to one delivery modes in Study

2 and the pilot programme included both a longer time-scale (over 6 weeks as opposed to a single half-day or over 4 weeks) and a one to one facilitator as key differentiators from the workshop modes. Both the timing and the facilitator factors may have served to enhance learning and retention of the framework material over and above the group workshop designs. The time periods involved in the workshops may not have been sufficient to enable consolidation and application of learning. The one to one facilitator may have provided important support for transfer that may have been lacking in the *work environment*. Given the individual nature of change appraisal and response already explored (see Section 10.2) the one to one facilitation may have provided an important level of tailoring of the intervention programme to individual needs in a way not possible in the group workshop delivery.

Considering the *work environment* further a number of factors may have impacted upon the transfer climate in participants' workplaces. The *opportunity to perform* the resilience skills and behaviours may not have been triggered sufficiently for participants. The criterion of adversity as a pre-requisite to resilience Masten (1994) may simply not have been present in the participants workplaces during the period of study focus particularly when considering Study 3 participants. This does not however explain the results for the one to one participants in Study 2 who occupied the same workplace and timeframe as their group workshop colleagues. Returning to the role of the facilitator and the design and timescale of the one to one programme, it is possible that the one to one design afforded the participants valuable opportunities for rehearsal of resilience skills and behaviours and opportunity not present to the same degree in the workshops, particularly the half day only version. Alternatively the one to one delivery mode may have enhanced

participant capabilities in identifying opportunities to practice skills and/or enhanced motivation to do so.

The wider level of *workplace support* for training transfer via participants' managers, peers etc. could be a variable of importance to the findings. All study organisations were supportive of the research as of potential benefit. The random nature of voluntary participation and the fact that the training interventions were research related projects rather than part of a wider strategic training plan however is likely to have led to potentially differing levels of manager support for transfer for example.

Baldwin and Ford's (1988) final transfer component, *generalization and maintenance* relates to transfer of learning from training to a wider range of situations in the workplace and the continued use of these capabilities over a sustained period of time. The timescale for the thesis studies which involved a one month follow up whilst sufficient to capture decline in learning (Arthur, 1998) is unlikely to have been adequate to provide a more robust exploration of generalization and maintenance elements. A more longitudinal design is likely to be required to establish training transfer at a more sustained level particularly if trained behaviours and skills are not called for regularly as may be the case in terms of resilience behaviours.

This has implications for the design of future studies which should seek more longitudinal designs that will encompass fluctuations in the experience of adversity at work.

10.5 Thesis strengths

The thesis is to the author's knowledge the first of its kind to investigate the development of employee resilience specifically within an organisational change context offering a pertinent contribution to the literature (see Section 10.2).

10.6 Thesis limitations

There are a number of limitations within the thesis body of work that will be discussed here. As this thesis consolidates a number of studies and approaches, generic limitations relating to the overall study questions and design will be addressed along with an exploration of study specific limitations where these apply.

10.6.1 Lack of a process evaluation lens

The prevailing focus of the thesis was on what Ruotsalainen et al. (2006) term effect only evaluation involving a focus upon the outcomes of resilience intervention as opposed to process evaluation. The limitations of this approach are that workplace interventions are complex and the effectiveness of implementation is influenced not only by the content and design of the intervention itself, but also a wide range of contextual, individual and collective factors.

Process evaluation refers to the reasons why a program or intervention succeeds or fails (Schuman, 1967). Biron, Karanika-Murray, and Cooper (2012) call for process and contextual issues to be evaluated when looking at occupational health and well-being interventions. They maintain that a lack of conclusive evidence relating to intervention effectiveness may not be due to issues of content or design but because important contributory contextual and process factors are omitted in evaluation studies over time and across situations. Contextual factors can have a mediating or moderating effect on the link between an intervention and its outcomes

and may help rule out alternative explanations for intervention outcomes (Johns, 2006; Nielsen & Abildgard, 2013). The lack of a process evaluation perspective in the thesis studies create limitations in the extent to which causal mechanisms may be understood. The lack of intervention impact found when using a group based approach may be due either to the nature of the intervention itself or contextual factors that moderated its impact. The study design means it is not possible to distinguish between theory/programme failure which would indicate the theoretical base for the intervention did not address the issue or implementation failure which refers to the implementation of the intervention being conducted in a way that would compromise success even if the theory behind the intervention is correct (Nielsen & Randall, 2013).

Nielsen and Randall (2012) propose a framework for intervention process evaluation consisting of three components, *intervention context*, *intervention design* and *participants mental models*. At a contextual level factors may involve *discrete* or *omnibus variables* (Johns, 2006). Discrete contextual factors relate to transitory episodes and events that may impact upon the organisational context within which the intervention is taking place such as organisational change projects, economic and budgetary changes or competing priorities or initiatives. Omnibus factors relate to wider organisational contextual aspects such as organisational culture and the corresponding intervention “fit” and the level of organisational health which can influence readiness for and receptiveness to the intervention. Intervention design refers to the design and implementation of the intervention, for example what was implemented, what was the role of various stakeholders such as managers, who were the intervention delivery personnel and participants? In addition the nature of communications and clarity of roles and expectations within the intervention implementation are important process features. Finally participant mental models

refer to sense making cognitions such as perceptions and appraisals that may exert a significant impact upon behaviour (Nielsen & Abildgard, 2013), predisposing participants to be receptive to or cynical/rejecting towards a given intervention for example. The Nielsen and Randal (2012) three component framework may be applied to further explore and gain insight into the results of the thesis studies from a process evaluation perspective.

Considering contextual factors, the organisations involved in the thesis studies were identified based upon limited criteria which involved the organisations identifying themselves as experiencing significant organisational change and receptive to employee resilience intervention. No further screening or attempts to match intervention formats to organisational contexts was undertaken. Reference to contextual issues for each of the study organisations is included within the body of the thesis report (see sections 1.7, 7.4 and 9.3.2) this is however provided as a source of contextual information rather than explicitly addressed as a variable in intervention implementation. Wider omnibus factors such as organisational culture, health and change readiness were not addressed. Whilst the focus of the thesis was to develop a generic intervention framework rather than a tailored organisational solution, the lack of contextualisation renders the development framework characteristic of an “*off the shelf package*” beset by the limitations of such approaches in terms of impact. Non tailored, generic approaches are unlikely to address the needs of all stakeholders and organizational contexts (Randall & Nielsen, 2012). Whilst the one to one delivery of the interventions may have enabled a degree of individual level contextualisation through the nature of the one to one relationship, it is possible that the group based interventions in studies 2 and 3 however lacked contextual congruence at either an organisational or individual level. Issues relating to the timing of the intervention relative to organisational

change timescales, participant opportunities to apply learning along with potential ceiling effects due to the maturational level of the organisation (Nielsen et al., 2006), are amongst many potential contextual factors that may have impacted study outcomes.

Linnan and Steckler (2002) propose a number of factors that can impact at the design and implementation level of interventions; these include issues of recruitment/reach, dose and fidelity of the intervention. These factors raise questions such as how were participants targeted and encouraged to participate/sustain participation, how effective was take-up, how did participants engage and respond to the intervention and how consistent with underlying theoretical assertions was actual delivery? Formal evaluation of these elements was not a component of the research design in the current studies due to the emphasis on intervention content design and outcome focused evaluation. Whilst an element of fidelity was addressed for the group interventions which were delivered by one facilitator, the potential for the role of multiple facilitators in the one to one conditions has already been identified as having the potential to modify the delivery of the intervention (see 7.6.1). Nielsen, Fredslund, Kristensen and Albertsen (2006) suggest that within group variability factors can impact upon how an intervention is received, for example how participants are informed about interventions, individual readiness for change and degree of involvement in shaping interventions. Whilst communications and procedures relating to the research element of the thesis studies were standardised, informal “grapevine” communications about the interventions occurring within the study organisations along with levels of management support and encouragement present potential confounds. Nielsen et al. (2006) further describe potential contamination effects in the form of treatment diffusion where control or non-intervention participants become aware of and adopt

intervention practices , this may have occurred in study 3 which included a waiting list control group who were colleagues of those completing the intervention condition first. Nielsen et al. (2006) highlight the challenges of undertaking such intervention research where the researcher is typically a guest rather than host of organisational interventions and unable to influence issues of participant blinding and practice sharing for example.

Nytrø, Saksvik, Mikkelsen, Bohle, and Quinlan, (2000) assert that in order for interventions to be effective potential participants should perceive they have problems to be addressed, believe the intervention to be capable of effectively addressing those problems and be motivated to participate in the intervention activities. Through such mechanisms, participant mental models are aligned towards positive orientation to the intervention. Participants in the thesis studies were all volunteers, their motivations for participation in the interventions however was not explored as part of the research. In addition employee participation in shaping interventions is seen to be an important way of ensuring fit for purpose designs along with fostering employee commitment (Nielsen et al., 2006; Nielsen & Abildgaard, 2013) a feature which was beyond the focus and scope of the thesis studies. Stakeholder feedback was included in the pilot study and utilised in the iteration of the intervention framework initially (see section 6.3), participant feedback was not however utilised in studies 2 and 3. Whilst this was consistent with the outcome focused nature of the studies, in the context of a process evaluation review this represents a potential loss of contextual information which may have usefully informed intervention design and shed further light on findings. As observed by Biron et al. (2012) an emphasis on experimental and quasi-experimental research designs lead to an emphasis on summative evaluation rather than formative evaluation of interventions.

Central to the thesis aim was the development of a resilience intervention framework , an emphasis on intervention content and delivery and an attempt to answer the question “does the intervention work” rather than “how and why does the intervention work” (Biron et al ., 2012, p. 3). As such the approach is subject to the limitations of what is termed a “black box” approach (Nielsen & Randall, 2007). Application of a process evaluation lens offers useful insights regarding factors that may have impacted thesis study outcomes and highlights limitations of methodological approach.

Attention to process factors could enhance the impact of the resilience intervention framework in future settings. This could include for example a needs analysis and assessment of organisational readiness, full stakeholder (managers, participants, practitioners) involvement and feedback in shaping and iteration or refinement of the approach, targeting of participants most likely to benefit and a clear implementation and evaluation strategy. As Biron et al. (2012) observe:

Incorporating process related factors and contextual issues in intervention research could optimise the fit of the intervention to the specific organizational context and thus improve implementation effectiveness and sustainability. (p. 2)

10.6.2 Variability in the nature of change in the study organisations

Including the pilot study, a total of 6 organisations were involved in the thesis studies. Whilst organisational consistency and continuity across the thesis may have been desirable, practical issues related to the recruitment of organisations, and/or practicalities relating to implementation of interventions meant that this was not possible. Whilst undertaking applied research in organisations is commonly beset with such problems as the practicalities of dealing with issues of recruitment,

attrition, and ethical and operational constraints (Ellam-Dyson, 2012) the potential implications include variability in the nature of organisational change and impacts on study participants.

Interviewees in Study 1 were typically survivors of employee downsizing exercises who had experienced radical changes to services and roles. Participants who were involved in the piloting of the one to one intervention (Appendix A) were managers implementing significant budget cuts and service reforms during the period of the intervention and faced potential redundancies themselves or in their teams. The organisations within Study 2 were experiencing increased operational demands created by changes and were experiencing some future uncertainty but were not at the time experiencing radical or transformative change that created downsizing for example. In Study 3 participants were experiencing waves of change created by rounds of budget cuts and at the time of the study were at a post major change point and anticipating a further round of cuts. This suggests participants across the studies were at different stages of change and experiencing changes with differing levels of impact.

In a longitudinal study of employees experiencing organisational changes Grunberg, Moore, Greenberg and Sikora, (2008) describe different change contexts distinguishing between “*typical*” organisational change programmes involving influencing employee attitudes and behaviours and “exceptional , episodic events like mass layoffs or a major merger” (p. 217). Grunberg and colleagues indicate these episodic changes to be more dramatic in impact and more likely to impact employee attitudes and behaviour because of their potential for disruption and the creation of “an emotional stir-up” (p. 217). The *emotional stir up* in the final study may have been insufficient to either require a resilient response and/or maximise its

potential. Alternatively having experienced change already the participants may have been more resilient, more prepared and less fazed by subsequent rounds.

Change impact was measured in Study 3 in an attempt to address the variable. However as organisational change was a key variable of study in the thesis a degree of scale measurement or consistency of change impact across the research would have enhanced the approach. In addition results may have been enhanced where the interventions were consistently applied in the *episodic* or *exceptional* change circumstances referred to by Grunberg et al. (2008) as in the pilot study.

10.6.3 Study instruments

The thesis involved a range of resilience measures. Robertson et al. (2015) recommend consistency in definition and measurement of resilience in workplace studies. The thesis utilised three separate measures (including the pilot study). The iterative nature of the thesis studies provide a rationale for the conscious selection of different measures whereby measurement progressed from measuring resilience as a POB and personal resource in the pilot, measuring resilience processes in Study 2 and resilience as an outcome in Study 3. Change efficacy was the one measure held constant across all three studies as increased confidence in dealing with change was a desired intervention outcome; consistency in the resilience measure in addition may have strengthened overall design of the study programme.

10.6.4 Short term longitudinal design

The timescales utilised in the intervention evaluative studies was relatively short with a one month post-intervention time point. The use of a one week proximal and four week distal interval was deemed appropriate to assess any attrition in positive gains/outcomes between a relatively immediate intervention completion point and a

later one. Given the nature of the anticipated behavioural and outcome impacts of the interventions, a more extended longitudinal timescale may be appropriate. The utilisation of a more longitudinal timescale over some months with the inclusion of more regular data collection (e.g. weekly) would overcome some of the challenges raised here. Such a design would also be more sensitive to temporal fluctuations in the key variables such as resilience.

10.6.5 Sampling

Participants in all studies were volunteers who expressed an interest in taking part in research. The study samples were self-selected and potentially qualitatively different from colleagues in their organisations who did not volunteer for participation. Factors such as self-awareness, openness to development and existing levels of study variable such as resilience and well-being may for example have been some of the variables in which the study participants differed from non-participating colleagues.

In Sheldon and Lyubomirsky's (2006) meta-analytical review of positive psychology interventions they found self-selection to be an important variable with self-selected participants showing greater gains than non-self-selected participants. Ouweneel, et al. (2013) conversely describe what they term "selection benefit paradox" (p. 191) where participants most likely to benefit from personal development interventions are most likely to drop out or not participate whereas those higher in positive emotions and engagement are more likely to participate but have less to gain. Clearly voluntary versus non voluntary intervention participation may be an important factor impacting intervention gains.

Randomised controlled trials are an obvious if elusive approach for future studies to aspire to in order to overcome the challenges identified here. There are practical,

organisational implications here too in terms of how organisations may best target and implement interventions and encourage participation. This is a challenging dilemma given that voluntary participation in positive interventions would appear to be a component of effectiveness plus the ethical considerations relating to any attempt at non-voluntary participation.

10.6.6 Dual role of practitioner and researcher/evaluator

Within the thesis research, the researcher also operated as practitioner delivering all of the thesis workshops and operating as one to one facilitator for 15 of the 24 one to one condition participants in Study 2. The relatively low attrition rate in questionnaire completion in Study 2 may be testimony to the nature and impact of the practitioner/researcher relationship. Eysenbach (2005) identifies the lack of face to face contact as a key factor in increased attrition rates. Whilst the researcher had face to face contact as a practitioner with the treatment group in Study 3 there was no contact with the control group until after the period of data collection.

Levels of researcher independence and social desirability in participants are potential confounds in practitioner research of this nature. Effort was made to ensure the study was as objective as possible via the use of emails and on-line questionnaires to provide some distance in the data gathering process. In addition researcher reflexivity was encouraged through the supervision process.

10.6.7 Random assignment to intervention

Sheldon and Lyubomirsky (2006) maintain that positive psychology interventions should have good fit with an individual's personality and needs. The random assignment of participants to the study conditions in the final study may have resulted in the impact of the allocated intervention not being optimised for some

participants. It may also explain at least partially, the initial attrition rate in Study 2 (see Chapter 6) from completion of the baseline study questionnaire to commencement of the intervention i.e. as some participants became aware that they were not allocated to a potentially preferred intervention. Random assignment was utilised in the present studies in order to maximise the validity of the intervention comparisons, future studies may explicitly address the issue of match in order to explore boundary issues relating to the effectiveness of interventions and participant fit.

10.6.8 The challenge of identifying the most effective content components of the interventions

The design and implementation of the resilience interventions employed multiple models and activities e.g. goal setting, strengths use, self-care. This multiplicity of approach is in line with the recommendations of Sin and Lyubomirsky (2009) regarding positive interventions. This approach however means that it is not possible to identify which elements of the interventions were most effective, whether all are required or whether a particular combination is most efficacious for example. Future studies could address this limitation with designs involving comparisons of various forms of intervention content and or through regression and /or modelling focused analyses.

10.6.9 The challenge of drawing conclusions relating to delivery mode

The current studies do not enable conclusions to be drawn about whether or not the impacts of the one to one approach were as a result of the framework content or the one to one delivery mode. The limited impact of the workshop interventions means that the current study has not validated the common framework content of the resilience workshop and one to one programmes as a contributory factor enhancing

study variables. One possible interpretation of the impact of the one to one programme could be that this was due to the use of a coaching modality rather than the resilience content. Exploring coaching which is a form of one to one delivery, Grant et al. (2009) for example observe that the effectiveness of coaching may operate through three mechanisms; a supportive relationship, goal setting and systematic engagement. Grant and colleagues note that systematically engaging in the setting and reviewing of self-concordant goals within the context of a supportive and confidential relationship can relieve stress and anxiety, enhance well-being and self-efficacy and build resilience. The one to one programme in the thesis contained all three mechanisms described by Grant et al. (2009) and attained similar outcomes to those cited, this may have been due to the process rather than the content of the programme. More direct contact with trainers who can assess and respond to individual needs and provide feedback are all factors that have been identified as enhancing training delivery (Vanhove et al.,2015) and are independent of training content.

10.7 Implications and recommendations

This section presents the framework thesis and considered implications and recommendations for practitioners who may wish to make use of it. Target practitioners are likely to include Training and Development professionals and Occupational Psychologists.

10.7.1 The final framework

The final framework illustrating the delivery mode and brief content is contained in Table10.1. This presents an outline of modes of delivery and activities for potential resilience programmes developed through the iterative process outlined in previous chapters. Supporting materials are located in Appendices G, H, L, M & N.

The consideration of the framework and approaches to resilience intervention which follows is designed to provide insights and recommendations to inform future practice.

Table 10.1

Final Framework Showing Activities in Each Delivery Mode

Framework area	One to one delivery	Half day workshop	3 session programme
Optimistic Style	<i>ABC model</i> introduced pre-programme and briefed by facilitator at first meeting. Participant records any examples of negative thinking /overcoming negative thinking in weekly logs and discusses with facilitator at meetings.	<i>ABC model</i> introduced by trainer, examples worked through in plenary. Individuals identify own examples and discuss in pairs/small groups.	Trainer introduces <i>ABC model</i> and <i>thinking traps</i> . Individuals identify and discuss in small groups examples of own thinking traps.
Using Strengths	Participants complete <i>VIA strengths</i> survey in advance of first meeting. Strengths are discussed at first meeting, participants log use of strengths in weekly logs for discussion at meetings.	Trainer provides input on role of strengths. Participants work in pairs/trios to identify and discuss individual signature <i>character strengths</i> using strengths cards.	Trainer provides input on role of strengths. Participants work in pairs/trios to identify and discuss individual signature <i>character strengths</i> using strengths cards.
Getting perspective	Pre-programme workbook introduces perspective and the <i>circle of influence</i> . Participants complete own circle of influence for discussion in first meeting with facilitator. Weekly logging of any use of <i>circle of influence</i> for discussion at meetings.	Trainer provides input on role of perspective and describes strategies before introducing <i>circle of influence</i> . Individuals complete own blank circle of influence re. change. Pairs work together to help each other add to <i>circle of influence</i> .	Trainer provides input on role of perspective and describes strategies before introducing <i>circle of influence</i> . Individuals complete own blank <i>circle of influence</i> re. change. Pairs work together to help each other add to <i>circle of influence</i> .
Social Support	Participants complete social support checklist as pre-work for discussion in first meeting. Facilitator provides brief input on role of social support. Participant maintains weekly log of social support for discussion at one to one meetings.	Trainer provides input on role of social support. Participants complete social support checklist. Pairs discuss insights.	Trainer provides input on role of social support. Participants complete social support checklist. Individuals formulate a short term goal to strengthen support. Small group discussion of insights and goals.
Self-efficacy	Participants reflect upon a situation of self-efficacy in advance of meetings. Facilitator provides brief input on role of self-efficacy and the range of strategies. Participant maintains weekly log of self-efficacy examples for discussion at one to one meetings.	Participants are asked to identify a situation where they experienced self-efficacy. Plenary sharing of factors that enabled individuals to reach self – efficacy. Trainer provides brief input on self-efficacy strategies. Individuals identify personal “default” strategies.	Participants are asked to identify a situation where they experienced self-efficacy. Plenary sharing of factors that enabled individuals to reach self – efficacy. Trainer provides brief input on self-efficacy strategies. Individuals identify personal “default” strategies.

Self-care	Participants complete <i>five a day</i> activity as pre-work for discussion in first meeting. Facilitator provides brief input on role of self-care. Participant maintains weekly log of self-care activities for discussion at one to one meetings.	Brief input from facilitator re the importance of self-care to resilience and outline of the <i>five a day</i> . Individuals self-assess against the <i>five a day</i> and discuss in small groups actions they could take.	Brief input from facilitator re the importance of self-care to resilience and outline of the <i>five a day</i> . Individuals self-assess against the <i>five a day</i> and discuss in small groups. Individuals formulate a short term goal to progress <i>self-care</i> ; Goals are shared in small groups.
Goal setting	Participants are encouraged to draft one or two resilience related goals at the end of the pre-work. Preliminary goals are discussed and refined with facilitator in session 1. Progress on goals is discussed in each of the two subsequent meetings. Participant is supported in identifying ongoing goal(s) in final session.	At the end of workshop participant's complete action planning proforma where they identify insights from the workshop and action(s) they can take to support them in being resilient in the face of changes. Pairs/trios share goals.	The setting and sharing of goals is a feature of all 3 sessions. Session 1 = self-care goal, session 2 = social support goal, session 3 = "best self" goals. Small group review of progress in goals takes place in sessions 2 and 3.

10.7.2 Timing and targeting intervention

The thesis studies raise questions about when in the organisational change process is the most effective point to offer employee resilience training? Timing the delivery so that employees are able to put skills and tools into practice relatively quickly is an important training transfer issue. Whilst participants may be better equipped to adapt to adversity following the interventions unless they are required to do so the impact of this improved individual resilience process may not be fully realised. Targeting of resilience interventions at those who will be most affected by change may form part of an effective strategy. Preparing employees for an imminent and high impact change by providing interventions just prior to the change where practicable may be optimal, alternatively an *inoculation approach* may be viable.

10.7.3 An inoculation approach

An *inoculation approach* (Meichenbaum, 1985, 2007) may strengthen the design and impact of potential interventions. The process of inoculation has been used in cognitive behavioural therapy to support individuals in anticipating setbacks and

developing the skills to cope with them (Vuori, Toppinen-Tanner, & Mutanen, 2012). According to Meichenbaum (2007), inoculation against setbacks can be achieved by providing individuals with exposure to minor setbacks and stressors. Such an approach fosters psychological preparedness, promotes resilience, and develops a sense of mastery in confronting more stressful setbacks and obstacles (Meichenbaum, 2007; Vuori et al., 2012). Two of the workplace studies identified in resilience programme reviews (see table 2.4) utilised inoculation principles. Arnetz et al. (2009) and McCraty and Atkinson (2012) both utilised critical incident simulations in their resilience training programmes for police officers.

Whilst resilience interventions may be targeted at those about to experience change and therefore with immediate opportunity to put learning into operation, an inoculation approach as explored above could form part of an organisation's more general well-being policy and strategy to enhance employees personal resources and coping skills.

10.7.4 Improving workshop outcomes

Vuori and Silvonen (2005) set out five essential components for effective group training designed to enhance the acquisition of personal resources:

A focus upon proactive skills such as personal strengths auditing, networking and concrete techniques for self-management (in Vuori & Silvonen's 2005 example these relate to career management skills).

Active teaching and learning methods such as discussion, role-play and the utilisation of participants own experiences.

Skilled trainers who build trust and facilitate processes that promote the learning of the target skills.

A supportive learning environment which promotes and utilises modelling and supportive group behaviours.

Preparation against set-backs using a stress inoculation approach (Meichenbaum 1985, 2007; Vuori et al., 2012) where participants articulate and share potential setbacks, generate solutions and practice these solutions.

Whilst the study resilience workshops (in Studies 2 and 3) were designed in a way that satisfies the first four of the principles outlined by Vuori and colleagues (2005), the stress inoculation approach was not an explicit feature. Given the nature of the change context experienced by the workshop participants already explored (see Section 10.6.1) an approach which included an explicit anticipatory element coupled with solution generation and rehearsal/practice may enhance the design of the workshop intervention and strengthen outcomes. Within the one to one programme the reviews of weekly logs were designed to engage participants in trialling and reviewing behaviours and strategies for dealing with setbacks. Whilst the setbacks and challenges encountered may have been relatively minor in many cases, the process provided a valuable opportunity for practice, review and preparation which was not afforded to the workshop participants.

10.7.5 Utilising one to one delivery in employee resilience development

The findings of the thesis provide tentative support for the efficacy of a one to one delivery mode when seeking to strengthen employee resilience. Where a one to one approach is practicable this would be recommended. The framework outlined in the thesis could be utilised by trained coaches/mentors in an organisation to support individuals within the context of a corporate coaching/mentoring programme for example. Given the numbers of employees that may be involved in an organisational change process coupled with likely accompanying resource

restrictions in the target sectors such an approach is unlikely to be viable on any significant scale however. An alternative approach could be to combine elements of group inputs such as the three session programme outlined in Study 3 with elements that would enable a one to one focus such as a single brief follow up session with a trained facilitator who could support the individual in reviewing content, goals and planning next steps for example. In a controlled experimental design Bright and Crockett (2012) for example found that workers who received one 30 minute telephone coaching session 4 weeks following a 4 hour classroom based training programme for enhancing performance demonstrated significant gains in a range of performance and stress management variables compared to participants who received the classroom based training only. Whilst the study involved a trained coach, they also suggest that coaches or mentors from within organisations may be able to satisfactorily deliver the one to one element needed for enhance performance. Alternatively the potential for peer support could be incorporated into group programmes through the use of a *buddying* approach for example where peer pairs form a supportive one to one relationship through and beyond the programme.

10.7.6 Piloting

Organisations wishing to implement resilience development interventions are advised to conduct a small scale pilot to establish which pattern of delivery to be most effective for the specific context. Whilst the group modes of delivery have not yielded significant results in the context of the current thesis studies, the framework provides the potential for a range of potential permutations to be trialled. Self-directed and/or web-based administrations of resilience programmes for example, whilst lacking a significant presence in the workplace literature have been demonstrated to be effective in other settings (Rose et al., 2013). Prospective pilot

studies should involve a clear statement of anticipated outcomes and benefits. Clarification of specific adaptive behavioural changes relating to the nature of the organisational change such as increased multi-disciplinary working, application of new practices for example is recommended (Van den Heuvel et al., 2010) .The inclusion of adaptive performance measures within the evaluation of resilience interventions constitutes a robust approach that goes beyond merely assessing whether an intervention has enhanced resilience and/or well-being to an examination of the impact upon behavioural changes, and potentially outcomes and results (Kirkpatrick, 1994).

10.8 Future avenues of research

Workplace trials and comparisons of resilience programmes are a much needed component of the resilience literature (see Chapter 2). Use of larger samples, longitudinal timescales for proximal and distal follow-up periods and use of randomised controlled trial designs in particular could usefully extend knowledge of workplace applications of resilience.

The issue of thresholds and boundaries at which intervention impacts may be maximised could be explored further to inform the targeting and informed implementation of interventions designed to enhance employee personal resources such as resilience. The thesis has raised issues relating to the level of personal impact of organisational change and individual factors that may moderate that impact as potential variables impacting upon intervention effectiveness. Other variables such as pre-intervention personal resource levels level or baseline well-being may be informative areas of inquiry. A wider consideration of contextual and process issues in intervention design and research would further strengthen the knowledge base concerning resilience programme research and implementation.

The area of employee resilience is currently dominated by military or uniformed services (see Table 2.3, Chapter 2). Studies relating to resilience in wider and more general occupational populations and settings would address an important gap in the literature. Application to private sector employees is another potential avenue for exploration

A consideration of interventions in organisational change contexts in particular is an area of study worthy of both academic and practitioner focus. Addressing the existing knowledge gap concerning employee resilience offers potential to make a positive impact on employee well-being and organisational effectiveness.

Whilst one to one delivery has been demonstrated to offer a viable methodology for boosting employee personal resources further work is needed to identify the variables that characterise effective programme content. The current research has not identified conclusively the discrete contribution of training and development variables that include delivery mode, programme curriculum and programme content, to impacts and out. Future research could focus on identifying how such factors contribute to and account for variability in intervention outcomes.

Finally, a recent Journal of Occupational and Organizational Psychology (2013) call for papers: "Designing and evaluating resource-oriented interventions to enhance well-being, health and performance at work" outlines a comprehensive research agenda paralleling themes raised here:

When considering boundary conditions of intervention effectiveness, questions such as the following are raised:

- *What resources are the optimal ones to fuel in such interventions?*

- *Are there specific population groups (i.e. vulnerable groups, high stress groups) who benefit the most from specific interventions?*
- *How long should intervention activities be, and how frequently should they be performed in order to have sustainable effects? What are appropriate time frames for capturing these effects? Under what conditions are different interventions beneficial?*
- *Going forward, how can current research and evaluation designs be improved upon to capture psychological changes that occur as a result of these interventions?*
- *Are there optimal designs for such interventions in order to capture the expected changes in psychological resources? (p. 224).*

The current thesis offers a contribution to the research agenda set out here and confirms the ongoing currency and relevance of the questions.

10.9 Researcher reflections

Reflections on the professional doctorate process and journey include those from a practitioner perspective and those relating to my reflections as a researcher and on the research process culminating in key lessons learned. These are presented here in first person in line with the reflexive nature of the process and the position and function of this section in a professional doctorate thesis.

The decision to focus my doctorate studies on organisational change and resilience represented a bringing together of my Occupational Psychology practitioner history as an Organisational Development Consultant, Trainer and Coach with a growing interest in the areas of positive psychology which had commenced on my

appointment to Northumbria University in 2007. As a practitioner my focus was and continues to be, largely about supporting organisations and individuals in dealing with organisational change, particularly in the public sector. The professional doctorate presented me with an opportunity to test and strengthen the evidence based practice approach to which I aspire whilst hopefully contributing something of value and utility to organisations and individuals facing the significant change challenges presented in the current economic climate.

I have gained insights about the particular challenges of undertaking intervention related research projects in organisational settings. Challenges encountered on the way have included dealing with an organisation pulling out of an initial planned quantitative evaluation of the study workshop and the prolonged and unexpected time period taken to secure an organisation in which to undertake Study 2 which caused the initial thesis completion to be delayed by six months. My intended randomised controlled trial approach was not feasible for the organisation in study 3 and sample sizes in both studies were disappointing. Sample size in Study 3 was particularly disappointing given the potentially large pool of employees who could have taken part (up to 700 being affected by change).

Reflecting on these challenges leads me to a number of conclusions including noting that I may have had an overly optimistic expectation of outcomes and timescales in the early part of my doctorate journey. Secondly my experiences have engendered a greater empathy with Masters students whose theses I supervise and who routinely experience similar challenges in securing organisations and their commitment to timescales. I have also learned a great deal about the value of supervision particularly the style of supervision that strikes the right balance of challenge and support and wanting the supervisee to give of their best. I hope that I

may take this learning forward into my own supervision to benefit students I supervise.

During the doctorate process I produced my first published peer reviewed article (Sherlock-Storey et al.,2013) which was one of the “highs” of my doctorate journey. The article was based upon work undertaken with a Masters student who was able to complete her thesis using the work involved. This was particularly gratifying and forms a model for how I would like to work with students in future. The inclusion of my article in both of the 2015 reviews of workplace resilience development (Robertson et al., 2015; Vanhove et al., 2015) was encouraging and somewhat surprising to me given the exploratory nature of the study and small sample size involved. The reviews were very timely and their recommendations provided some validation for my approach to the quantitative studies in my thesis, Study 3 in particular which was reassuring. This has encouraged me to consider the role of potential future practitioner related research projects and my role as a researcher. Previously I may have considered it too difficult to attain a necessary level of scale and rigour to warrant publication of practice based organisational studies , I can now see the role and importance of such work, even if exploratory, in contributing to literature in an emergent field and feel encouraged to pursue further research opportunities.

As I am sure most who have taken this journey would agree, the doctorate process is a long and arduous one. Whilst the formal outcome of successful completion is the award of a doctoral qualification, that outcome can belie the idiosyncratic nature and scope of the learning that has occurred. I have learned a great deal on my own doctoral journey and as is often the case, the most significant learning emerged from the toughest lessons. The doctorate examination and feedback process has

been particularly challenging involving significant changes to the body of work presented in culmination in this thesis document. Looking back now, with hindsight I can see that significant improvements have been made in the rationale, focus, and general academic calibre of the thesis and that I have learned salutary lessons that will enhance my researcher competence going forward. Key learning is explored here.

Focusing the thesis. Consistent with doctorate requirements, this thesis represents a significant body of work which included not only the design and execution of three research studies but the design and iterative development of the intervention framework, the design and delivery of a training programme for facilitators and the delivery of multiple organisational interventions and associated project management. In a first iteration of the thesis my focus was only upon the three research studies with little attention paid to the write-up of the design of the framework itself. Through the feedback and support process I became aware of the need to better integrate the research and practitioner elements of my thesis and position all of the components more firmly within an evidence base and also to be clear about my research questions.

Evidence base. In early iterations of my thesis the evidence base was less well articulated in some areas. I feel this was likely due to the challenges of the dual requirements of a professional doctorate to combine both practitioner and researcher elements. Within a piece of work such as this the practitioner perspective can constitute a very legitimate source of “evidence”. I lacked a true grasp of how to make this work within my doctorate write up initially. As a novice researcher I was possibly overly focused upon and anxious about the empirical aspects of the thesis. As a consequence, this led to me providing only minimal focus

upon the framework itself as already discussed and additionally, with some of the framework design elements appearing to lack clear evidence based link. The explicit inclusion of an Evidence Based Practice (EBP), (Briner & Rousseau, 2011; Rousseau & Barends, 2011) model and approach in chapter 5 enabled me to better synthesise the different strands of evidence that underpinned the framework design. Whilst EBP principles had underpinned the work undertaken in the thesis, I had not addressed this explicitly within the write-up. Inclusion of the EBP approach led to me providing a more focused explanation of how the components of the framework were informed by the literature, feedback from stakeholders including participants in study 1 and how I utilised criteria based on practitioner informed judgement to make decisions concerning content and delivery. Use of the EBP lens helped me to be clear about assertions that were based on evidence from the literature and those that were not and to examine more robustly the nature of none literature based assertions. I feel this has been a valuable lesson learned that will enhance both my practitioner and researcher competence in the future.

Limiting variables/selecting measures. I was keen to select measures that would be of contextual relevance to the study involving workplace resilience, and workplace well-being. In selecting the WRI as the resilience measure for study 2 however what I may have gained in contextual fit was countered by the challenge of using a measure that consisted of 7 subscales. Given the small sample size involved in the study, having numerous dependent variables increases the potential for error. The examination feedback process encouraged me to ensure more focused measurement by removing variables that were not of central focus to the study and thereby providing greater focus to the study and reducing error possibility. Methodological improvements to study 3 included a reduced number of variables and the selection of a single scale measure of resilience. With hindsight I would

have included fewer variables in study 2 selecting single scale measures for example. In future I will ensure focused research questions with explicitly linked measures and will be attentive to both balancing contextual fit of study measures with appropriate measurement characteristics.

Randomisation and blinding. Feedback from examiners gave me the opportunity to strengthen the methodological approach taken in study 3 to provide an enhanced approach to that utilised in study 2. The intervention trial in the final study included a control group, a reduced and more focused number of variables and an element of randomisation. Whilst both study 2 and study 3 were characterised by the challenges of real world research, the final study presented particular challenges to my initial intention to utilise a fully Randomised Controlled Trial (RCT) approach. The study sample were those volunteers from an opportune group of employees who were signed up to a resilience intervention, the employees were randomly assigned to the intervention dates which formed the two conditions for the study, not all intervention participants participated in the research, this meant that randomisation occurred before research participation rather than after consent so did not adhere to a typical RCT protocol. This was disappointing but unavoidable and due to the constraints placed by the study organisation, which involved an emphasis on the intervention as an organisational offer rather than a research project coupled with the requirement to provide early date confirmation to employees expressing interest in attending the workshops. My examiners made me aware of the potential role of a lack of blinding in study 3. as all participants both intervention and control groups were aware of the intervention prior to taking part and were aware they would all receive the intervention. This was a feature I had overlooked both in initial design and in post study critique. In a future “ideal world” scenario I would seek to recruit an organisation specifically for a research trial (as

opposed to an opportune organisation undertaking the intervention) in order to exert a higher degree of control over variables. Whilst the challenges of undertaking interventions in organisational contexts will always be present I now have enhanced awareness of factors to attend to when striving for more controlled trials.

Avoiding over interpretation/extrapolation. In various drafts of my thesis I have swung between downplaying findings due to restrictive sampling and measurement issues to potentially over extrapolating from modest findings. I feel I have now assimilated an understanding of the need to position my findings appropriately in the context of an exploratory/pilot study with a restricted, sector specific sample. Related to this, the need to recognise that without a thorough process evaluation approach (which was not a feature of my study) I am unable to conclude whether findings or the lack of were due to contextual issues, the validity of the intervention theory, the content of the interventions or flawed research design. The viva feedback process has enabled me to appreciate limitations in my evaluation approach which were not immediately apparent to me when operating in a “black box” mode, focusing on intervention content and outcome only in pursuit of a “scientific” approach. Whilst an outcomes focus to intervention study is not atypical it clearly limits the drawing of conclusions. The wider inclusion of stakeholder feedback could have been one relatively simple way of strengthening my approach offering further information concerning process variables for example. In study 3 participant feedback could have provided potentially helpful insights concerning the patterns in the data by providing contextual information about organisational change and participant reflections for example. Alternatively a *participatory action research* approach to intervention design where stakeholders are actively involved as co-creators in organisational intervention (see for example McIntyre, 2008) could have offered an alternative and fitting design for the thesis and addressed the process

evaluation limitations discussed. This is certainly an approach I will consider in future intervention focused studies.

Many of the challenges I have experienced and the significant lessons learned have stemmed from the challenges of integrating the dual lenses of practitioner and researcher in a body of work such as this. At times I have felt that my practitioner focus has detracted from my ability to operate in a true “scientific” way as in the situations described where I have had to accommodate organisational constraints relating to the research studies or failing to factor in how participants could be blinded to interventions for example. On other occasions I feel my eagerness to undertake a controlled approach to the research studies caused me to narrow my vision and overlook things I would very typically address in my practitioner role. The lack of inclusion of process evaluation factors explored here and in the thesis discussion or the initial underplaying of the central focus of the framework development to the thesis are some of the examples. Reflecting back on the work I can see that whilst I have learned a great deal, my journey as a researcher has only begun. I do however feel enthused that I am a little closer to becoming a better scientist practitioner and gratified by the words of Baumeister and Alghamdi (2015) who in providing a concluding commentary on a recent special issue of the Journal of Occupational Organisational Psychology looking at resource based interventions for employee well-being supply a fitting conclusion to reflections on my own work:

Resource based interventions to improve well-being and productivity in the workplace hold the promise of multiple, assorted benefits. From the evidence presented in this special issue, they have not yet fulfilled that promise. Still there would seem to be ample room for improving this outcome, in terms of both more sensitive research and more effective interventions. All is not lost even though not much has been found. (p. 627)

10.10 Conclusion

The thesis set out to contribute to knowledge and practice in the area of employee resilience and its development through workplace intervention programmes. Through an examination of organisational change as an adversity context for employees a number of resilience factors that may be of salience to employees in change contexts have been identified. These factors support some well-established resilience factors from the literature including the role of positivity/optimism, social support and a problem focused approach. Trialling of an evidence based framework for resilience intervention has provided some support for the concept of resilience as a personal resource with positive organisational behaviour qualities and has indicated one to one delivery modes to be a potentially more effective form of delivery than group based. The constraints of the thesis mean questions relating to the most effective content for resilience programmes along with boundary issues such as when to offer intervention and for who require further exploration.

Appendices

List of Contents

Appendix A: Sherlock-Storey, Moss and Timson Article 2013)	<i>i-viii</i>
Appendix B: Briefing and Consent - Study 1	<i>ix-xii</i>
Appendix C: Study 1 – Interview Question Schedule	<i>xiii</i>
Appendix D: Template Analysis – Template 2	<i>xiv-xvii</i>
Appendix E: Template Analysis – Example Coded Transcript	<i>xviii-xxix</i>
Appendix F: Template Analysis – Tracked Changes to Template	<i>xxix-xxxi</i>
Appendix G: Study 2 – Workshop Participant Guide	<i>xxxi-xlix</i>
Appendix H: Study 2 - One to One Participant Pre-Work	<i>l-xciii</i>
Appendix I: Study 2 – Participant Information Sheet and Consent Form	<i>xciv-xcvi</i>
Appendix J: Study 2 – One to One Terms of Engagement	<i>xcvii</i>
Appendix K: Stakeholder Feedback – Questionnaire Results from Training and Development Professionals	<i>xcviii-cx</i>
Appendix L: Study 3 - Workshop Materials Session 1	<i>cxix-cxi</i>
Appendix M: Study 3 - Workshop Materials Session 2	<i>cxix-cxxvii</i>
Appendix N: Study 3 - Workshop Materials Session 3	<i>cxxvii-cxxxiv</i>
Appendix O: Study 3 – Participant Information Sheet and Consent Form	<i>cxxxv-cxxxvii</i>
References	1- 23

Brief coaching for resilience during organisational change – an exploratory study

Mandi Sherlock–Storey, Mark Moss & Susan Timson

Purpose: This article outlines a small-scale exploratory study focusing upon the impact of a brief coaching intervention on participant levels of resilience in the face of organisational change. The study sought to pilot a brief, three-session resilience coaching programme and explore the impact upon participants reported levels of resilience and attitudes towards organisational change.

Design: A programme of three 90-minute coaching sessions was delivered at three-weekly intervals over a six-week period. Luthans et al. (2007) Psychological Capital (Psychap) Questionnaire and questions relating to participants' confidence in dealing with organisational change were administered in a test/re-test design one week prior to the commencement of coaching and within two weeks of coaching conclusion.

Method: An opportunity sample of 12 middle managers from a UK public sector organisation experiencing significant organisational change participated in the study. Participants completed the pre-coaching questionnaire and participated in a brief resilience coaching programme consisting of three semi-structured sessions. The coaching programme was designed to support individuals in developing and demonstrating resilient behaviours in the face of organisational changes and progressing their well-being and/or resilience related goals. Participants were invited to repeat the study questionnaire within two weeks of their final coaching session.

Results: Statistical analyses supported both study questions, with participants reporting significant (positive) changes in resilience levels and confidence in dealing with organisational change following the coaching programme. Increases in participants' psychological capital in the areas of 'Hope' and 'Optimism' were also found although 'Self-Efficacy' was not found to be significantly enhanced.

Keywords: Brief coaching; skills coaching; resilience; organisational change; psychological capital; positive organisational behaviour.

THE CURRENT UK economic climate necessitates adaptive and resilient employees who are able to maintain at least adequate if not high levels of performance and well-being during significant organisational change and re-organisation. Jackson et al. (2007) define workplace adversity as: '...any negative, stressful, traumatic or difficult situation or episode of hardship that is encountered in the occupational setting.'

Given that organisational change may represent an 'adverse' situation for many employees, the ability to adapt to and even thrive during change that may be typified by the resilient worker could offer significant

benefits for both the employee and the organisation. Resilient individuals are more likely to be open to new experiences, more flexible and more emotionally stable in the face of adversity (Avey et al., 2009). This is highly likely to confer significant adaptive advantages to such individuals when faced with the challenges of organisational change. Resilient individuals may, therefore, be expected to be more open to change, experience less negative emotional and physical consequences when faced with change and to be more likely to adapt to and implement required changes. Resilience could offer significant benefits at an organisational

level in enhancing the successful implementation of change and potentially reducing typical experienced negative impacts of change such as increased stress, absenteeism staff turnover, etc.

Developing individual employee resilience

There is a growing case for resilience in the workplace constituting what Luthans (2003) defines as a 'positive organisational behaviour' (POB) which is : *'the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed and effectively managed for performance improvement in today's workplace'*.

Resilience has been confirmed in a number of studies to be a potential POB (Luthans et al., 2002; Luthans & Youssef, 2007) in that it has been demonstrated to be state like as opposed to a fixed personality trait and, therefore, capable of development and enhancement.

Whilst a focus upon developing employee resilience in organisations is a relatively new area of research, there is a degree of consistency emerging in terms of areas of worthy inclusion which is of potential interest to organisations, practitioners and researchers. Jackson et al. (2007), for example, propose the following strategies for developing individual resilience:

- Building positive professional relationships and networks;
- Maintaining positivity;
- Developing emotional insight;
- Achieving life-balance and spirituality;
- Becoming more reflective.

Jackson et al.'s (2007) suggestions typify the focus of interventions aimed at enhancing individual resilience in that they tend to focus upon supporting individuals in developing resilient mind sets, for example, optimism, reframing setbacks and 'self-care' habits. See, for example, Milllear et al. (2008) and the CIPD (2011) publication for resilience practitioners.

Coaching for resilience

The agenda set out by Jackson and her colleagues for resilience interventions clearly resonates with the focus of many coaching programmes and conversations with the focus upon supporting coachees in being more effective through the facilitation of learning, growth and reflection in the pursuit of their goals. As such coaching would appear to offer a highly appropriate medium for the promotion and development of individual resilience.

Grant et al. (2009) concluded that: *'...short-term coaching can be effective, and that evidence-based executive coaching can be valuable as an applied positive psychology in helping people deal with the uncertainty and challenges inherent in organisational change.'*

The current study seeks to contribute to the call for growing the evidence base for coaching psychology (Ellam-Dyson, 2012) and more importantly to develop and test accessible and robust interventions designed to enhance the effectiveness and well-being of employees. The approach used in the study differs from that of Grant and his colleagues in that it trials skills-based rather than a developmental or executive coaching approach. Skills-based coaching is generally characterised by a higher level of structure and/or a more directive style of coaching, a fairly narrow skill or behavioural focus and a shorter timescale than development coaching which is typically more complex and emergent in focus, less directive in style and more about creating the right conditions and 'psychological space' for 'reflective learning' (West & Milan, 2001).

The study sought to explore the extent to which a relatively brief and structured, skills-based coaching approach (the skills focus being resilience behaviours) could contribute to enhancing coachees' levels of resilience and feelings towards organisational change. More specifically the study addressed the following research questions:

1. Can brief resilience coaching increase an individual's level of resilience?
2. Can brief resilience coaching increase an individual's feeling of confidence to deal with organisational change?

Method

The coaching programme

The design of the the study coaching programme utilised principles described by Luthans et al. (2006) for developing positive psychological capacities through 'micro-interventions' combined with currently available literature and guidelines for resilience interventions (CIPD, 2011) and the lead author's own (unpublished) qualitative study of factors that contribute to experiences of resilience during organisational change. The programme focused upon educating and supporting coachees in developing and utilising resilience behaviours drawn from seven key areas: *Goal setting; Explanatory style; Using strengths; Social support; Self-care; Self-efficacy; and Attaining perspective.*

The programme commenced with participants receiving a workbook outlining the key areas of resilience and a number of reflective activities. Participant coachees were required to work through activities relating to each of the resilience areas and draft initial resilience and well-being related goals in advance of the first meeting with their coach. The workbook also contained log pages where coachees could record notes of their progress between coaching sessions and note any issues they wished to discuss with their coach at forthcoming meetings.

The programme consisted of three coaching sessions of 90 minutes duration over a six-week period, giving a three-week interval between sessions. Coaching took place at the coachee's workplace. Session one was focused upon helping coachees to understand the various resilience areas, reviewing insights from the pre-work activities and supporting the coachee in setting resilience and well-being related goals which could be progressed during the period of coaching. Sessions two and three involved

reviewing coachee progress in utilising the various resilience related behaviours (e.g. making use of their support network) and progress against goals set. In addition the final session focused upon setting future goals to extend beyond the coaching programme and supporting coachees in preparing for progressing and maintaining their resilience and well-being without the support of a coach/coaching process.

Coaches

Seven volunteer coaches were involved in the delivery of the study coaching programme. Coaches included chartered and registered practitioner occupational psychologists with significant coaching experience, experienced non-psychologist coaches, and trainee occupational psychologists with limited coaching experience. Coaches possessed either a Master's in Occupational Psychology or a coaching qualification as a minimum. Coaching experience ranged from six months to 14 years. In addition to exploring the impact of the coaching programme on coachees, an additional aim of the project was to develop a relatively simple skills-based coaching programme that could be delivered by coaches of varying skill levels. Coaches were provided with a one-day training programme to equip them with an understanding of the programme content and process and to familiarise themselves with the programme materials. Coaching supervision was provided for the less experienced coaches following their first and final sessions with coachees. All coaches confirmed that the training and the supporting coaching materials had prepared them adequately for the delivery of the coaching programme.

Measures

Psychological Capital questionnaire PCQ

The study employed the Psychological Capital (PsyCap) Questionnaire PCQ (self-report) developed by Luthans and colleagues (Luthans, Youssef et al., 2007; Luthans, Avolio et al., 2007). The PCQ

consists of 24 items measuring Psycap sub-scales of Hope, Optimism, Resilience and Self-efficacy, six items per sub-scale. A six-point Likert scale is used ranging from strongly agree to strongly disagree, example item 'I feel confident analysing a long-term problem to find a solution'. Whilst the primary interest of the study was in participants levels of resilience defined by Luthans and colleagues as '*when beset by problems and adversity sustaining and bouncing back and even beyond to attain success*', the questionnaire was utilised in its entirety to allow exploration of any coaching impacts on the additional areas of PsyCap.

Attitude to organisational change measure

Six items from the Readiness for Change Scale (Holt et al., 2007) were utilised. Holt and colleagues propose that change readiness has amongst other dimensions, a '*change-specific efficacy*' dimension. Items from the efficacy component of the scale were considered most fitting to the current study as it relates to the extent to which an individual believes they are capable of implementing a proposed change. Change efficacy was felt to be the most appropriate target for a brief coaching intervention as opposed to 'acceptance of' or 'commitment to' change for example. A six-point Likert scale rating was utilised ranging from strongly agree to strongly disagree, example item 'When we implement change I feel I can handle it with ease'.

Participants

Participants were an opportunity sample of middle managers from a UK public sector organisation who had voluntarily taken up the offer of the resilience coaching programme which was promoted directly to their management tier ($N=52$) by their Human Resource Department. Participation in the coaching programme was not dependent upon participation in the research study, whilst 21 managers completed the coaching programme; the study sample consists of 12 coachees who

completed the study questionnaires at both time points. Study participants consisted of nine females and three males, age ranged from 35 to 64. The mean period of time participants had been employed by the organisation was 14.1 years for females and 7.7 years for males. Participants were heavily involved in the implementation of organisational changes created by public sector budget cuts. Between the first and second coaching sessions the organisation introduced a further and unanticipated change agenda to the group. This change involved further budget, staff and service cuts and required the immediate involvement and action of the management tier from which the group were drawn.

Procedure

Participants who had expressed an interest in the coaching programme were asked to select a block of three dates with three-week intervals between dates. These dates were used to match coaches to coachees based upon coach availability. Assigned coaches contacted individual coachees directly to agree a time slot and venue for each of the coaching sessions. Coaches emailed the resilience coaching workbook along with a brief 'contract' for the coaching and instructed coachees to complete the exercises in advance of the first coaching meeting. Approximately one week before the first coach meeting, coachees were contacted by email and invited to take part in the research study. They were advised that access to the coaching programme was not dependent upon participation in the research which was entirely voluntary. The invitation email outlined the study, the required involvement and specified how issues of confidentiality and data use were to be addressed. Interested participants were invited to return a form of consent to indicate their intent to be involved in the study. A link to the online questionnaire was provided and participants were required to select their own password to facilitate confidential questionnaire completion and

storage. Participants were contacted again within one to two weeks of their final coaching session and invited to complete the post-coaching questionnaire. The study received approval from the University of Northumbria Psychology Department ethics board prior to commencement.

Results

The data for the four sub-scales of the Psychological Capital Questionnaire and the Readiness for Change scale were calculated for all participants both pre and post intervention. None of the variables were found to deviate from normality as evaluated through Kolmogorov-Smirnoff tests, and so parametric analyses were deemed appropriate. Pre- to post-changes were, therefore, assessed using paired sample *t*-tests. A Bonferroni correction was applied in order to control for inflation of the type one error rate as a consequence of conducting multiple tests. Descriptive and uncorrected comparison significance levels are presented in Table 1. Pre- and post-differences were calculated by subtracting the pre-mean from the post-mean and consequently a positive value indicates an increase in any given variable from pre- to post-testing.

Hope

A paired samples *t*-test revealed that the post-intervention mean (27.7) was significantly higher than the pre-intervention mean (24.9), $t(11)=4.07$, $p=.01$ (Bonferroni corrected).

Optimism

A paired samples *t*-test revealed that the post-intervention mean (26.5) was significantly higher than the pre-intervention mean (22.7), $t(11)=3.97$, $p=.01$ (Bonferroni corrected).

Resilience

A paired samples *t*-test revealed that the post-intervention mean (29.5) was significantly higher than the pre-intervention mean (27.3), $t(10)=3.24$, $p=.045$ (Bonferroni corrected).

Self-Efficacy

A paired samples *t*-test revealed that the post-intervention mean (31.1) was not significantly different to the pre-intervention mean (29.1), $t(11)=3.07$, $p=.055$ (Bonferroni corrected).

Change Efficacy

A paired samples *t*-test revealed that the post-intervention mean (31.6) was significantly higher than the pre-intervention mean (28.1), $t(11)=4.26$, $p=.005$ (Bonferroni corrected).

Table 1: Pre- and Post-means (and standard deviations) and difference scores for the four variables of the Psychological Capital Questionnaire and the Change Efficacy Scale. Significance levels are uncorrected and obtained from paired samples t-tests. N=12 in each case except for Resilience where N=11 due to an incomplete questionnaire.

Variable	Pre Mean (SD)	Post Mean (SD)	Post – Pre	Sig (Uncorrected)
Hope	24.9 (3.0)	27.7 (3.7)	2.8	.002
Optimism	22.7 (4.5)	26.5 (4.9)	3.8	.002
Resilience*	27.3 (3.3)	29.5 (2.9)	2.2	.009
Self-Efficacy	29.1 (2.3)	31.1 (1.8)	2.0	.011
Change Efficacy	28.1 (4.0)	31.6 (4.5)	3.5	.001

Discussion

The primary study questions were

1. Does brief coaching enhance participant resilience?
2. Does resilience coaching have a positive impact upon coachee attitudes towards organisational change, specifically does coaching increase participants feelings of confidence in dealing with change?

Both research questions were supported by the study.

Coaching builds resilience

The coaching programme effectively enhanced coachee's levels of personal resilience. In addition, other areas of psychological capital namely Hope and Optimism also showed positive gains. Given the potential impact of resilience upon employee well-being, and attitudes towards change (Wanberg & Banas, 2000) and the growing evidence for the relationship between levels of PsyCap and productivity, turnover, absenteeism and other benefits (Avey et al., 2011; Luthans et al., 2008) this is an encouraging finding. Whilst the PsyCap dimension of Self-efficacy approached significance, the coaching programme did not lead to significantly enhanced pre- and post-coaching measures of Self-efficacy. Participant's levels of change efficacy were, however, significantly enhanced. This may suggest that a brief programme of skills/behaviour focused coaching can be effective in enhancing confidence in a domain specific area such as dealing with change but will be less effective in enhancing coachees more general level of personal confidence and efficacy. A development coaching approach may perhaps be better suited to enhancing coachee's broader feelings of confidence and efficacy?

Coaching enhances attitudes towards organisational change

Participants reported increased positive attitudes concerning their confidence in dealing with organisational change following the coaching programme. Participant coachees were middle managers already

experiencing significant organisational change created by austerity measures and budget cuts currently impacting on UK public sector organisations. In the middle of the coaching programme, that is, between coachees first and second coaching sessions, the organisation announced the need for a further unanticipated, significant and imperative budget cut. The coachee group were heavily involved in implementing this change and progressing the necessary cuts to services and staff from the point of the second coaching session. Despite this unanticipated change, coachees reported enhanced confidence to deal with change following the coaching programme.

Limitations and future research

The study is subject to many of the limitations typically found in the coaching literature due to the challenges of research in applied settings (Ellam-Dyson, 2012). Limitations of the study include a small and predominantly female sample, use of self-report measures, lack of a longitudinal time-scale and lack of a control/comparison group. Clearly the sample size is limiting, related to this is the fact that participants self-selected themselves onto the programme and were then further motivated to complete the research questionnaires. This may render the participant sample qualitatively different in terms of factors such as their openness to development, perceived impact of coaching, etc., from their colleagues who either did not opt for coaching in the first place or who participated in the coaching but opted out of the research element. The current sample was in addition predominantly female which may have impacted on the findings.

There was considerable variability in the experience and skills of coaches involved in the study. This was intentional for the purposes of the current study as one of the aims was to develop and test a simple and accessible approach which could be mastered by inexperienced, trainee or non-psychologist coaches as readily as more expe-

rienced professionals. The sample size of the study did not make it possible, however, to distinguish whether coach experience was a factor impacting on coaching effectiveness, an issue that may be of relevance to future studies of this nature and something of a worthy topic of interest in its own right.

The current study was subject to a number of challenges typically experienced in organisational research and which render the highly prized randomised controlled trial (RCT) approach non-viable. The challenges included issues identified by Ellam-Dyson (2012) relating to appropriate and ethical use of control groups, participation and drop-out issues and resources. Within the current study a waiting list control group approach for example, would not have been appropriate due to the coaching programme representing a real-time intervention offer for a group of managers dealing with a current and pressing challenge, that is, organisational change. Considering participation and drop-out issues, the research sample (i.e. those completing pre- and post-coaching measures) represented just over half of the group who actually participated in coaching who in turn represented less than half of the management group offered the coaching programme. Whilst this pattern of participation may not be unusual in terms of involvement in voluntary coaching and/or research programmes it clearly has a significant impact upon sampling and the potential to generalise findings. In the absence of truly representative samples researchers are unable to answer with any certainty questions relating to the extent to which coachee characteristics such as gender, coaching/development motivation and pre-intervention levels of personal resources such as PsyCap, for example, impact upon coaching effectiveness. Whilst there are clearly challenges in developing a robust and comprehensive evidence base for coaching, the authors endorse the views of Briner (2012) and Passmore and Fillery-Travis (2011) in encouraging future researchers to

strive to overcome such challenges, to undertake RCT-based studies and contribute to the evidence base for coaching psychology.

Conclusion

The current study provides encouraging support for brief, skills (behaviour) focused coaching as a potentially effective method for enhancing employee resilience and change orientation. Compared to development coaching approaches which typically require highly skilled, experienced and often costly coaching professionals, a programme such as the one used in the study may provide an accessible and affordable approach to employee support and development during change.

The area of resilience and other positive organisational behaviours (e.g. optimism, self-efficacy) offer potentially promising areas of focus for coaches supporting individuals during organisational change. As noted earlier these areas are often implicitly the focus of coaching and coaching conversations. The current study provides support for the potential value of a more explicit and focused coaching emphasis on positive behaviours that can enhance an individual's capacity to deal with change and encouragingly, that the inclusion of these need not be complex.

The current study formed the pilot for a coaching approach to be utilised in a planned larger-scale study. The intent is to compare the coaching approach outlined here with a workshop version of the content, ideally with the inclusion of a control group. The authors hope to share the findings from the larger study in the near future.

Correspondence

Mandi Sherlock-Storey

Psychology Department,
Faculty of Health and Life Sciences,
Northumberland Building,
Northumbria University,
Newcastle NE1 8ST, UK.

Email:

Mandi.sherlock-storey@northumbria.ac.uk

References

- Avey, J.B., Patera, J.L. & West, B.J. (2006). The implications of positive psychological capital on employee absenteeism. *Journal of Leadership & Organisational Studies*, 13(2), 42–60.
- Avey, J.B., Luthans, F. & Jensen, S.J. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management*, 48, 677–693.
- Avey, J.B., Reichard, R.J., Luthans, F. & Mhatre, K.H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviours, and performance. *Human Resource Development Quarterly*, 22(2), 127–152.
- Briner, R.B. (2012). Does coaching work and does anyone really care? *OP Matters*, 16, 4–12.
- Chartered Institute of Personnel and Development (CIPD) (2011). *Developing resilience: An evidence-based guide for practitioners*. Retrieved 12 February 2013, from: www.cipd.co.uk
- Ellam-Dyson, V. (2012). Coaching psychology research: Building the evidence, developing awareness. *OP Matters*, 16, 13–16.
- Grant, A.M., Curtayne, L. & Burton, G. (2009). Executive coaching enhances goal attainment, resilience and workplace well-being: A randomised controlled study. *The Journal of Positive Psychology*, 4(5), 396–407.
- Holt, D.T., Armenakis, A.A., Field, H.S. & Harris, S.G. (2007). Readiness for organisational change: The systematic development of a scale. *Journal of Applied Behavioural Science*, 43, 232–255.
- Jackson, D., Firtko, A. & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: A literature review. *Journal of Advanced Nursing*, 60, 1–9
- Luthans, F. (2002). The need for and meaning of positive organisational behaviour. *Journal of Organisational Behaviour*, 23, 695–706.
- Luthans, F. (2003). Positive organisational behaviour: Implications for leadership and HR development and motivation. In L.W. Porter, G.A. Bigley & R.M. Steers (Eds.), *Motivation and work behaviour* (pp.178–195). New York: McGraw-Hill/Irwin.
- Luthans, F., Avey, J.B., Avolio, B.J., Norman, S. & Combs, G.M. (2006). Psychological capital development: A micro-intervention. *Journal of Organisational Behaviour*, 27, 387–393.
- Luthans, F., Avey, J.B., Avolio, S.M. & Combs, G.M. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organisational Behaviour*, 27, 387–393.
- Luthans, F., Youssef, C.M. & Avolio, B.J. (2007). *Psychological capital*. New York: Oxford University Press.
- Luthans, F., Avolio, B.J., Avey, J.B. & Norman, S.M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60, 541–572.
- Luthans, F. & Youssef, C.M. (2007). Positive organisational behaviour in the workplace: The impact of hope, optimism and resilience. *Journal of Management*, 33(5), 774–800.
- Luthans, F., Avey, J.B., Clapp-Smith, R. & Li, W. (2008). More evidence on the value of Chinese workers' psychological capital: A potentially unlimited competitive resource. *The International Journal of Human Resource Management*, 19(5), 818–827.
- Millear, P.M., Liossis, P., Shochet, I.M., Biggs, H.C. & Donald, M. (2008). Being on PAR: Outcomes of a pilot trial to improve mental health and well-being in the workplace with the Promoting Adult Resilience (PAR) programme. *Behaviour Change*, 25(4), 215–228.
- Passmore, J. & Fillery-Travis, A. (2011). A critical review of executive coaching research: A decade of progress and what's to come. *Coaching: An International Journal of Theory, Research and Practice*, 4, 70–78.
- Wanberg, C. & Banas, J. (2000). Predictors and outcomes of openness to changes in a reorganising workplace. *Journal of Applied Psychology*, 85(1), 132–142.
- West, M. & Milan, L. (2001). *The reflecting glass: Professional coaching for leadership development*. London: Palgrave MacMillan.

Appendix B: Briefing and Consent - Study 1

To potential Organisational Resilience research participants:

TITLE OF PROJECT: Resilience in the workplace

Participant ID Number:

Principal Investigator: Mandi Sherlock-Storey

Investigator contact details: Email: mandi.sherlock-storey@northumbria.ac.uk

This project is funded by: Northumbria University

INFORMATION TO POTENTIAL PARTICIPANTS

1. What is the purpose of the project?

To explore the experience of resilience during organisational change i.e. to examine individual employees experience of feeling resilient during change and the factors that contribute to those feelings

2. Why have I been selected to take part?

You are currently an employee in an organisation that is experiencing change and can offer your perspective on resilient responses to change either from a personal perspective or as observed in others.

3. What will I have to do?

You will be asked to participate in an interview lasting around 30 minutes During the interview you will be asked to describe key points in your experience of organisational change where you feel you (or others) have demonstrated a resilient response e.g. bounced back from a setback The interviewer will encourage you to identify the factors which you feel have contributed to resilience. Interviews will take place in your workplace in a suitably private location to be agreed, The interview will be conducted by the principal researcher and recorded with your consent to allow for data analysis

4. What are the exclusion criteria (i.e. are there any reasons why I should not take part)? None

5. Will my participation involve any physical discomfort? No

6. Will my participation involve any psychological discomfort or embarrassment?

Participation should not lead to any undue embarrassment or discomfort. You are free to withdraw from the interview at any stage and/or opt out or answering certain questions should you choose.

7. Will I have to provide any bodily samples (i.e. blood, saliva)?No

8. How will confidentiality be assured?

The research team has put into place a number of procedures to protect the confidentiality of participants. These include:

You will be allocated a participant code that will only be used to identify any data that you provide. Your name or other personal details will not be associated with your data, for example the consent form that you sign will be kept separate from your data.

All paper records will be stored in a locked filing cabinet, accessible only to the research team, and all electronic information will be stored on a password-protected computer. In general all of the information you provide will be treated in accordance with the Data Protection Act

9. Who will have access to the information that I provide?

Any information and data gathered during this research study will only be available to the research team identified in the information sheet. Should the research be presented or published in any form, then that information will be generalised (i.e. your personal information or data will not be identifiable).

10. How will my information be stored / used in the future?

All information and data gathered during this research will be stored in line with the Data Protection Act and will be destroyed 3 years following the conclusion of the study. During that time the data may be used by members of the research team only for purposes appropriate to the research question, but at no point will your personal information or data be revealed. Insurance companies and employers will not be given any individual's information, samples, or test results, and nor will we allow access to the police, security services, social services, relatives or lawyers, unless forced to do so by the courts.

11. Has this investigation received appropriate ethical clearance?

Yes, the study and its protocol has received full ethical approval from the School of Life Sciences Ethics Committee. If you require confirmation of this please contact the Chair of this Committee, stating the title of the research project and the name of the principle investigator:

Dr Nick Neave
Chair of School Ethics Committee,
Northumberland Building,
Northumbria University,
Newcastle upon Tyne,
NE1 8ST

12. Will I receive any financial rewards / travel expenses for taking part? No.

13. How can I withdraw from the project?

The research you will take part in will be most valuable if few people withdraw from it, so please discuss any concerns you might have with the investigators.

During the study itself, if you do decide that you do not wish to take any further part then please inform the research team as soon as possible, and they will facilitate your withdrawal. Any personal information or data that you have provided (be it in paper or electronic form) will be destroyed/deleted as soon as possible.

After you have completed the research you can still withdraw your personal information / data by contacting one of the research team within one month of your participation (their contact details are provided in section 14, give them your participant number or if you have lost this give them your name. Any personal information or data that you have provided (be it in paper or electronic form) will be destroyed/deleted as soon as possible.

14. If I require further information who should I contact and how?

You can contact the principal investigator on the details shown at the beginning of this form or if you have ethical concerns, you can contact the Chair of the Ethics Committee using the details shown in section 11.

INFORMED CONSENT FORM

Project Title: Resilience in the Workplace

Principal Investigator: Mandi Sherlock-Storey

Participant Number:

*please tick
where applicable*

I have read and understood the Participant Information Sheet.

I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.

I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice.

I agree to take part in this study.

I would like to receive feedback on the overall results of the study at the email address given below. I understand that I will not receive individual feedback on my own performance.

Email address.....

Signature of participant..... Date..... (NAME IN BLOCK LETTERS).....

Signature of researcher..... Date..... (NAME IN BLOCK LETTERS).....
--

FOR USE WHEN VIDEO/TAPE RECORDINGS WILL BE TAKEN

Project title: Resilience in the workplace_____

Principal Investigator: Mandi Sherlock-Storey_____

Participant Number: _____

I hereby confirm that I give consent for the following recordings to be made:

Recording	Purpose	Consent
voice recordings	Recording of interview to allow data analysis	

Clause B: I understand that the recording(s) may also be used for teaching/research purposes and may be presented to students/researchers in an educational/research context. My name or other personal information will never be associated with the recording(s).

Tick the box to indicate your consent to Clause B

Clause C: I understand that the recording(s) may be published in an appropriate journal/textbook or on an appropriate Northumbria University webpage. My name or other personal information will never be associated with the recording(s). I understand that I have the right to withdraw consent at any time prior to publication, but that once the recording(s) are in the public domain there may be no opportunity for the effective withdrawal of consent.

Tick the box to indicate your consent to Clause C

Signature of participant..... Date.....

Signature of researcher..... Date.....

To potential Organisational Resilience research participants:

I am a Chartered and Registered Occupational Psychologist undertaking research into organisational and employee resilience as part of my Professional Doctorate in Occupational Psychology at Northumbria University. In the current stage of my research, I am seeking to conduct interviews with people who are working in organisations experiencing change. My intent is to interview a range of people within a given organisation, leaders, managers and employees and to explore their experience of resilience during change.

If you agree to participate in this stage of my research you will be required to participate in an interview lasting around 30 minutes. I will be asking you to share with me examples/situations where you have experienced resilience in the face of organisational change.

By taking part you will be contributing to current, applied research in the area of organisational resilience during change and the researcher will provide feedback to both you and your organisation concerning important findings. In addition later stages of the research will involve the delivery and evaluation of resilience building interventions (such as workshops for example) which will be offered to your organisation as a potential partner in later stages of the research project.

I do hope you would like to take part in this exciting area of research, if you have any questions please feel free to contact me directly.

Mandi Sherlock-Storey

Mandi.sherlock-storey@northumbria.ac.uk

<http://www.northumbria.ac.uk/vitalwork>

Appendix C: Study 1 – Interview Question Schedule

Schedule of questions used in study 1

An open-ended, semi-structured questioning format was used with four core questions listed below. Further probing occurred as required

1. Tell me about the change you are experiencing.
 - general context/background –
 - what is the change how is it impacting your part of the organisation
 - how is it affecting you
2. What is your definition of resilience particularly in the context of the changes you have described – resilience during change?
3. Tell me about one or two recent situations where you displayed resilience during the changes described.
 - encourage the narration in sufficient detail
4. What helped you to be resilient in these situations?
 - probe for behaviours

Appendix D: Template Analysis – Template 2

Template 2 (produced following use of a priori themes applied to first 6 scripts and reviewer inputs)

First level theme	Second Level Code	Third Level sub-code
		1.1.1 Unprecedented nature of change
1 Change antecedent	1.1 Nature of change	1.1.2 Rapid pace of change
		1.1.3 Repetitive/Unrelenting nature of change
		1.1.4 Large scale change
		1.1.5 Radical/transformational influence on organisation
		1.1.6 Protracted period(s) of uncertainty
	1.2 Organisational Impact of change	1.2.1 Loss of workforce - redundancies
		1.2.2 Restructured/re-configured organisational structure
		1.2.3 Transformed modes of operation/service delivery
	1.3 Relational impacts of change	1.3.1 Loss of colleagues
		1.3.2 Changes in reporting and other relationships
		1.3.3 Competitive interviewing amongst colleagues
		1.3.4 Requirement to establish new relationships
	1.4 Individual impacts of change	1.4.1 Threat to employment – potential job loss
		1.4.2 Changes to nature of role or work
		1.4.3 Increased workload – scope/scale or responsibility
		1.4.4 Downgrading – status, pay, or hours worked
		1.4.5 Negative impact upon career progression /prospects
	1.5 Change recipient factors	1.5.1 Previous history of organisational change
		1.5.2 Existing level of trust in managers of change
		1.5.3 Disposition – “a positive person” or “enjoy change”
		1.5.4 Level of role – e.g. whether or not a manager
	1.6 Change management process	1.6.1 Timeliness of communications
		1.6.2 Communication – openness /availability of information
		1.6.3 Level of involvement in change

		process
		1.6.4 Procedural justice in implementation
		1.65 Level of support for workforce/individuals
		1.6.6 Competence of change managers

2 Change Reaction	2.1 Cognitive reaction	2.1.1 Sceptical or cynical interpretations of change management process
		2.1.2 Negative appraisal of change managers
		2.1.3 Viewing change as personally detrimental
		2.1.4 Doubting the viability/tenability of new modes of delivery /roles
		2.1.6 Assessing change as having a negative impact on nature/quality of service delivery
	2.2 Affective reaction - negative	2.2.1 Feeling challenged/overwhelmed in dealing with change
		2.2.2 Feeling uncertain/unstable e.g. about personal future – how to proceed
		2.2.3 Feeling uninformed – kept in the dark
		2.2.4 Feeling disempowered - lack of control or choices
		2.2.5 Experiencing stress, upset or distress
		2.2.6 Feeling devalued, de-professionalised or rejected
		2.2.7 Feeling victimized - taking change personally
		2.2.8 Feeling isolated
		2.2.9 Feeling concerned for service delivery e.g. quality
		2.2.10 Feeling negative or ambivalent towards the organisation
	2.4 Behavioural reaction	2.4.1 Seeking the support of others
		2.4.2 Providing support to others
		2.4.3 Seeking information or reassurance about the change(s)
		2.4.4 Attempting to manage feelings and emotions
		2.4.5 Resisting change – not adapting
		2.4.6 seeking to leave the organisation

3 Change Consequences	3.1 work related consequences (negative)	3.1.1. leaving or considering leaving the organisation
		3.1.2 Withholding labour or effort
		3.1.3 Lacking commitment – ambivalent towards organisation
		3.1.4 Presenteeism
	3.3 Personal consequences negative	3.3.1 Compromised health or well-being - illness
		3.3.1 Reduced self-confidence –self-esteem
		3.3.3 Pervasive personal negative attitude

Resilience

4 Resilience factors	4.1 Positive emotions	4.1.1 Pride in one’s achievement or conduct
		4.1.2 Courage in facing challenges
		4.1.3 Showing determination or perseverance in facing a challenge
		4.1.4 Optimism - being a “positive person”
		4.1.5 Hope – holding a positive view of future
		4.1.6 Confidence –self-belief
		4.1.7 Use of humour
	4.2 Cognitive flexibility	4.2.1 Positive reappraisal, reframing or sensemaking
		4.2.2 Focusing on personal boundaries – capability/influence/responsibility
		4.2.3 Noting progress /successes
		4.2.4 Choosing one’s attitude – recognising choice in doing so
		4.2.5 Focusing upon realities and practicalities
		4.2.6 Drawing on personal history of change/adversity to reframe or gain perspective
		4.2.7 Making comparisons to gain perspective e.g. to others circumstances
	4.3 Meaning	4.3.1 Connecting to core personal values or principles such as e.g. professionalism
		4.3.2 Committed to “making a difference”
		4.3.3 Commitment to others – being a good parent, good partner etc.
		4.3.4 Maintaining a personal vision of how to present self
	4.4 emotion regulation	4.4.1 Striving to not taking change personally

		4.4.2 Exercising self-awareness - tuning in to emotional responses
		4.4.3 Consciously taking steps to actively manage emotions
		4.4.4 Exercising awareness of impact of self on others
	4.5 Connecting	4.5.1 seeking the support of colleagues
		4.5.2 Utilising supportive external relationships – partner family etc.
		4.5.3 Getting the support of one’s manager
		4.5. 4 Providing support to others
		4.5.5 Uniting with others – pulling together
	4.6 Active coping	4.6.1 Taking decisions – not procrastinating
		4.6.2 Focusing on task in hand “getting on with it”
		4.6.3 Preparation – e.g. preparing strategies/approaches to challenging scenarios
		4.6.4 Rising to a challenge – taking it on
		4.6.5 Exercising self-care

Definitions

5 Resilience Definitions	5.1 Coping	5.1.1 Surviving
		5.1. 2 Being strong
		5.1.3 Coping
	5.2 Adaptation	5.2.1 Getting thorough
		5.2.2 Moving forward
		5.2.3 Bouncing back
	5.3 Growth	5.3.1 seeing opportunities in challenges
		5.3.2 proactivity in the face of challenges
	5.4 Positivity	5.4.1 Positive frame of mind

Appendix E: Example Coded Transcript

I: Ok, can you kind of, just give me a little bit of background context to the change that you've experienced in maybe the last six months or so

R: Sure erm my, my job title was senior practitioner at the base which was project worker three erm so at that point in time the base had erm kind of two distinct teams, one was a team that chooses who delivered basic skills, ICT skills, art skills, citizenship, to young people who were training there and who received EMA to be on that training, they were on a foundation learning programme and they had to do sixteen hours, then you had another team which was a team of youth support workers of which there was a mixture of erm, there was a manager, project worker three, staff and project worker two staff, erm and them grades important because, they're obviously people's salaries erm in October we were told we were going to go through a management of change which basically meant erm the way that was rolled out was erm we received a management paper via email which was probably about thirty five pages long and basically what that proposed was that erm these, in North Tyneside there's a xxx training agency which was the base erm and there was also xxx training, xxxx training was a much bigger site and housed about approximately sixty five staff, the base housed twenty two staff and what the first management of change paper proposed was that erm all the training staff at the base, all the tutors erm, all the training element of the base would be removed so essentially you'd be left with a team of youth workers erm which also took with it the majority of our client group, the majority, we also ran a duty service at the base, so young people could come in which tended to be, young people aged sixteen to twenty five could come in erm, was more like crisis intervention, so it would be more like young people experiencing erm issues with benefits, homelessness, issues within the family home because of where the base is there is a lot of homeless young people who get temporarily in bed and breakfasts so they

Comment [p1]: Change antecedent

Comment [p2]: Change antecedent communication

Comment [p3]: Change antecedent – radical change, downsizing

may be coming in for food parcels, for laundry or simply just someone to talk to and just somewhere to go and just a friendly supportive adult erm so the management of change, basically, in its essence removed a number of departments from xxx which led directly to staff being made redundant and then you were left with a pool of staff who, some of which, the tutors at the base had to competitively interview against tutors at XXXXXXXXXXXX for a reduced number of jobs so essentially the staff team of erm tutors or training supervisors went from, if you count the base staff, from thirty posts to seventeen posts so that was a huge cut in terms of jobs erm and then there was a whole new way of how they were gonna work with young people which essentially said that rather than housing young people within a building they were gonna get them out on apprenticeships so that was kind of the model left forward so for those of us who were left at the base with the youth worker support staff this was all rolled out in October and was implemented, I think it was February, erm, February, March, yeah it was it was the end of March actually when those staff who were successful in interviews kind of went across to xxxor took voluntary redundancy then we had a pool of us who were left at the base and there was four posts that were youth worker support, erm, two which were project worker three, two which were project worker two, then four posts went to three posts, all of project worker one, er does that make sense so far? Then passed that management of change, so four of us had to go, would have had to competitively interview against each other for three posts at, the difference for me was an eight thousand salary drop erm and then we had a crèche at the base, them staff were made redundant erm we had a cook and like a community cafe at the base, that member of staff was made redundant and our admin staff also went from a team, it was three posts for four staff because two of them were job share, they were having to competitively interview for their jobs against XXXXXXXXXXXXXXXX admin staff so it was a really stressful time for everyone involved because obviously erm people were just looking at their livelihoods and then looking at competitively interviewing against people

Comment [p4]: Antecedent redundancies

Comment [p5]: Antecedent –job application competition

Comment [p6]: Antecedent hi impact change –job losses

Comment [p7]: Antecedent –radical change to way of working

Comment [p8]: Antecedent pace of implementation

Comment [p9]: Antecedent – changes in teams colleagues

Comment [p10]: Antecedent reducing posts

Comment [p11]: Antecedent reducing staff

Comment [p12]: Antecedent – competing against colleagues

Comment [p13]: Antecedent – personal negative impact -financial

Comment [p14]: Antecedent – redundancies reducing posts

Comment [p15]: Change antecedent competitive interviewing

Comment [p16]: Change reaction-stress

Comment [p17]: Antecedent – negative personal impact

who they had friendships, or working relationships with, for me it was a little bit more

Comment [p18]: Antecedent competitive interviewing against colleagues

complicated because I wouldn't, I was getting placed into competitively interviewing

against me husband who also works at the base erm and then our admin team went down

Comment [p19]: Antecedent competitive interviewing against colleagues

from four to one erm so essentially that was the management of change so we went from a

staff team of twenty two to a staff team of five, does that makes sense so far?

Comment [p20]: Change antecedent – scale of cuts in posts

I: It does, over a very short space of time?

R: Within six months

Comment [p21]: Change antecedent-pace of change implementation

I: And what, what was behind the changes, why?

R: Funding

I: Funding cuts

R: Ok so how, it's all starting to shake out now the change, kind of the terms of...

R: Yeah, and I say funding cuts Mandi, but in essence what they done was looked at the way they was working and it was also based on issues of young people so what xxx's were

Comment [p22]: Antecedent – radical shift ways of working

saying was, a lot of the training agencies work with young people on like a one to fifty ratio

or a one to thirty ration, we were often working with people with a one to six or a one to

eight ratio or within xxxxx it was like a one to fifteen ratio and what they were saying was

we needed to kind of get more with the times which I understand the rationale for but at

Comment [p23]: Antecedent – shift ways of working

the same token a lot of young people accessed training at the base may not have been in

Comment [p24]: Change antecedent – understanding change rationale

school since they were twelve, so even getting them to sit and concentrate on stuff for an

hour can be quite an arduous task erm and often they needed a lot of intensive support,

you're looking at young people where maybe, were homeless, living in B&B

accommodation, living in hostels, erm basically young people who were getting themselves

up of the morning, turning up without any breakfast, to be provided breakfast club and

stuff you know looking at like their generation of unemployment in young people, young

people who are brought up with heroin using parents, lots of child protection issues within families so what, there was a reason why I suppose our ratios were so high erm but obviously xxxx within their wisdom said that these young people would now fit this model which I mean the proof will be in the pudding about you know rolls out and because I'm not currently working in the training sector I'm not sure how it has rolled out

Comment [p25]: Change antecedent radical shift

Comment [p26]: Reaction – scepticism

I: What I'd like to explore with you is kind of how you've dealt with that change erm because it's been nearly a year now really if you talk about since you were first advised of it, that last October, so you've been dealing with change essentially for a year?

R: Yeah I mean my change didn't, we knew it was gonna change but my change I think came in very much, I think it was March when we were informed of like the job regarding and that type of thing, so we knew it was happening but, they basically rolled it out in two bits so I wasn't part of this first paper, I was part of the second paper, if that makes sense but we, yeah coming up to a year now

Comment [p27]: Change antecedent – awareness/anticipation of change

I: What I'd like to explore with you is how this change has impacted on you and we can go right back through October you know and think about how it's impacted you at various points in terms of how you felt about that you know what other impacts it might have had kind of what, you know what has it meant to you, this change?

R: Erm, a big tightening of the belt financially, but also I think emotionally it's made me feel really devalued and career wise it's put me back eight to ten years so I apply for jobs now and I'm looking at erm it's going to take me at least six years to get back to the salary I was on unless I can really sell me self in an interview but we know with the current jobs climate you're lucky to even get to interview stage at this point erm I think for me it was probably harder because me and me husband John, as a household we took a twelve thousand pounds hit over night erm but essentially we were working within the same building with the same client group not doing the same job, I've got to give xxxx's that because it's got a

Comment [p28]: Consequence?? Financial consequence

Comment [p29]: Consequence – feeling devalued

Comment [p30]: Change ??? career consequence

Comment [p31]: Consequence financial/career

Comment [p32]: Change consequence? financial

lot quieter because of all the training elements have been taken out erm but really feeling devalued, feeling like you know I am someone who would in me job will go above and beyond what is asked of me because I, I work with young people because I want to work with young people because I believe in young people, I want to really make a difference in their lives and I think it's, it's hard to reckon the public face of xxxx's with what I've experience within xxxo's in terms of the very caring, committed image because I see them in a different way now

Comment [p33]: Change reaction feeling devalued

Comment [p34]: resilience – meaning making a difference

Comment [p35]: Change consequence – negative/ambivalent about organisation

Comment [p36]: Change consequence – negative/ambivalent about organisation

I: Ok so you don't feel that you've been handled in that way is what you're saying?

R: Yeah completely and I think that's also partly to do with the way it was handled, I can understand why some of the changes were made if I'm completely honest Mandi, I think, there was a lot of dead wood within kind of both separate projects, I think there was people coming into work, smiling doing their job because they were on a decent salary but not necessarily working within the best interests of the organisation or the young people so I can understand why some of those changes were made erm I think some of the way it as handled was done very insensitively erm and, and in a very crass way erm and very much cloak and dagger and I, I just, I think a lot a, a lot of managers were protected in that process

Comment [p37]: Change antecedent – way in which change implemented

Comment [p38]: Change antecedent – understanding change rationale

Comment [p39]: Change antecedent – understanding change rationale

Comment [p40]: Change antecedent – sensitivity in handling change

Comment [p41]: Change antecedent – transparency in change implementation

Comment [p42]: Change antecedent – perceived lack of fairness in implementation

I: Ok, what I said at the beginning is I want to explore kind of positive experiences during change because we know that typically, organisational change is not, it's not a great experience, you know people experience the very things that you've described there, kind of feeling devalued, erm you know, taking all sorts of kind of impacts, emotional, financial, psychological, what I'm trying to get to is kind of how do people survive that then and kind of you know, how are you still here and kind of what, what, you know what are the things that have helped you kind of deal with that change, so my focus is on resilience, so my

starting question to really is kind of, when I say resilience during change what would that mean to you, what kind of words, images come to mind?

R: resilience during change I think, can also come down to your attitude within me life, within me job, within me relationships, I have a can-do attitude, I can't, I just think, it's like someone who's fat sitting going oh I'm never going to lose this weight sitting eating a cream cake, it's like well, you know, do more, eat less, it's not rocket science and I think in order to kind a, to make things happen you've gotta have a positive attitude, regardless, I've got two young children, all this anger I feel about work, I can't go home and be an angry mum to a one year old and a five year old, where's that going to leave them, do you know what I mean so I think for me what got me through is the fact that I've got a mortgage erm, I've got bills to pay, I'm not going to end up in the housing line with the young people that I've supported standing next to me going oh hello there erm and for me it was a case of you've got to get on with it, you've got to get on with it because, of course there's a choice, we've got a choice in everything we do but ultimately I didn't want my children to kind of feel, I didn't really want it to touch them, do you know what I mean I didn't want like, I had to really separate work and home I suppose and for me that's what kept me going because I want to still be a good mum, I still wanted to be bringing the money in, I still wanted us to have, you know a degree of lifestyle that we had and ultimately when you've got a young person in crisis walking through the door, what I've experienced in work, some of these young people, it's not, not even on a par with the lives that these young people have had and you can't give them a crap service because you've had a bad experience with an organisation I think that was part of the thing that we kind of said with the management of change, it's like ok so now you're paying me fifty pence an hour for this knowledge and skills say, but now you're only going to pay me twenty two pence an hour for it, you're getting the same knowledge and skill because you're not going to sit and say to a young person I know all this about housing and law legislation and where

Comment [p43]: Resilience as positive attitude

Comment [p44]: resilience cognitive flexibility/positive emotions

Comment [p45]: Proactive

Comment [p46]: Positive attitude

Comment [p47]: Resilience meaning – being a parent

Comment [p48]: Considering others

Comment [p49]: Focusing on practicalities

Comment [p50]: Resilience active coping – getting on with it

Comment [p51]: Perspective of choice/control

Comment [p52]: Resilience meaning

Comment [p53]: Considering others

Comment [p54]: Resilience active coping – home/work life separation

Comment [p55]: Resilience meaning

Comment [p56]: Focus on practical financial – life (meaning)

Comment [p57]: Cog flexibility – perspective reframing sensemaking

Comment [p58]: Meaning-professionalism service to others

Comment [p59]: Change reaction – feeling devalued

you can go but because this organisation is paying me less I'm only going to give you this much of course we can't do that because I, you know I have a duty to work with young people and give them the very best, knowledge, service, experience, empathy, everything that I can do because ultimately they're come in because they're in crisis not necessarily because they just want a cup of tea erm so for me I think in terms of resilience, also my duty to my colleagues as well, you know there's only so long, I think we did go through a period of time where it was like you know erm this is crap, I'm feeling angry, frustrated but essentially, we knew that our manager, who I know you're interviewing as part of this process, we knew that our manager was also over a barrel so if we just said we're project worker ones, we're not gonna do that, it puts more on her plate because essentially she's looking for funding to keep the project going and to keep us within jobs and to give the service to young people so while, while I suppose there was an element of well I'm only going to do now what I'm paid to do, I'm not going to do what I did do, essentially, it's your moral code, for me it was me moral code, I've got a pride in me work and that comes down, is when, you know resilience comes into that, I'm not gonna walk away from work going yeah I did a really rubbish job today and ha ha, get you xxx's, it doesn't work like that, you know I want to feel proud that I'm giving a good service to young people and them young people are walking away and feeling like god I felt crap when I went in there and at least now I've got options and someone's sat with me and listened to me and explored all me options and talked to me a treated me like a human being so I suppose they were where my resilience came from

Comment [p60]: Meaning – professionalism serving others

Comment [p61]: Social support – giving to /thinking of others

Comment [p62]: Change reaction – anger frustration

Comment [p63]: Aware of /considering/considerate of others

Comment [p64]: Change antecedent – positive view of manager in change process

Comment [p65]: Change consequence – withholding commitment/labour/effort

Comment [p66]: Resilience meaning – pride morality

Comment [p67]: Change consequence – continued engagement as a result of professionalism/pride/motivation

Comment [p68]: Resilience meaning – professionalism, pride, being of service

I: Ok, can I kind of like probe that little bit further into something more specific so you've talked kind of generically about what resilience is for you and you've described a lot of things like can-do thinking, you know, kind of adhering to your moral code, delivering good service, so they're the things that have helped you be resilient, over the last twelve months, you know thinking about that change that you've described from the beginning

there, are there, is there an event or an episode or a day or an interaction that for you stands out as, for your personally, that was when you felt you were displaying high levels of resilience during a really challenging change?

R: Erm, I think it was, I think, a turning point came for me when all management of change or small management of change was getting dragged out and dragged out and dragged out and we didn't understand why and our manager was off erm and when she came back and we were in a staff meeting and stuff she was very open and erm as a manager she's not someone who gives a lot of her personal self away which I completely respect but she sat in the meeting and just said you know erm I need to be honest with you, I did apply for voluntary redundancy erm and I've basically been denied it because she took a demotion as well, I've basically been denied it erm you know I did take legal advice you know, I'm not part of the union, I've had a solicitor involved, essentially, this is what I've got and I think seeing that I suppose for me that was a feeling of, you know regardless we're all in this together and we've kind a, we've gotta turn a corner because ultimately we've got to make the best of what we've got and for me I think we've seen her vulnerability as well and just I think of going, we've got to make the best of this of what we've got erm I think also then, kind of some of the work with young people that we were doing and seeing that as a smaller organisation like we had (unclear) still in terms to education programme erm both at xxxxx Education Authority and xxxx still wanted to stay with our provision so that kind of gave a bit of a boost because like people were still leaving the work that we were doing and then we got some new contracts on board to erm, they're like started, I think actually for me a piece of work that I got was erm a young parents to be proud of, erm so I was working with young mums who are NEET, not in education, employment or training erm and it was a piece of work again that was driven by funding erm it was a new stream of funding that came through and erm I was working with five young mums who were all NEET, four of whom with child protection issues and for me just, I mean some of these young women's

Comment [p69]: Turning point moment/key event trigger for resilience

Comment [p70]: Change antecedent-transparency (lack of) in change implementation

Comment [p71]: Antecedent – trust/respect for manager

Comment [p72]: Antecedent- manager openness integrity

Comment [p73]: Antecedent – perceived equity/fairness

Comment [p74]: Resilience social support

Comment [p75]: Resilience cognitive flexibility – perspective reframing – positive outlook

Comment [p76]: Resilience social support

Comment [p77]: Antecedent – manager transparency/integrity

Comment [p78]: Cognitive flexibility – reframing – positive outlook

Comment [p79]: Resilience positive emotions – pride

Comment [p80]: Resilience positive emotions – pride

lives were horrendous erm and you think god you've got to bring a baby into the world you're sort of so young yourselves and for me I suppose it was that thinking, if I didn't (unclear) feel like and the group was a new group and it was actually really successful in an educational sense but really, just like, they really gelled with, they needed the emotional support, they needed the different support and like, I don't know I suppose it was the thing of like we'd turned a corner, it was new programme, I felt needed in a way by the young women, I could see some of their, their gaps and we did loads of different work around parenting, around different things and also they had nothing, the families had nothing erm so some of them you know, like I was texting all me daughter's friends at school and stuff with like, Moses baskets, and more nappies than I could shake a stick at and loads of clothes and being able to like kinda use my social networks if you like for these young mums I think also gave me resilience because I felt like again I was making a difference which was me motivation for doing the job so I suppose again it was working with that group of young women erm and knowing that I was making a difference not only to their lives but to the lives of babies that were being, that they were like brining into the world and stuff and just kind of, it just gave it a really positive slant once again and it gave the work a new focus and a new like, yeah this is like really good so I think yeah that for me I suppose, seeing Cxxx like had a, you know, us having to turn a corner, corner, and operate in a different way as a smaller team but also the piece of work with the young mums I think made a big difference to me in how I felt about me work

Comment [p81]: Turning point - positive outlook

Comment [p82]: Resilience meaning - giving to others, being of service

Comment [p83]: Resilience meaning - making a difference (for others)

Comment [p84]: Resilience meaning - purpose - spirituality

Comment [p85]: Resilience Positive emotions - pride, enthusiasm

Comment [p86]: Turning point

Comment [p87]: Antecedent - radical changes to service delivery

Comment [p88]: Change reaction - positivity pride in making a difference

I: Can you tease out in those examples what it is that helped you be resilient?

R: Erm, I don't know, just, I tried, just knowing that I was making a difference, knowing that, you just got a different sense of purpose

Comment [p89]: Resilience meaning - making a difference

I: I can hear that in the second example yeah that they kind of, that comes through very strongly in terms of that was really key, you what kept you going and you felt you were making a difference, I can see the energy just when you're talking about it you know

R: Erm

I: What about the Cxxx example? What is it in that, that for you has kind of stood out as a, this helped me kind of be resilient in the face of change?

R: Because I think a lot of the managers have been protected through the whole thing, if you look at, there's probably no one on a wage over forty thousand pound whose been touched within xxx's and I find that quite sickening if I'm honest, erm, sorry it sounds horrible but another part of me wants to see some of the managers take a hit because I think it was terrible that it was all frontline staff who were taking the hit but I think on a more personally level it was just about seeing Cxxx I suppose be a bit more vulnerable around it er and be honest and open with us about where she was at because we, because before that, there was a very closed face around her approach to working, who she is as a person and stuff so I think, I suppose it was a feeling of, god we're all in this together and if we give her a bit of a crap time then ultimately all we're doing is shooting ourselves in the foot and I also think there's only so long you can stay angry for, it's for any of our mental health, it's not good to stay in a place and to stay stuck, it doesn't help anyone, it doesn't help the young people, it doesn't help us as team and working with me husband, if me and him go to work as this angry couple essentially it just, it becomes your whole life, do you know what I mean and I just, for me I can't do that and I suppose again going back to having children, you know, for me it's I think you've got to let go and I think, I'm not particularly good with change erm I would, you know kinda, I don't like big change within life and I just think there's just a feeling, I had to let go of that anger, I had to let go of that frustration, I had to let go of feeling so devalued and stuff by the whole process

- Comment [p90]:** Change antecedent – perceived equity/fairness
- Comment [p91]:** Change reaction – disgust/negativity to perceptions of inequity in change implementation
- Comment [p92]:** Change consequence – negativity towards management – seeking justice
- Comment [p93]:** Change reaction – negative response to perceived inequity
- Comment [p94]:** Resilience social support
- Comment [p95]:** Change antecedent – positive perception of manager in change – transparency /integrity
- Comment [p96]:** Change reaction – feeling united
- Comment [p97]:** Social support
- Comment [p98]:** Managing emotions-choosing response
- Comment [p99]:** Resilience positive emotions/cog flexibility – awareness of negative impact on well-being – recognising exercising choice
- Comment [p100]:** Resilience cognitive flexibility – reframing – sense making
- Comment [p101]:** Role of others - meaning
- Comment [p102]:** Resilience cognitive flexibility – letting go
- Comment [p103]:** Change antecedent – personal disposition re change
- Comment [p104]:** Change reaction anger
- Comment [p105]:** Change reaction feeling devalued
- Comment [p106]:** Resilience –cognitive flexibility – letting go restructuring

I: What helped you do that?

R: I don't know, I suppose being positive about it and looking on, I suppose when the management of change people was coming, me and John, me husband, were essentially looking at each other and going, we could you know we could essentially both get made redundant during part of this process and if we do that like, really you know, that's the house on the market, that's like you know changing schools for our little girl, you know it would have massively impacted on our lives, erm, so, I've got a bit lost here, erm

Comment [p107]: Positive emotions - optimism

Comment [p108]: Change consequences – life impact

I: The thing about what helped, helped you

R: I suppose, just the recognition that you can't stay stuck, you can't stay angry and just, I don't know, being, being positive, no, sorry, going back to it, when the management of change people was coming we were like we could both be out of jobs so essentially when it came to four of us interviewing against three he looked at me and went at least one of us has definitely got a job, bottom line is we still, with everything, one of us has got a job so that kind of bought us more time and no matter what happened we kept saying we've got to stay positive with this because one of the, we didn't end up having to interview competitively because one of the girls got another job elsewhere so me, Exxx and Jxxx were automatically slotted into the project worker ones so whenever we did feel angry, we'd have to go but listen we've still got, both got jobs, this could have been a lot worse, I think for us looking at worst case scenario, helped us pull it back in erm and also job searching and looking what else was out there erm and it, I suppose, comparing what was going on with us, could see the wider world and seeing that, you know, other people completely lost their jobs, do you know what I mean, and how they felt about that, like our crèche worker had been with the organisation seventeen years and she got made redundant and I just looked and thought, you know, she's in a much worse position than me because at least I've still got a job so I think comparing it erm, but I just, my attitude is that I just don't think

Comment [p109]: Resilience cognitive flexibility – reframing managing emotions and exercising choice

Comment [p110]: Resilience cognitive flexibility/positive emotions – being positive

Comment [p111]: ?

Comment [p112]: Resilience social support – supportive partner

Comment [p113]: Resilience cognitive flexibility – staying positive

Comment [p114]: Resilience social support – supporting each other in being positive

Comment [p115]: Resilience cognitive flexibility

Comment [p116]: Cognitive flexibility - perspective

Comment [p117]: Resilience cognitive flexibility perspective

Comment [p118]: Resilience active coping - jobseeking

Comment [p119]: Resilience cognitive flexibility – perspective

Comment [p120]: Resilience cognitive flexibility – perspective comparing to others

you can stay stuck, it's not good for your mental health to carry around so much anger and frustration, it isn't healthy

Comment [p121]: Resilience active coping – managing emotions choosing attitude/action

I: Have you always been like that?

R: I'd like to think so, I've always had a strong work ethic at school, since I left school, you know, since then I've always worked in one capacity or another whether it was a Saturday job and this, so I've always wanted to kind of be out there and doing things and when, you know I volunteered for a while before I got into youth work so I've always been quite an active person and someone who tries to see the best of the situation rather than the worst,

Comment [p122]: Positive emotions - optimism

erm so I think part of it was my inbuilt thing but I think being in this sector of work, you look at young people and some of their lives that they've had, you know, it's just dreadful and I think again, comparing that, what I've been through while it's not been great it

Comment [p123]: Resilience cognitive flexibility – perspective by comparison to others

doesn't touch on some of the lives that the young people have had and I just think, a woe is me attitude gets you nowhere and again having children, you can't go home and sit and be

Comment [p124]: Resilience cognitive flexibility – sensemaking reframing

angry because you know we've got two kids who want to play and be read to and do stories and have a fun mum and I can't go home and be an angry mum because I've got to

Comment [p125]: Resilience meaning – being a parent

build up childhood memories for me kids, do you know what I mean so, you can't

Comment [p126]: Resilience meaning – serving others – wider life role

Appendix F: Template Analysis – Tracked Changes to Template

	Changes
<p>Changes from initial a-priori codes based template1 following additional coder inputs</p>	<ul style="list-style-type: none"> • 1.4.1 – rewording splitting to reflect no job loss but threat to as none of the interviewees have lost jobs • 1.5 Change from characteristics to factors (more representative of the codes) • 1.5.4 reword to reflect level of role being important (noted by both additional raters) • 1.66 add in Competence of change managers (from rater 1) • 1.16 and 1.17 remove as reflected in 1.2 – 1.4 • Remove 2.3 understanding reasons for change (focus upon negative impacts in line with research question) • 4.14 add in “optimism” (need to qualify more clearly) • 4.27 add Gaining perspective by comparisons e.g. to other people, other scenarios from personal history (observation from second rater) • 4.5.3 change to getting support from a manager • 4.55 add uniting with others – pulling together (emerged in a number of scripts) • Remove positive consequences from change block as reflected in resilience component • add 5.2.3 Bouncing back explicit in definition of script 6 • Add 5.4 Positivity from scripts (from scripts 1 and 6) • Add 5.4.1 positive attitude (script 6)
<p>Changes to template 2 following coding of scripts 7 and 8 and reflection</p>	<ul style="list-style-type: none"> • Add 1.3.5 changes in/to customer or service user relationships (distinct from 1.3.2 colleague relationships emerged in script 7) • 1.4.4 separate out to have separate financial element (currently combined but appears as a code in own right) • Add 1.6.7 time management of roll out of change –pace • Create separate level 2 code (1.7) for being a manager delete 1.5.4 add 1.7.1 Requirement to be a good role model (the manager theme strong in scripts 7 and 8 need to look for specific sub-codes when reanalysing scripts already processed as currently may be lost in the generic 1.5.4) • 2.2.8 add unsupported to wording (theme in scripts 7 and 8) • Add 2.2.11 Distracted or loss of focus (script 7) • Remove 3.1.1 as duplicates 2.4.6 (and interviewees haven’t actually left) • Add 3.1.4 Reduced work engagement (script 7) • Add 3.3.4 Negative impacts on home life (script 7) • Add 4.2 .8 Acceptance of situation (comes through as theme from 7 and 8) • 4.3.4 change wording to Maintaining a vision of /striving for ideal self (arose from mention of ideal self in script 8) • 4.4.1 add detaching to wording (used by interviewee 7) • 4.5.1 delete “seeking” (not always as proactive as that may merely be having supportive colleagues) • 4.6.3 Add “planning” to wording (script 8) • Add 4.6.7 managing personal boundaries (setting limits) – more action oriented reflection of 4.2.2 (change to reflect this)came through in scripts 7 and 8 • Add 5.1.4 Toughness (7)

<p>Changes to template 3 following coding of scripts 9-12</p>	<ul style="list-style-type: none"> • 1.53 Include negative dispositional elements “change averse” (crystallised need to reflect the negative elements of disposition as having an effect too) • 1.7 to have a number of additions (theme was only separated out in last template –needs to be developed and a number of these scripts are managers giving several examples) • 1.7.2 Dealing with anxieties of staff and or colleagues • 1.7.3 Having to support to others through change • 1.7.4 Dealing with resistance to change from staff/others • Add to 1.7.1 add eg as promoter of change, resilience etc. • Add 2.2.12 Feeling regret or sadness eg for losses • 3.2 Reword to include “other working “ relationships (from examples in scripts 10, 11) • Add 4.1.8 Identifying one’s own strengths as potential resource or offer (from script 12) • Distinguish 4.2.6 and 4.2.7 more clearly as : (was finding both codes being applied to single piece of text and not usefully) • 4.2.6 Drawing on learning from personal history of change/adversity • 4.2.7 Gaining perspective via comparisons eg to others circumstances, previous situations etc, • Add 4.3.5 Identifying/focusing on what is important to one’s life (from script 12) • Add 4.5.6 Sharing experiences with others (a number of examples of this emerged in these scripts consolidating an separate connecting code) • 4.6.5 – add wording – eg exercise, leisure use, switching off (from examples in these scripts –particularly 12) • 5.2.1 add wording “working through ” • Add 5.4.2 Looking for opportunities/influence (from script 12) • Delete 5.3.1 and 5.3.2 as now covered by the similar 5.4 components. Leave 5.3 code “growth” for now to check for any separate factor emerging in remaining scripts or in final template application
<p>Changes to template 4 following coding of scripts 13-16</p>	<ul style="list-style-type: none"> • 2.4 – add the following new codes emerging from scripts 13 • 2.4.7 Challenging the change (from script 13) • 2.4.8 Withdrawing (script 13) • add 3.1.5 Absenteeism (script 13) • 5.1.2 5.1.4 Combine strength/toughness – doesn’t add anything to separate these • add 5.2.4 Acceptance – explicit in definition of script 13 • add 5.3.1 Coming out stronger (from script 13)
<p>Changes to template following application of template 5 to all scripts and reviewer feedback discussion and reflection</p>	<ul style="list-style-type: none"> • Theme 1 Antecedents : too big, split too form two 1: Antecedents , 2 Impacts • 5.1 Change code label to “Positive personal resources” - positive emotions too narrow?

--	--

Coding note

Scripts 1-6 coded with template 1 rater 1 coded scripts 4 and 6, rater 2 coded scripts 1 and 2

Scripts 7-8 coded with template 2

Scripts 9-12 coded with template 3

Scripts 13-16 coded with template 4

Scripts 1-16 coded with final template rater 1 and 2 coded scripts 7 and 13

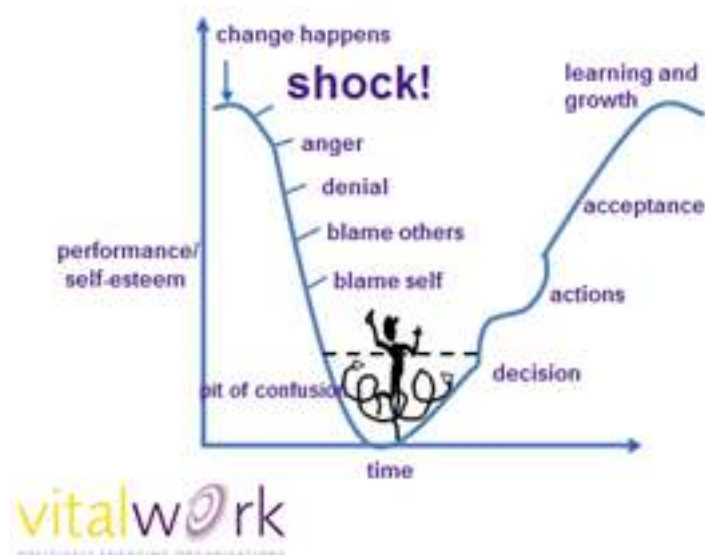
Personal Resilience During Organisational Change

Participants Handbook



The challenge of change – why we need resilience

- Change typically means we have to give things up in order to move forward. These may be things that have meaning and value to us such as a sense of competence or stability, a sense of identity, important relationships etc.
- The way forward and/or end-point of change is not always clear so we regularly have to deal with uncertainty and confusion.
- Change can trigger a range of negative feelings which can impact upon our well-being and effectiveness
- Our resilience is both needed to help us deal with the challenges of change and also strengthened by experiencing those challenges see the “change curve” below.



To help ourselves deal with changes and strengthen our resilience we can:

- Think about where we are at on the change curve and accept that emotions such as anger etc. are typical and normal responses to change.
- Consider what we have to give up in order to move forward
- Take care of ourselves as we deal with the uncertainties and challenges of change

resilient individuals :

- They have an optimistic style
- They are aware of and use their strengths
- They set and work towards goals
- They put things in perspective
- They have “can do” thinking
- They exercise self-care
- They connect – use their support network

Strengths

Resilient individuals are aware of their strengths and use them on a daily basis.

People typically possess 5 to 7 "signature strengths". Your signature

strengths are " Those strengths that best describe the positive aspects of who you are. These strengths are strong capacities in you and they are probably engaging, energizing, and comfortable for you to use. Your family and friends would immediately agree these are important strengths that you have. Finding ways to use and express these strengths is likely to bring you many benefits".

(Viame.org.uk)

The first step to realizing the benefits of our strengths is to know what they are. The activities below use the "VIA strengths" framework developed by psychologists to help you to identify your own signature strengths. Use the table and descriptions that follow to identify your top 5-7 strengths,

The strengths are listed below, there are 24 strengths organised into six categories. Please note your strengths may be scattered across the different categories or may cluster, your profile will be unique to you.

Having identified your strengths, take a few moments to consider the questions that follow

The viastrengths survey

If you are interested in this you can take a free survey of your strengths later at :

<https://viame.org/survey/account/register>

the site also contains useful information and resources

VIA (Values in action)
strengths
 adapted from Seligman and Peterson

Wisdom and Knowledge: Cognitive strengths that entail the acquisition and use of knowledge.

- **Creativity** (originality)
- **Curiosity** (interest in the world)
- **Judgement** (Rational thinking)
- **Love of learning**
- **Perspective** (wisdom)

Courage: Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition

- **Bravery** (courageousness)
- **Perseverance** (Persistence)
- **Honesty**(integrity,genuineness,)
- **Zest** (vitality, passion, energy)

Humanity: Interpersonal strengths that involve tending to and befriending others.

- **Love and being loved**
- **Kindness** (generosity and empathy)
- **Social intelligence**

Justice: Civic strengths that underlie healthy community life.

- **Teamwork** (loyalty, citizenship)
- **Fairness** (equity and justice)
- **Leadership**

Temperance: Strengths that protect against excess.

- **Forgiveness**
- **Humility and Modesty**
- **Prudence** (sensible, cautious)
- **Self-control** (self-discipline)

Transcendence: Strengths that forge connections to the larger universe and provide meaning.

- **Appreciation of beauty and excellence**
- **Gratitude** (appreciation)
- **Hope** (optimism)
- **Humour** (playfulness)
- **Spirituality** (sense of purpose)

1. Wisdom and knowledge - Cognitive strengths that entail acquisition and use of knowledge.

- **Creativity:** Thinking of novel and productive ways to conceptualise and do things
- **Curiosity:** Taking an interest in on going experience for its own sake
- **Judgement:** Thinking things through and examining them from all sides
- **Love of learning:** Mastering new skills, topics and bodies of knowledge
- **Perspective:** Being able to provide wise counsel to others

2. Courage-emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external and internal.

- **Courage:** Not shrinking from threat, challenge, difficulty or pain
- **Perseverance:** Finishing what one starts; persisting in a course of action in spite of obstacles
- **Honesty:** Speaking the truth but more broadly presenting oneself in a genuine way
- **Zest:** Approaching life with excitement and energy; not doing anything half heartedly

3. Humanity-interpersonal strengths that involve tending and befriending others.

- **Love and being loved:** Valuing close relations with others, in particular those in which caring is reciprocated
- **Kindness:** Doing favours and good deeds for others; helping them; taking care of them
- **Social intelligence:** Being aware of the motives and feelings of other people and oneself

4. Justice-civic strengths that underlie healthy community life

- **Team work:** Working well as a member of a group or team; being loyal to a group
- **Fairness:** Treating all people the same according to the notions of fairness and justice
- **Leadership:** Encouraging a group of which one is a member to get things done

5. Temperance strengths that protect against excess.

- **Forgiveness:** Forgiving those who have done wrong; accepting others' faults
- **Humility/modesty:** Letting one's accomplishments speak for themselves
- **Prudence:** Being careful about one's choices; not taking undue risks
- **Self-control:** Regulating what one feels and does; being disciplined

6. Transcendence strengths that forge connections to the larger universe and provide meaning

- **Appreciation of beauty and excellence:** Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life
- **Gratitude:** Being aware of and thankful for the good things that happen
- **Hope:** Expecting the best in the future and working to achieve it
- **Humour:** Liking to laugh and tease; bringing smiles to other people
- **Spirituality:** Having coherent beliefs about higher purpose/ meaning of universe

Using strengths

Which 5 or so strengths do you feel best represent you (draw on both your self assessment and survey) ? Why ? What examples do you have?

Are you using strengths daily? How could you use them more frequently?

How could your strengths help you deal with challenges and setbacks?

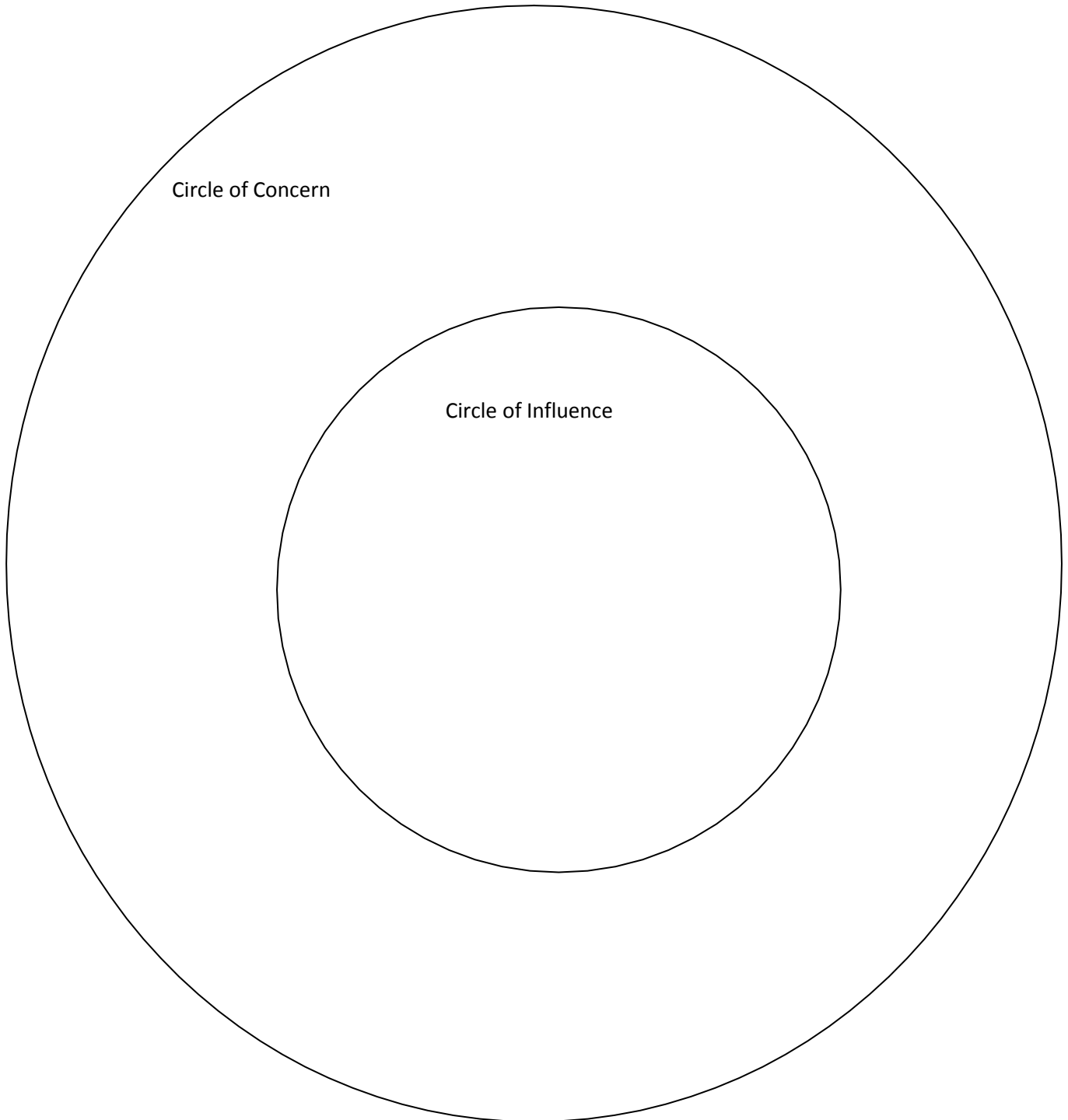
Getting perspective

Resilient individuals are generally effective in getting a helpful perspective on a set-back problem or challenge. Strategies they may use or things they may say to get to that place of perspective include:

- **Seeking meaning** e.g. "things happen for a purpose" or "as one door closes another one opens" mentality - seeing some wider pattern or spiritual perspective in a situation
- **Looking for opportunities:** instead of just seeing the losses or negatives in a situation looking for opportunities e.g. " what are the opportunities in this situation to acquire skills, do things differently ?" for example
- **Scaling:** e.g. "on a scale of 1- 10 how big is this actually? " can help in getting perspective Life perspective – e.g. "it's a work situation and my life is about so much more than that "
- **Remembering past setbacks and challenges** we have dealt with successfully e.g. "Compared to x situation this is much less of a challenge "
- **Referencing to others:** e.g. "compared to x I am really quite fortunate"
- **Operating in your circle of influence:** in his book "The Seven habits of Highly effective people" Steven Covey talks about the circle of influence which provides us with some helpful insights about maintaining perspective in challenging situations. Basically the model encourages us to focus our energy on things we can do something about rather than worry excessively about things over which we have no influence. By doing this we are able to be proactive, set goals, take control and experience resultant well-being benefits. This can be a useful approach for the many people in workplaces experiencing enforced or unavoidable changes as ultimately in such situations we may have control only over our own actions and responses.

YOUR CIRCLE OF INFLUENCE

What are your concerns about change or changes you are experiencing? What is within your influence and what isn't



“Can do” Thinking

Think of a time recently when you faced a challenge at work *where you initially felt daunted by the task and lacked confidence in your ability to succeed, but eventually arrived at a place of “can do ” thinking (ie feeling you could/would take on the challenge)

Make a brief note of the situation below.

What got you to can do thinking ?

think about what helped you to get there and what it felt like

Things that might help get us to “can do”

Approaches that help	Approaches you use (tick those you use or have used)
Chunking: Breaking the challenge down into smaller parts, eg several milestones	
Visualising the end point: seeing its appeal/benefits	
Getting perspective: taking time out to think about the challenge or considering “what’s the worst that could happen”? or “compared to x challenge this is easy” for example	
Drawing on past experience – reminding yourself of past achievements, challenges and skills	
Other people relying on you: i.e the achievement or non achievement of the task/ challenge will impact upon staff, family service users for example	
Wanting to make a difference : having a sense of purpose or need to make a meaningful contribution	
Seeking resources: maybe time, expertise, support etc.	
Making use of a role model/mentor talking it through with someone whose experience or advice you value or observing/shadowing someone with relevant experience	
Seeking out those who believe in you: getting encouragement and perspective on your capability	
Avoidance no longer works: too painful or stressful, easier to just get on with it	
Self-talk: using positive inner talk to generate self-belief and confidence	
Looking after yourself: getting a good night’s sleep for example	

Optimistic Explanatory Style

How do you frame setbacks and successes?

An optimistic style is key to resilience as it enables us to bounce back from setbacks, adopt "can do" thinking and experience the positive emotions that come with success.

The good news is that we can cultivate an optimistic style because it may not be fixed like personality but a function of our way of seeing things i.e. our thinking. A brief explanation of optimism is given below.

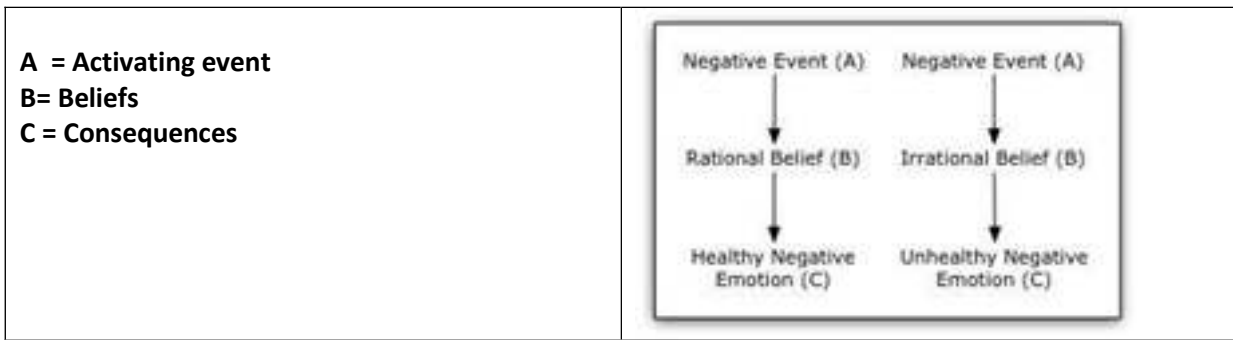
When we experience outcomes either good or bad, we have ways of explaining this that can tend towards an optimistic or pessimistic style. An individual with an optimistic style of explaining a positive outcome/experience will tend to feel

that they had an impact on the outcome ("like me") that they are likely to be able to replicate the experience (permanent) and that the event is pervasive, has a wider impact beyond the immediate situation (impact whole life). An individual with a pessimistic explanatory style will tend to feel that the outcome was not influenced by them but by external factors (not like me), that the experience is not permanent (will pass) and is confined to the specific situation (small part of life). The situation reverses for negative experiences/outcomes

Linked to this is the idea that our thoughts impact on our feelings – a positive or neutral interpretation of an event is more likely to lead to us feeling ok about it, negative interpretations may lead to negative feelings such as anger or low self-esteem. This is why two people may experience the same event eg. not getting a job they applied for but feel very differently about it. Person x may say "I didn't perform as well as I could" or "Maybe that wasn't the job for me", person y may say "I am useless at interviews" "I am never going to get a job". In this scenario person x may feel more positive about future job interviews than person y – the situation is the same for both but the interpretation or "inner dialogue" can lead to very different outcomes.

It helps to be aware of our thinking, particularly when we may be undermining our esteem or well-being with flawed interpretations of events.

Addressing Explanatory style –The “ABC” model – Thoughts influence feelings



Our beliefs about an event are what determine how we feel about it

ABC, Thinking/Feelings Identification Log- Example

(A)	(B)	(C)
Activating event, write down details of the event	Beliefs/self talk, thoughts, attitudes, images, assumptions, opinions about event at (A)	Consequences/Emotions, write down your resulting emotions
<i>My Manager asks if I can complete a report earlier than anticipated</i>	<i>He feels I am not working hard enough</i>	<i>I feel resentful and upset and avoid my manager</i>
<i>My manager says he is unable to share details about the planned change</i>	<i>I am going to be made redundant</i>	<i>I feel, anxious and depressed and angry at my manager for withholding information</i>
Alternatively ?		
<i>My Manager asks if I can complete a report earlier than anticipated</i>	<i>My manager is under pressure and needs this report asap</i>	<i>I prioritise the report and feel confident it will be done on time and assure my manager of this</i>
<i>My manager says he is unable to share details about the planned change</i>	<i>My manager is not being given all of the information about changes</i>	<i>I am disappointed that information is not forthcoming but request my manager keeps me informed</i>
NOW COMPLETE THE MISSING SECTIONS		
<i>My team is being reduced from 5 to 3 and I have to apply for a position</i>		<i>I feel anxious and angry and put off filling in an application form</i>
<i>My team is being reduced from 5 to 3 and I have to apply for a position</i>		<i>I feel concerned that I or my colleagues may not get a position but resolve to give it my best shot</i>
<i>My service is closing as part of cuts, I am to be redeployed</i>	<i>The managers in this organisation are incompetent, they don't consider service users</i>	
<i>My service is closing as part of cuts, I am to be redeployed</i>		<i>I am sad not to be working with the group of colleagues and service users I have worked with for a long time but feel up for a new challenge</i>

ABC, Thinking/Feelings Identification Your-Examples

(A) Activating event, write down details of the event	(B) Beliefs/self talk, thoughts, attitudes, images, assumptions,	(C) Consequences/Emotions, write down your resulting emotions
<p>opinions about event at (A) Can you identify any scenarios where you experienced a negative emotion at work recently ?Try to identify what beliefs/self talk may have contributed to the feelings NB it is sometimes easier to start with a recent strong emotion you experienced e.g anger or withdrawal and work backwards . Refer back to the table on the previous page for examples</p>		
<p>Can you identify any alternative explanation/self -talk or beliefs that could maybe have lead to an alternative feeling or emotional response. See the examples in the previous table .</p>		

Further Reading : If you found this helpful you might like “Developing resilience – A Cognitive Behavioural Approach “ 2009 by Michael Neenan about £12 on Amazon

Support Networks

An individual's network of relationships has an important impact upon how they respond to challenges and pressures. Developing and using good social support systems is a key way to strengthen our well-being and resilience. Our network can be made up of people from various areas of our life, work, family friends, social groups and people may provide different forms of support, the important thing is that our connections can be a great "buffer" and a valuable resource. **Consider your support network by working through the following questions:**

Your support network	
Form of support	Who?
Someone who listens to me?	
Someone who is fun to be with/makes me laugh?	
Someone who makes me feel wanted?	
Someone who is good in a crisis?	
Someone who talks straight to me, is open/honest?	
Someone who will do practical things for me e.g. repairs, lifts, childcare	
Someone who makes me feel good about myself?	
Someone who cares about me/shows me affection?	
Someone who helps me put things in perspective?	
Someone who gives good advice or helps me solve problems?	
Someone who can console/comfort me when I am upset?	
Someone to do things with/go places with?	
Someone I can tell anything to?	
Your approach	Comment below
I am able to ask for help when I need it	
I can share how I am feeling with others	
I make time to spend with people who can support me/or are good for me	
I support others when they need it	
I am able to accept help and support when others offer it	

Strengthening your connections

Having considered your support network and your approach to using others for support ,consider the following:

What form of support would be helpful right now?

Is there any form of support I am missing within my network – who might provide this?

Who would it be good to spend more time with?

What might I need to do to make better use of my support network?

Any other thoughts or things to consider?

What action should I take very soon?

The well-being Five-a-day

According to a government report¹, these are the well-being equivalent of “five fruit and vegetables a day”. How are you doing?

Connect...

With the people around you. With family, friends, colleagues and neighbours. At home, work, school or in your local community. Think of these as the cornerstones of your life and invest time in developing them. Building these connections will support and enrich you every day.

How am I doing currently and what else could I do?

Be active...

Go for a walk or run. Step outside. Cycle. Play a game. Garden. Dance. Exercising makes you feel good. Most importantly, discover a physical activity you enjoy and that suits your level of mobility and fitness.

How am I doing currently and what else could I do?

Take notice...

Be curious. Catch sight of the beautiful. Remark on the unusual. Notice the changing seasons. Savour the moment, whether you are walking to work, eating lunch or talking to friends. Be aware of the world around you and what you are feeling. Reflecting on your experiences will help you appreciate what matters to you.

How am I doing currently and what else could I do?

¹ Five ways to wellbeing NEF (New Economics Foundation) 2011

Keep learning...

Try something new. Rediscover an old interest. Sign up for that course. Take on a different responsibility at work. Fix a bike. Learn to play an instrument or how to cook your favourite food. Set a challenge you will enjoy achieving. Learning new things will make you more confident as well as being fun.

How am I doing currently and what else could I do?

Give...

Do something nice for a friend, or a stranger. Thank someone. Smile. Volunteer your time. Join a community group. Look out, as well as in. Seeing yourself, and your happiness, linked to the wider community can be incredibly rewarding and creates connections with the people around you.

How am I doing currently and what else could I do?

Interested in this ? see <http://www.fivewaystowellbeing.org> for more information and ideas

Next Steps Setting Goals to boost your resilience

Thinking about the content and activities of the workshop :

What did you learn , what really stands out for you ?

What actions could you take to help you be more resilient and manage the impact of change?

What might stop you and how might you overcome this ?

What will you do next – aim to be specific eg what will you do by when ?



Coaching for resilience

Coachee Handbook



Introduction

Welcome to the vitalwork coaching for resilience programme. This handbook contains all of the information you require for the programme. The coaching programme will support you in strengthening your resilience at work through the use of “resilience habits” over the next couple of months.

Key components of the programme are:

- Pre-work – there are a number of exercises you are required to complete in advance of your first meeting with your coach. These are intended to enable you to generate goals and establish your current baseline with respect to the resilience habits. In total these should take between two and three hours to complete. You may spread these to suit e.g. doing one or two activities at a time .
- Meeting with your coach. You will meet with your resilience coach three times over a six week period. In the first meeting your coach will work with you to establish goals for coaching and ensure you are comfortable in your understanding of the resilience habits and how to apply them. Subsequent meetings will focus upon your progress in applying the habits. Your coach meetings will last up to 90 minutes.
- Between session work - In between coaching sessions you will be maintaining a brief log of challenges and setbacks you experience at work along with a note of your use of resilience habits. This log will form the basis of your discussion with your coach in sessions two and three and help you to make progress with your goals for resilience and well-being.

Before you embark on the programme please be sure that you are happy to commit to the following:

- **You undertake to complete pre and between session activities as outlined**
- **You are able to honour the three 90 minute coaching meetings you have signed up to**

Contents

Resilient individuals	4
Pework materials	5
Strengths	6
"Can do" Thinking.....	12
Optimistic Explanatory Style	15
Getting perspective.....	19
Your Circle of Influence.....	22
Support Networks.....	24
The well-being Five-a-day	27
Goal Setting	29
Pework checklist	33
Between Coaching Session Logs	34
Meeting my coach - notes and questions before we meet	38
Second coach meeting.....	39
Meeting my coach - notes and questions.....	43
Final coach meeting.....	44

resilient individuals

- They have an optimistic style
- They are aware of and use their strengths
- They set and work towards goals
- They put things in perspective
- They have “can do” thinking
- They exercise self-care
- They connect – use their support network

These behaviours and habits form the focus of the coaching programme, it is likely that you already display some or all of these to a degree. The coaching programme aims to strengthen your use of these so they do become more habitual and a useful resource as you deal with workplace challenges such as organizational change. Please read through the materials and complete all activities up to page 33 .You may do this all at once which will take a couple of hours or by exercise which each take around ten to fifteen minutes.

NB our experience confirms that time spent on the pre-work exercises before meeting with your coach considerably maximizes the effectiveness of the coaching time spent together – particularly the first session. Please try to work through as much as possible in advance.

Prewrite materials

Strengths

Resilient individuals are aware of their strengths and use them on a daily basis. People typically possess 5 to 7 “signature strengths”. Your signature strengths are “ Those strengths that best describe the positive aspects of who you are. These strengths are strong capacities in you and they are probably engaging, energizing, and comfortable for you to use. Your family and friends would immediately agree these are important strengths that you have. Finding ways to use and express these strengths is likely to bring you many benefits”. (Viame.org.uk)

The first step to realizing the benefits of our strengths is to know what they are. The activities below use the “Viastrengths” framework developed by psychologists to help you to identify your own signature strengths. Use the table and descriptions that follow to identify your top 5-7 strengths, seek out the opinion of others who know you well if that helps. If time allows it would be useful if you could also complete the viastrengths online survey (details provided at the end of this section) as this provides a further useful source of information and you may check the survey results against your own self-assessment

The strengths are listed below, there are 24 strengths organised into six categories Please note your strengths may be scattered across the different categories or may cluster, your profile will be unique to you.

Having identified your strengths, take a few moments to consider the questions that follow.

VIA (Values in action) strengths adapted from Seligman and Peterson	
<p>Wisdom and Knowledge: Cognitive strengths that entail the acquisition and use of knowledge.</p> <ul style="list-style-type: none"> • Creativity (originality) • Curiosity (interest in the world) • Judgement (Rational thinking) • Love of learning • Perspective (wisdom) 	<p>Courage: Emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external or internal.</p> <ul style="list-style-type: none"> • Bravery (courageousness) • Perseverance (Persistence) • Honesty(integrity,genuineness,) • Zest (vitality, passion, energy)
<p>Humanity: Interpersonal strengths that involve tending and befriending others.</p> <ul style="list-style-type: none"> • Love and being loved • Kindness (generosity and empathy) • Social intelligence 	<p>Justice: Civic strengths that underlie healthy community life.</p> <ul style="list-style-type: none"> • Teamwork (loyalty, citizenship) • Fairness (equity and justice) • Leadership
<p>Temperance: Strengths that protect against excess.</p> <ul style="list-style-type: none"> • Forgiveness • Humility and Modesty • Prudence (sensible, cautious) • Self-control (self-discipline) 	<p>Transcendence: Strengths that forge connections to the larger universe and provide meaning.</p> <ul style="list-style-type: none"> • Appreciation of beauty and excellence • Gratitude (appreciation) • Hope (optimism) • Humour (playfulness) • Spirituality (sense of purpose)

1. Wisdom and knowledge - Cognitive strengths that entail acquisition and use of knowledge.

- **Creativity:** Thinking of novel and productive ways to conceptualise and do things
- **Curiosity:** Taking an interest in on going experience for its own sake
- **Judgement:** Thinking things through and examining them from all sides
- **Love of learning:** Mastering new skills, topics and bodies of knowledge
- **Perspective:** Being able to provide wise counsel to others

2. Courage-emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external and internal.

- **Courage:** Not shrinking from threat, challenge, difficulty or pain
- **Perseverance:** Finishing what one starts; persisting in a course of action in spite of obstacles
- **Honesty:** Speaking the truth but more broadly presenting oneself in a genuine way
- **Zest:** Approaching life with excitement and energy; not doing anything half heartedly

3. Humanity-interpersonal strengths that involve tending and befriending others.

- **Love and being loved:** Valuing close relations with others, in particular those in which caring is reciprocated
- **Kindness:** Doing favours and good deeds for others; helping them; taking care of them
- **Social intelligence:** Being aware of the motives and feelings of other people and oneself

4. Justice-civic strengths that underlie healthy community life

- **Team work:** Working well as a member of a group or team; being loyal to a group
- **Fairness:** Treating all people the same according to the notions of fairness and justice
- **Leadership:** Encouraging a group of which one is a member to get things done

5. Temperance strengths that protect against excess.

- **Forgiveness:** Forgiving those who have done wrong; accepting others' faults
- **Humility/modesty:** Letting one's accomplishments speak for themselves
- **Prudence:** Being careful about one's choices; not taking undue risks
- **Self-control:** Regulating what one feels and does; being disciplined

6. Transcendence strengths that forge connections to the larger universe and provide meaning

- **Appreciation of beauty and excellence:** Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life
- **Gratitude:** Being aware of and thankful for the good things that happen
- **Hope:** Expecting the best in the future and working to achieve it
- **Humour:** Liking to laugh and tease; bringing smiles to other people
- **Spirituality:** Having coherent beliefs about the higher purpose and meaning of the universe

The viastrengths survey

It would be useful if, in addition to self identification of your strengths you could also take the free strengths survey at the following link in advance of your first meeting with your coach.

<https://viame.org/survey/account/register>

The survey is short (about fifteen - twenty minutes) and provides a useful summary of your strengths. Having identified your signature strengths through both self assessment against the descriptions and completion of the survey, you will then be in a better position to realise the benefits. Hopefully there will be some consistency between your self-assessed strengths and your survey results, if not you might want to think about why that may be. Your coach will clarify any questions you may have about strengths and help you to make use of the resilient habit of strengths use throughout your coaching programme. The activities on the following page should enable you to prepare for a discussion around strengths with your coach.

Which 5-7 strengths do you feel best represent you (draw on both your self assessment and survey) ? Why ? What examples do you have?

Are you using strengths daily? How could you use them more frequently?

How could your strengths help you deal with challenges and setbacks?

Notes:

.

“Can do” Thinking

Think of a time recently when you faced a challenge at work *where you initially felt daunted by the task and lacked confidence in your ability to succeed, but eventually arrived at a place of “can do ” thinking (ie feeling you could/would take on the challenge)

Make a brief note of the situation below.

*(NB a non-work related example is fine if you are unable to recall a workplace one)

What got you to can do thinking ?

think about what helped you to get there and what it felt like

Things that might help get us to “can do”

Approaches that help	Approaches you use (tick those you use or have used)
Chunking: Breaking the challenge down into smaller parts, eg several milestones	
Visualising the end point: seeing its appeal/benefits	
Getting perspective: taking time out to think about the challenge or considering “what’s the worst that could happen”? or “compared to x challenge this is easy” for example	
Drawing on past experience – reminding yourself of past achievements, challenges and skills	
Other people relying on you: i.e the achievement or non achievement of the task/ challenge will impact upon staff, family service users for example	
Wanting to make a difference : having a sense of purpose or need to make a meaningful contribution	
Seeking resources: maybe time, expertise, support etc.	
Making use of a role model/mentor talking it through with someone whose experience or advice you value or observing/shadowing someone with relevant experience	
Seeking out those who believe in you: getting encouragement and perspective on your capability	
Avoidance no longer works: too painful or stressful, easier to just get on with it	
Self-talk: using positive inner talk to generate self-belief and confidence	
Looking after yourself: getting a good night’s sleep for example	

Which from the above list would you consider using in future challenges?

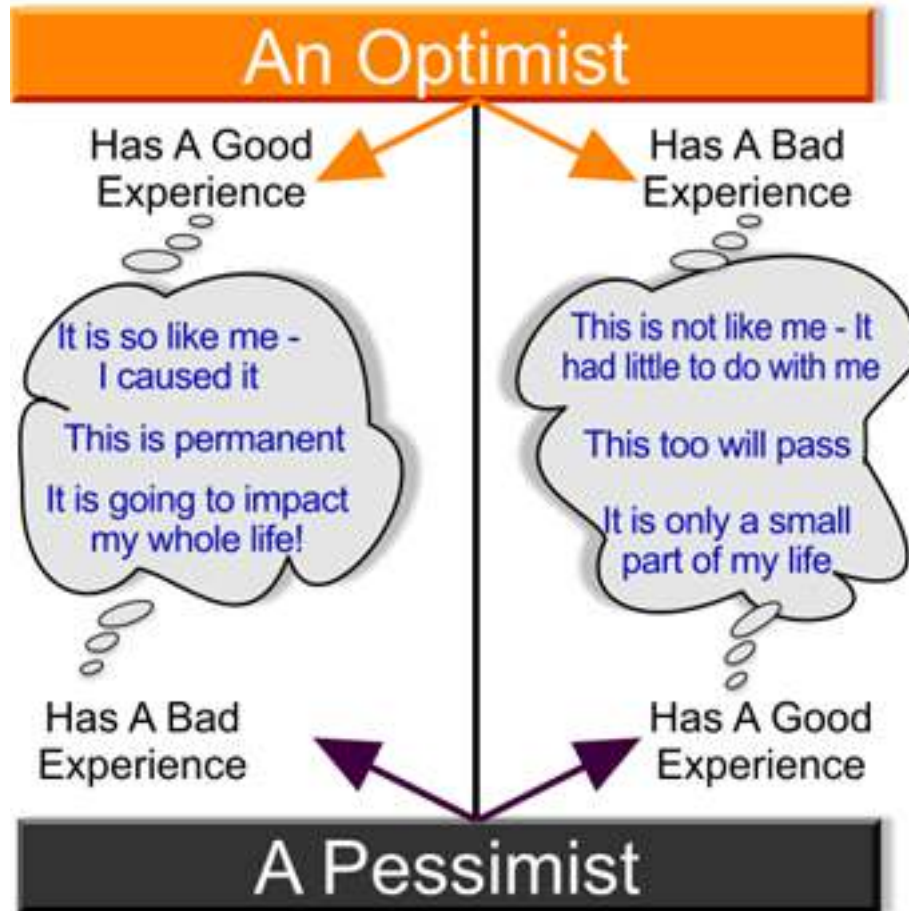
Optimistic Explanatory Style

How do you frame setbacks and successes?

An optimistic style is key to resilience as it enables us to bounce back from setbacks, adopt “can do” thinking and experience the positive emotions that come with success. The good news is that we can cultivate an optimistic style because it may not be fixed like personality but a function of our way of seeing things i.e. our thinking. A brief explanation of optimism is given below, your coach will explore this with you and offer further explanation if needed.

When we experience outcomes either good or bad, we have ways of explaining this that can tend towards an optimistic or pessimistic style. An individual with an optimistic style of explaining a positive outcome/experience will tend to feel that they had an impact on the outcome (“like me”) that they are likely to be able to replicate the experience (permanent) and that the event is pervasive, has a wider impact beyond the immediate situation (impact whole life) . An individual with a pessimistic explanatory style will tend to feel that the outcome was not influenced by them but by external factors (not like me), that the experience is not permanent (will pass) and is confined to the specific situation (small part of life). The situation reverses for negative experiences/outcomes – see diagram that follows.

Same Incident ... Different Conclusion



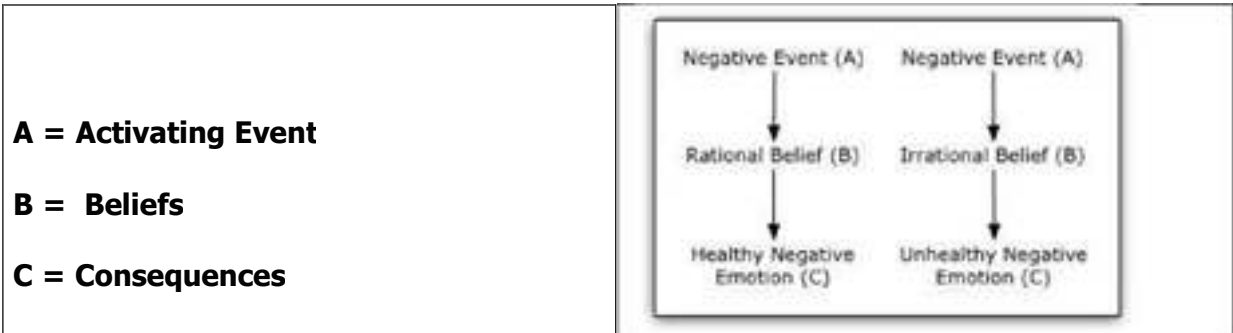
Our explanatory style can have critical impact upon a number of factors including:

- How we bounce back from a setback
- Our confidence to take on challenges
- Our general well-being

So it is important to tune in to our thinking particularly following a negative experience or event to develop self-awareness and hopefully exercise more control over thinking that may be self-defeating or undermine us. The "ABC" model following can be a helpful framework to support us in becoming aware of when and how our thinking may serve or undermine us.

Think back to any recent setbacks or negative outcomes you have experienced – was your response/interpretation typically optimistic or typically pessimistic? What was the impact of this?

Addressing Explanatory style –The “ABC” model – Thoughts influence feelings



Our beliefs about an event are what determine how we feel about it

ABC, Thinking/Feelings Identification Log- Example

(A)	(B)	(C)
Activating event, write down details of the event	Beliefs/self talk, thoughts, attitudes, images, assumptions, opinions about event	Consequences/Emotions, write down your resulting emotions
My manager says he is unable to share details about the planned changes	I have no opinions about the event at all	I feel, anxious and depressed and angry at my manager for withholding information
I have to convey difficult messages to staff	They will blame me . I am not sure how to handle this.	I feel anxious and try to avoid unnecessary contact with staff
Alternatively ?		
My manager says he is unable to share details about the planned change	My manager is not being given all of the information about changes	I am disappointed that information is not forthcoming but request my manager keeps me informed
I have to convey difficult messages to staff	This will be challenging but providing information and support is critical to people and performance	I think about how best to communicate with staff and brace myself for some of the challenges
NOW COMPLETE THE MISSING SECTIONS		
My team is being reduced from 5 to 3 and I have to apply for a position		I feel anxious and angry and put off filling in an application form
My team is being reduced from 5 to 3 and I have to apply for a position		I feel concerned that I or my colleagues may not get a position but resolve to give it my best shot
My service is closing as part of cuts, I am to be redeployed	The managers in this organisation are incompetent, they don't consider service users	
My service is closing as part of cuts, I am to be redeployed		I am sad not to be working with the group of colleagues and service users I have worked with for a long time but feel up for a new challenge

ABC, Thinking/Feelings Identification Your- Examples

(A) Activating event, write down details of the event	(B) Beliefs/self talk, thoughts, attitudes, images, assumptions,	(C) Consequences/Emotions, write down your resulting emotions
<p>opinions about event at (A</p> <p>Can you identify any scenarios where you experienced a negative emotion at work recently ?Try to identify what beliefs/self talk may have contributed to the feelings NB it is sometimes easier to start with a recent strong emotion you experienced e.g anger or withdrawal and work backwards . Refer back to the table on the previous page for examples</p>		
<p>Can you identify any alternative explanation/self -talk or beliefs that could maybe have lead to an alternative feeling or emotional response. See the examples in the previous table .</p>		

Further Reading : If you found this helpful you might like "Developing resilience – A Cognitive Behavioural Approach " 2009 by Michael Neenan about £12 on Amazon

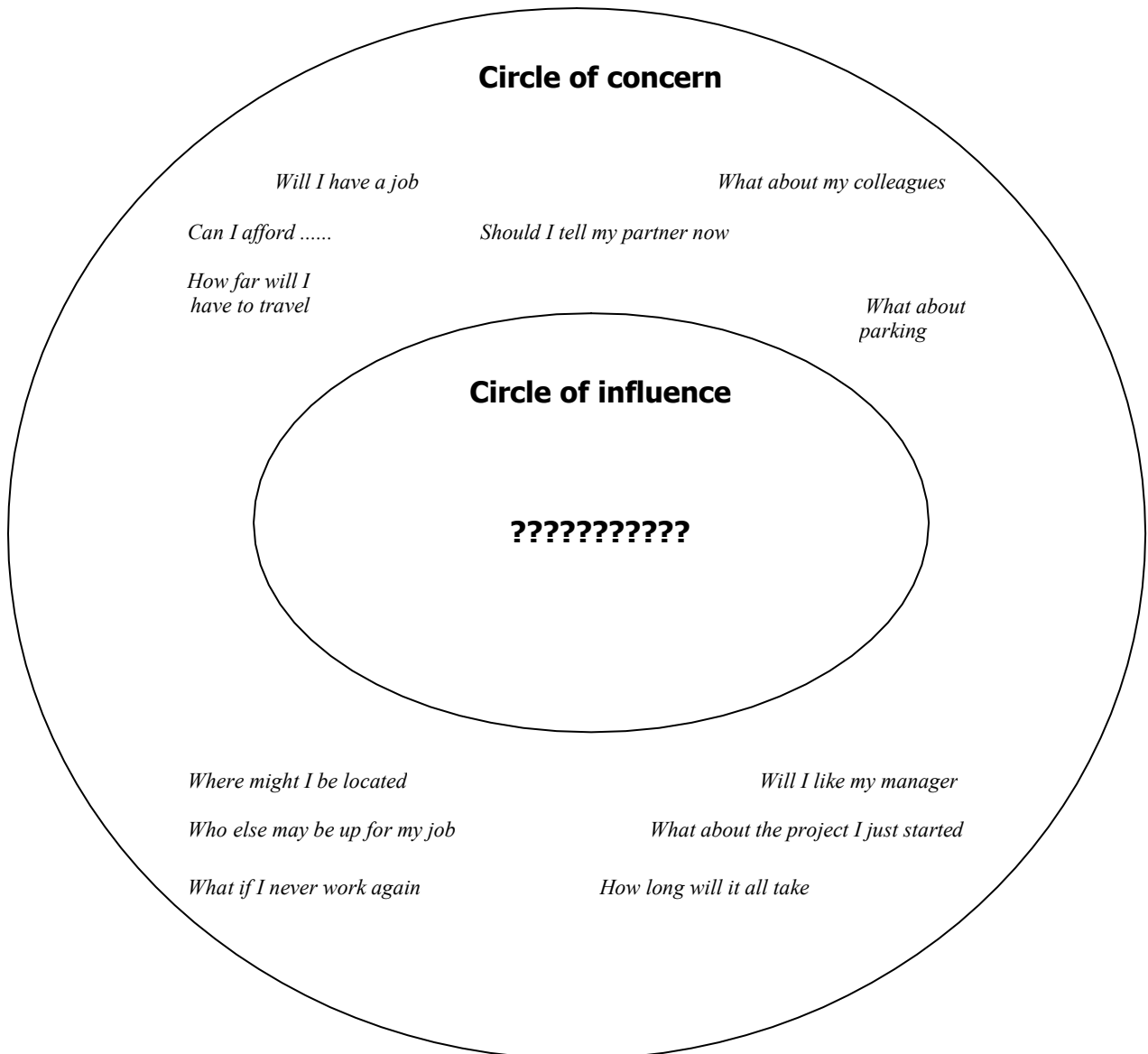
Getting perspective

Resilient individuals are generally effective in getting a helpful perspective on a set-back problem or challenge. Strategies they may use or things they may say to get to that place of perspective include:

- **Seeking meaning** e.g. "things happen for a purpose" or "as one door closes another one opens " mentality - seeing some wider pattern or spiritual perspective in a situation
- **Looking for opportunities:** instead of just seeing the losses or negatives in a situation looking for opportunities e.g. " what are the opportunities in this situation to acquire skills, do things differently ?" for example
- **Scaling:** e.g. "on a scale of 1- 10 how big is this actually? " can help in getting perspective Life perspective – e.g. "it's a work situation and my life is about so much more than that "
- **Remembering past setbacks and challenges** we have dealt with successfully e.g. "Compared to x situation this is much less of a challenge "
- **Referencing to others:** e.g. "compared to x I am really quite fortunate"
- **Operating in your circle of influence:** in his book "The Seven habits of Highly effective people" Steven Covey talks about the circle of influence which provides us with some helpful insights about maintaining perspective in challenging situations. Basically the model encourages us to focus our energy on things we can do something about rather than worry excessively about things over which we have no influence. By doing this we are able to be proactive, set goals, take control and experience resultant well-being benefits. This can be a useful approach for the many people in workplaces experiencing enforced or unavoidable changes as ultimately in such situations we may have control only over our own actions and responses.

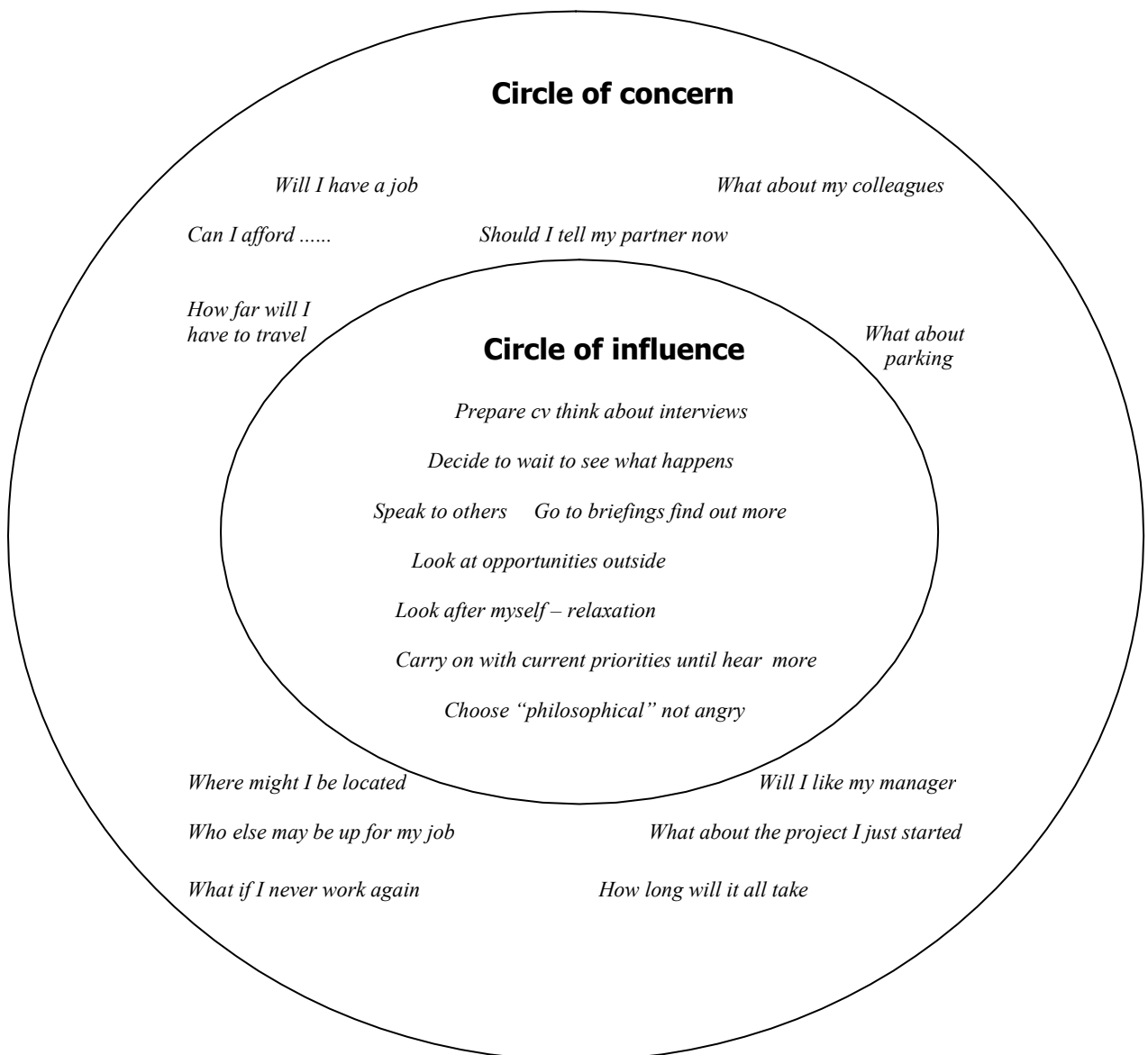
Example circle of influence

Consider the example concerns below of someone who faces significant changes at work, possibly redundancy.



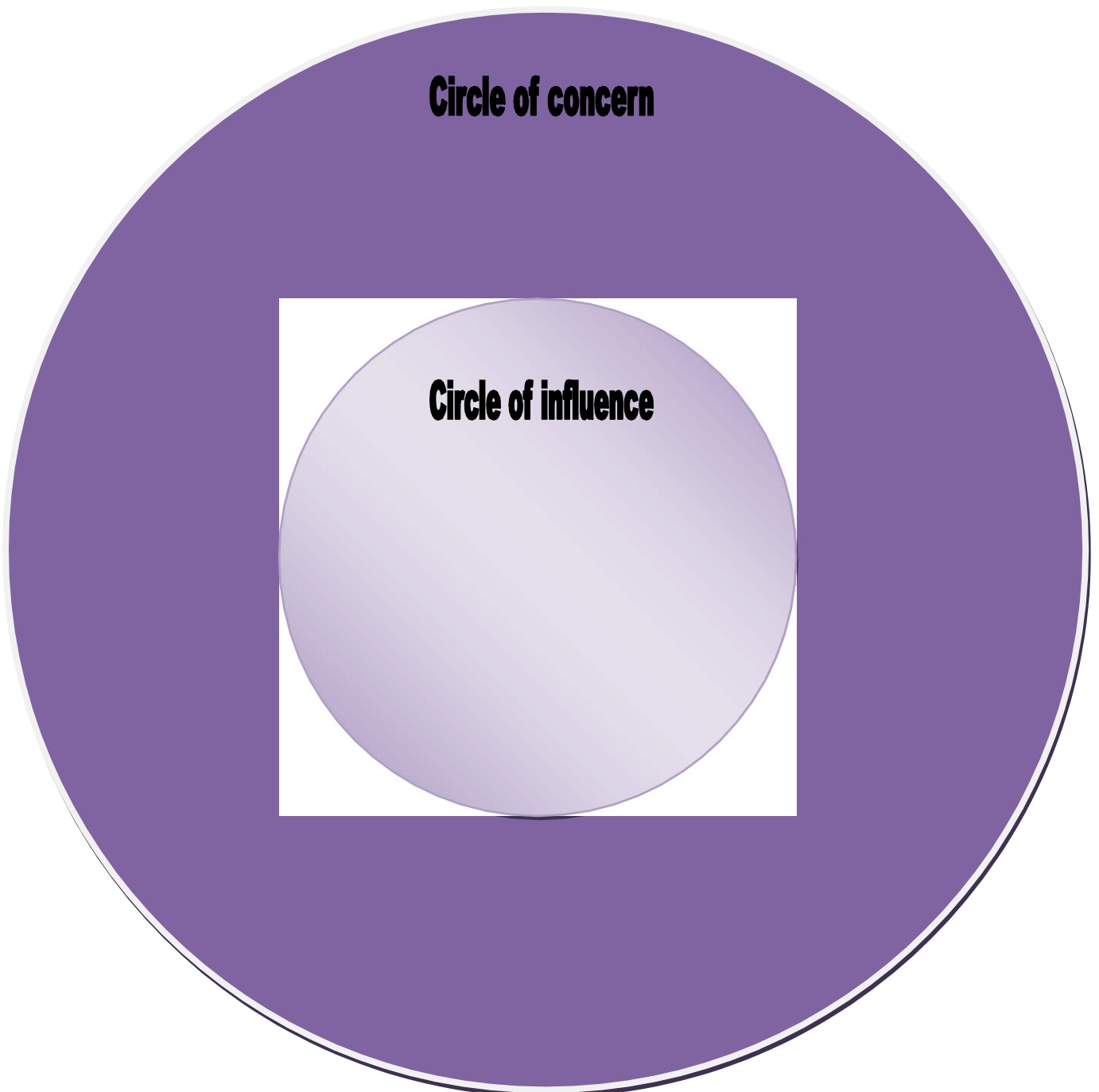
In such circumstances it would be easy for x to become overwhelmed by the concerns they have, many of which are beyond their control and influence. The circle of influence encourages us to focus upon the things we can act upon, focusing our attention and energy on these whilst recognising but “parking” factors beyond our control. What factors do you think are within X’s influence above , what actions could they take ?

The circle of influence is a way of achieving a helpful perspective. In this way we are able to be proactive and focused in the face of a challenge rather than reactive, apathetic or just simply exhausted and overwhelmed. In the example above there are a number of things within X's circle of influence which they could act upon see below .



Your Circle of Influence

Have a go at filling in the blank circle of influence for a situation /challenge you face, what do you observe about the factors outside your control and the actions you are able to take in this situation? In exceptionally challenging situations we may feel there is nothing we can do , in these situations it may be helpful to note that self-care and our emotional responses (e.g. anger) are always within our circle of influence.



Your reflections/Notes:

Support Networks

An individual's network of relationships has an important impact upon how they respond to challenges and pressures. Developing and using good social support systems is a key way to strengthen our well-being and resilience. Our network can be made up of people from various areas of our life, work, family friends, social groups and people may provide different forms of support, the important thing is that our connections can be a great "buffer" and a valuable resource. **Consider your support network by working through the following questions:**

Your support network	
Form of support	Who?
Someone who listens to me?	
Someone who is fun to be with/makes me laugh?	
Someone who makes me feel wanted?	
Someone who is good in a crisis?	
Someone who talks straight to me, is open/honest?	
Someone who will do practical things for me e.g. repairs, lifts, childcare	
Someone who makes me feel good about myself?	
Someone who cares about me/shows me affection?	
Someone who helps me put things in perspective?	
Someone who gives good advice or helps me solve problems?	
Someone who can console/comfort me when I am upset?	
Someone to do things with/go places with?	
Someone I can tell anything to?	
Your approach	Comment below
I am able to ask for help when I need it	
I can share how I am feeling with others	
I make time to spend with people who can support me/or are good for me	
I support others when they need it	
I am able to accept help and support when others offer it	

Strengthening your connections

Having considered your support network and your approach to using others for support ,consider the following:

<p>What form of support would be helpful right now?</p>
<p>Is there any form of support I am missing within my network – who might provide this?</p>
<p>Who would it be good to spend more time with?</p>
<p>What might I need to do to make better use of my support network?</p>
<p>Any other thoughts or things to consider?</p>
<p>What action should I take very soon?</p>

Notes:

The well-being Five-a-day

According to a government report¹, these are the well-being equivalent of “five fruit and vegetables a day”. How are you doing?

Connect...

With the people around you. With family, friends, colleagues and neighbours. At home, work, school or in your local community. Think of these as the cornerstones of your life and invest time in developing them. Building these connections will support and enrich you every day.

How am I doing currently and what else could I do?

Be active...

Go for a walk or run. Step outside. Cycle. Play a game. Garden. Dance. Exercising makes you feel good. Most importantly, discover a physical activity you enjoy and that suits your level of mobility and fitness.

How am I doing currently and what else could I do?

Take notice...

Be curious. Catch sight of the beautiful. Remark on the unusual. Notice the changing seasons. Savour the moment, whether you are walking to work, eating lunch or talking to friends. Be aware of the world around you and what you are feeling. Reflecting on your experiences will help you appreciate what matters to you.

How am I doing currently and what else could I do?

¹ Five ways to wellbeing NEF (New Economics Foundation) 2011

Keep learning...

Try something new. Rediscover an old interest. Sign up for that course. Take on a different responsibility at work. Fix a bike. Learn to play an instrument or how to cook your favourite food. Set a challenge you will enjoy achieving. Learning new things will make you more confident as well as being fun.

How am I doing currently and what else could I do?

Give...

Do something nice for a friend, or a stranger. Thank someone. Smile. Volunteer your time. Join a community group. Look out, as well as in. Seeing yourself, and your happiness, linked to the wider community can be incredibly rewarding and creates connections with the people around you.

How am I doing currently and what else could I do?

Interested in this ? see <http://www.fivewaystowellbeing.org> for more information and ideas

Goal Setting

Having worked through the activities , and spent more time thinking about resilience, **what goals do you have for your resilience and or well-being** and dealing with the changes or challenges you face? Have a go at the following sentence completion exercises to get you thinking about potential areas for goal setting .Ask each question until you have exhausted possible endings to the sentence

If I were more resilient

I signed up for this coaching programme because

The time I will spend on this coaching programme would be time well spent if

Your coaching programme will span 6 weeks so we would like you to identify goals which can be achieved in that period or at least have a milestone of achievement within that timescale. The focus of the coaching programme will be on resilience related goals. Your coach will help you to refine your goals if necessary but spend a little time here thinking what they may be and aiming to make them SMART – aim for two or three and think about what might prevent you achieving your goals and how you might overcome any potential obstacle

Specific not vague

Measureable: can you evaluate your progress?

Attractive: Do you really want it?

Realistic: Are you capable of achieving it?

Time bound: do you have an appropriate time frame in mind?

Resilience goals versus other goals

The coaching programme is designed to help you progress goals relating to your levels of resilience, this should in turn help you with work related goals. Consider for example a manager who is faced with the challenge of downsizing his team, the work related goals he could have around this may include :

- Implement the team reduction in the required organizational timeframe
- Support staff during the downsizing process
- Establish new operational arrangements following downsize
- Etc.

The manager's resilience/well-being goals however are more focused upon how he will deal with the challenging situation with a resilient stance and maintain his well-being. Example goals may include :

- Maintaining effective work-life balance whilst dealing with this situation – getting home by 6pm each evening
- Dealing with the “emotional fallout” in the situation – committing to open conversations with individuals about their concerns rather than avoiding this
- Developing a “can do” attitude to communicating the difficult messages
- Not taking challenges and displays of anger from staff personally – getting perspective
- Etc.

Now try developing two or three resilience related goals using the format below. Your coach will help you with this in your first session so don't worry if you can't make a lot of progress with this next activity just make sure you have completed the information on page 30 to start.

Insert your goal here:

Progress markers/milestones – how will you or others know you are getting there?	What might stop you achieving this goal	How might you address these
--	---	-----------------------------

Insert your goal here:

Progress markers/milestones? How will you or others know you are getting there?	What might stop you achieving this goal	How might you address these
---	---	-----------------------------

Insert your goal here:

Progress markers/milestones? How will you or others know you are getting there?

What might stop you achieving this goal

How might you address these

Insert your goal here:

Progress markers/milestones? How will you or others know you are getting there?

What might stop you achieving this goal

How might you address these

Pework checklist

You are now at the end of the coaching pre-work. Please ensure that you have completed the following:

- Read through and have a basic grasp of the seven resilience habits
- Completed a viastrengths self assessment /and or survey
- Tried out the circle of influence
- Completed the optimistic explanatory style (thoughts-feelings) exercises
- Completed the support network assessment
- Considered how you are doing with respect to self- care
- Clarified your goals in advance of your first coaching meeting
and
- Know when you are meeting your coach and have a suitable room/space booked

Between Coaching Session Logs

Make a brief weekly note of situations you encounter and your experience in using the resilience habits. Bring these to your coaching meetings – after three weeks of logs there is space to make notes on the issues you wish to bring for exploration with your coach.

Resilient Habits log wk 1. Date

.....

Challenges and situations that required me to be resilient this week
: (make a note of these below)

Resilient habits I used this week (circle and make brief notes to remind yourself what you did)

Used my strengths

Got perspective (circle of influence)

Used my support network

Got to "can do"

Addressed my thinking (ABC optimistic style)

Self-care

Set goals

Reflections (consider: how effective were you in dealing with the situations resiliently ? How did the habits help ? What might you do differently?)

Resilient Habits log week 2 Date

.....

Challenges and situations that required me to be resilient this week
: (make a note of these below)

Resilient habits I used this week (circle and make brief notes to remind yourself what you did)

- | | | |
|--------------------------|--|---------------------------------|
| Used my strengths | Got perspective (circle of influence) | Used my support network |
| Got to "can do" | Addressed my thinking (ABC optimistic style) | Self-care Set goals |

Reflections (consider: how effective were you in dealing with the situations resiliently ? How did the habits help ? What might you do differently?)

Resilient Habits log week 3 Date

.....

Challenges and situations that required me to be resilient this week
: (make a note of these below)

Resilient habits I used this week (circle and make brief notes to remind yourself what you did)

Used my strengths

Got perspective (circle of influence)

Used my support network

Got to "can do"

Addressed my thinking (ABC optimistic style)

Self-care

Set goals

Reflections (consider: how effective were you in dealing with the situations resiliently ? How did the habits help ? What might you do differently?)

Meeting my coach – notes and questions before we meet

Having reviewed your weekly logs, note any issues and questions you particularly wish to explore with your coach in your second meeting

Second coach meeting

Note here outcomes of your coaching meeting e.g. what goals have you set for the next three weeks ?

Issues explored

Insights and conclusions

Actions and goals

Resilient Habits log week 4 Date

.....

Challenges and situations that required me to be resilient this week
: (make a note of these below)

Resilient habits I used this week (circle and make brief notes to remind yourself what you did)

Used my strengths

Got perspective (circle of influence)

Used my support network

Got to "can do"

Addressed my thinking (ABC optimistic style)

Self-care

Set goals

Reflections (consider: how effective were you in dealing with the situations resiliently ? How did the habits help ? What might you do differently?)

Resilient Habits log week 5 Date

.....

Challenges and situations that required me to be resilient this week
: (make a note of these below)

Resilient habits I used this week (circle and make brief notes to remind yourself what you did)

- | | | |
|--------------------------|--|-----------------------------------|
| Used my strengths | Got perspective (circle of influence) | Used my support network |
| Got to "can do" | Addressed my thinking (ABC optimistic style) | Self-care Set goals |

Reflections (consider: how effective were you in dealing with the situations resiliently ? How did the habits help ? What might you do differently?)

Resilient Habits log week 6 Date

.....

Challenges and situations that required me to be resilient this week
: (make a note of these below)

Resilient habits I used this week (circle and make brief notes to remind yourself what you did)

Used my strengths

Got perspective (circle of influence)

Used my support network

Got to "can do"

Addressed my thinking (ABC optimistic style)

Self-care

Set goals

Reflections (consider: how effective were you in dealing with the situations resiliently ? How did the habits help ? What might you do differently?)

Meeting my coach for the last time - notes and questions

Reviewing your weekly logs, note any issues and questions you particularly wish to explore with your coach in your final meeting

Final coach meeting

Note here outcomes of your coaching meeting e.g. what goals have you set for the next three weeks and beyond?

Issues explored

Insights and conclusions

Actions and goals

Appendix I: Study 2 – Participant Information Sheet and Consent Form

PARTICIPANT INFORMATION

Title: Developing resilience during organisational change - a comparison of interventions

Researcher: Mandi Sherlock-Storey mandi.sherlock-storey@northumbria.ac.uk

1. What is the study about?

Employee resilience is a psychological state/characteristic that can be helpful to individuals experiencing change in the workplace. Resilience can help individuals to bounce back from setbacks and deal with challenges. The purpose of the study is to explore whether individual resilience levels can be enhanced through development activities such as training events and workbooks.

Why should I take part?

As you work in an organisation experiencing change your participation would be valuable to this study in helping to identify activities that can boost personal resilience and help people to deal with organisational change. No financial incentive is offered for participation but it is hoped that you will benefit from taking part. Your organisation has agreed to release you for the time taken to participate in the study.

2. What will I have to do?

There are two parts to your involvement :

1) The study will require you to take part in one * of two development activities

- 1 Attendance at a three hour “Resilience through change workshop”
- 2 Participation in a programme of one to one coaching for resilience where you will work through a resilience workbook and meet with a resilience coach for three 90 minute sessions over a six week period

2) The study will require you to complete an on-line questionnaire at three time-points: 1-2 weeks before participating in one of the development activities above, within one week of completion and again approximately 4- 6 weeks after completion. The questionnaire should take no longer than ten to fifteen minutes to complete on each occasion. The questionnaire asks questions relating to your levels of well-being, your resilience and how you feel about organisational change. You will be e-mailed a link to complete the questionnaire at the appropriate time-points. The first link is in the e-mail containing this briefing.

*NB You will be randomly allocated to one of the two development activities the workshop or coaching, this means that should you agree to participation in the research you are happy to take part in either of the activities.

3. Will my participation involve any discomfort or embarrassment?

Each of the development activities would involve you in some personal reflection and consideration of the changes happening in your organisation, some individuals may find this challenging. In the case of the workshop and coaching activities support will be provided by the trained and experienced facilitators. The study questionnaire asks questions about your levels of well-being and attitudes to organisational change, these are unlikely to cause any significant discomfort and again you may withdraw your participation or omit any items if you wish.

4. How will confidentiality be assured?

You will assign a password which will be used on all of your questionnaires and data. Your name and identifier will be recorded and maintained securely by the researcher so that she may contact you as required at the various stages in the study. Your questionnaire data will bear your password only.

At the end of the study you and your organisation will be provided with a report showing the findings of the study. No individual data or contribution will be identified within any report.

The data collected in this study may also be published in scientific journals or presented at conferences. Should the research be presented published or shared in any form, all data will be anonymous (i.e. your personal information or data will never be identifiable).

All identifiable paper records will be stored in a locked filing cabinet, accessible only to the research team and all electronic information will be stored on a password-protected computer. All of the information you provide will be treated in accordance with the Data Protection Act. If the research is published in a scientific journal it may be kept for up to 3 years before being destroyed. During that time the data may be used by members of the research team only for purposes appropriate to the research question, but at no point will your personal information or data be revealed.

5. How can I withdraw from the project?

The research is dependent upon participants agreeing to take part in all three of the planned questionnaire administrations so that we can explore effects over time. Your participation would be particularly valued in supporting us with this. If however you would like to withdraw, this is possible at any time up to the point of one month after the final questionnaire completion. If you wish to withdraw your data do not hesitate to contact the researcher giving them your participant number or if you have lost this give them your name. The research team can be contacted via email mandi.sherlock-storey@northumbria.ac.uk or telephone 0191 2437477

6. If I require further information who should I contact and how?

For questions regarding the study you will be able to contact mandi.sherlock-storey@northumbria.ac.uk

If you have any concerns or worries concerning this research or if you wish to register a complaint, please direct it to the Director of research Ethics for the Faculty of Health and Life Sciences at the address below, or by Email: nick.neave@northumbria.ac.uk.

This study and its protocol have received full ethical approval from the Department of Psychology Ethics Committee (Undergraduate) in accordance with the Faculty of Health and Life Sciences Ethics Committee. If you require confirmation of this please contact the Chair of this Committee, stating the title of the research project and the name of the researcher:

Dr Nick Neave
Director of Research Ethics
Faculty of Health and Life Sciences
Northumberland Building,
Northumbria University,
Newcastle upon Tyne, NE1 8ST

INFORMED CONSENT FORM

Project Title: Resilience in the Workplace

Principal Investigator: Mandi Sherlock-Storey

Participant Number:

*please tick
where applicable*

I have read and understood the Participant Information Sheet.	<input type="checkbox"/>
I have had an opportunity to ask questions and discuss this study and I have received satisfactory answers.	<input type="checkbox"/>
I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice.	<input type="checkbox"/>
I agree to take part in this study.	<input type="checkbox"/>
I would like to receive feedback on the overall results of the study at the email address given below. I understand that I will not receive individual feedback on my own performance.	<input type="checkbox"/>
Email address.....	

Signature of participant.....	Date.....
(NAME IN BLOCK LETTERS).....	

Signature of researcher.....	Date.....
(NAME IN BLOCK LETTERS).....	

Appendix J: Study 2 – One to One Terms of Engagement

Vitalwork Coaching for Resilience Programme Terms and Expectations

Your Coach will:

- Be trained in the vitalwork coaching programme
- Provide confidential coaching – the content of individual coaching sessions will be confidential. Where Coach supervision involves discussion of coaching information this would not be attributable to individual coachees – anonymity would be maintained
- Provide resilience focused coaching. The vitalwork coaching for resilience programme is a brief, skills focused approach. The programme and coaching conversations will focus upon supporting you in strengthening the resilience habits.
- Provide as much notice as possible if circumstances require the cancellation of a coaching session and will endeavour to schedule a suitable alternative.

You the coachee will:

- Complete the pre-work required to get the most from the programme
- Maintain a resilience log each week of the coaching programme
- Attend the three scheduled coaching sessions
- Secure a suitable space for meetings with your coach
- Provide as much notice as possible should circumstances require you to cancel a coaching session. Please note it will be highly unlikely that your coach will be able to offer an alternative date as their commitment is to attend your organisation for the three scheduled dates only.

Appendix K: Stakeholder Feedback – Questionnaire Results from Training and Development Professionals

3. Can you please supply the following information I am :

#	Answer	Response	%
1	Male	3	50%
2	Female	3	50%
	Total	6	100%

Statistic	Value
Min Value	1
Max Value	2
Mean	1.50
Variance	0.30
Standard Deviation	0.55
Total Responses	6

4. Can you please supply the following information I am :

#	Answer	Response	%
1	aged 20-30	0	0%
2	aged 31-40	2	33%
3	aged 41-50	2	33%
4	aged 51-60	2	33%
5	aged 60+	0	0%
	Total	6	100%

Statistic	Value
Min Value	2
Max Value	4
Mean	3.00
Variance	0.80
Standard Deviation	0.89
Total Responses	6

5. Your Coaching Experience What coaching qualifications did you have at the time of commencing the resilience coaching training (October 2013)? Please insert below

Text Response
Certificate of Postgraduate Study - Coaching Competence (Level 5)
Post Graduate course in Coaching Competence
Post Graduate Diploma in Coaching
Level 7 Diploma in Workplace Coaching, completed in July 2013.
Level 5 Coaching Competence from University of Sunderland
CMI Level 5 Certificate in Coaching and Mentoring

Statistic	Value
Total Responses	6

6. How much coaching experience did you have at October 2013 (please tick one)

#	Answer	Response	%
1	None (beyond any practice sessions in coach training for example no independent experience of coaching)	0	0%
2	A little (less than six months /less than 4 coachees or less than 20 hours coaching for example)	4	67%
3	Some (over six months /coached more than four coachees or upwards of 20 hours coaching for example)	2	33%
4	Quite a bit (coaching over a year/ six or more coachees or 30-50 hours coaching for example)	0	0%
5	Experienced (coaching two years or more/100 hours of coaching plus for example)	0	0%
	Total	6	100%

Statistic	Value
Min Value	2
Max Value	3
Mean	2.33
Variance	0.27
Standard Deviation	0.52
Total Responses	6

7. My understanding of how to deliver the coaching programme?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Around 3 months after completing the training	4.00	9.00	6.67	1.75	6
2	Now	6.00	10.00	8.00	1.41	6

8. My understanding of the theory/rationale underpinning the coaching programme?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Around 3 months after completing the training	5.00	9.00	7.00	1.67	6
2	Now	6.00	10.00	8.17	1.47	6

9. My level of confidence in delivering the coaching programme?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Around 3 months after completing the training	4.00	9.00	6.83	1.94	6
2	Now	6.00	10.00	8.17	1.47	6

10. My level of competence in delivering the coaching programme?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Around 3 months after completing the training	4.00	9.00	6.50	1.87	6
2	Now	6.00	10.00	8.00	1.58	5

11. My level of use and application of the coaching programme or its content?

#	Answer	Min Value	Max Value	Average Value	Standard Deviation	Responses
1	Around 3 months after completing the training	2.00	10.00	6.00	2.61	6
2	Now	3.00	10.00	6.67	3.01	6

12. Comments Please comment on the above and any recommendations for example.

Text Response

I have used some parts more than others and have also used this in house to supplement coaching conversations with managers to great effect.






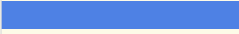
I have been able to use tool of the programme in many informal and formal coaching sessions, and outside of the workplace with friends and family

the number of coachees and amount of coaching I have delivered in previous year has decreased

Happy enough with understanding and delivery. Organisation still in the process of formulating it's coaching offer so the techniques probably haven't been mainstreamed Only carried out one formal programme but used techniques on adhoc basis in day to day discussions/management of staff - hence the lower scores for application

Statistic	Value
Total Responses	4

13. Using Character Strengths (Use of VIA strengths, list, survey or cards for example)





#	Answer		Response	%
1	I struggled to understand this component		1	17%
2	I understood this component		4	67%
3	I did not feel confident about delivering this component		0	0%
4	I felt confident about delivering this		4	67%
5	I have not yet made active use of this component at work		1	17%
6	I have made active use of this component at work		3	50%
7	I have used this component when delivering the resilience coaching model (i.e. 3 sessions of coaching)		3	50%

Statistic	Value
Min Value	1
Max Value	7
Total Responses	6

14. Getting perspective (Circle of Influence)

#	Answer	Response	%
1	I struggled to understand this component	0	0%
2	I understood this component	5	83%
3	I did not feel confident about delivering this component	0	0%
4	I felt confident about delivering this	4	67%
5	I have not yet made active use of this component at work	0	0%
6	I have made active use of this component at work	6	100%
7	I have used this component when delivering the resilience coaching model (i.e 3 sessions of coaching)	3	50%

Statistic	Value
Min Value	2
Max Value	7
Total Responses	6

15. Social support network				
#	Answer		Response	%
1	I struggled to understand this component		0	0%
2	I understood this component		5	83%
3	I did not feel confident about delivering this component		0	0%
4	I felt confident about delivering this		5	83%
5	I have not yet made active use of this component at work		0	0%
6	I have made active use of this component at work		5	83%
7	I have used this component when delivering the resilience coaching model (i.e. 3 sessions of coaching)		3	50%

Statistic	Value
Min Value	2
Max Value	7
Total Responses	6

16. Can Do Thinking

#	Answer	Response	%
1	I struggled to understand this component	0	0%
2	I understood this component	5	83%
3	I did not feel confident about delivering this component	0	0%
4	I felt confident about delivering this	5	83%
5	I have not yet made active use of this component at work	0	0%
6	I have made active use of this component at work	5	83%
7	I have used this component when delivering the resilience coaching model (i.e. 3 sessions of coaching)	3	50%

Statistic	Value
Min Value	2
Max Value	7
Total Responses	6

17. Optimistic thinking style

#	Answer	Response	%
1	I struggled to understand this component	1	17%
2	I understood this component	4	67%
3	I did not feel confident about delivering this component	1	17%
4	I felt confident about delivering this	3	50%
5	I have not yet made active use of this component at work	2	33%
6	I have made active use of this component at work	3	50%
7	I have used this component when delivering the resilience coaching model (i.e. 3 sessions of coaching)	1	17%

Statistic	Value
Min Value	1
Max Value	7
Total Responses	6

18. Setting Goals

#	Answer	Response	%
1	I struggled to understand this component	0	0%
2	I understood this component	6	100%
3	I did not feel confident about delivering this component	0	0%
4	I felt confident about delivering this	4	67%
5	I have not yet made active use of this component at work	0	0%
6	I have made active use of this component at work	4	67%
7	I have used this component when delivering the resilience coaching model (i.e. 3 sessions of coaching)	3	50%

Statistic	Value
Min Value	2
Max Value	7
Total Responses	6

19. Self-Care (5 a day for well-being)

#	Answer	Response	%
1	I struggled to understand this component	0	0%
2	I understood this component	5	83%
3	I did not feel confident about delivering this component	0	0%
4	I felt confident about delivering this	5	83%
5	I have not yet made active use of this component at work	0	0%
6	I have made active use of this component at work	4	67%
7	I have used this component when delivering the resilience coaching model (i.e. 3 sessions of coaching)	4	67%

Statistic	Value
Min Value	2
Max Value	7
Total Responses	6

20. Comments? Please comment on your use or non-use of the components and offer any recommendations for example

Text Response

I think these are great exercises regardless whether managers/employees are conscious of a need to boost their resilience in certain situations. I have successfully used some components more than others to supplement coaching.

I found the tools easy to understand and recommend to others when coaching. They are adaptable and accessible. I don't recall much about the character strengths tool/component. Thanks

I have used the various components at different times mainly during 1 to 1's with team during reflection time. I have used them personally for my own benefit when tackling particular issues at work/home - for example we have gone through a lot of change at work with a new line manager and new ways of working.

Statistic	Value
Total Responses	3

Well-being and resilience During Organisational Change

Session 1



Strengths

Being aware of and regularly using our strengths can enhance our well-being and resilience. People typically possess around 5 “signature strengths”. Your signature strengths are “ Those strengths that best describe the positive aspects of who you are. These strengths are strong capacities in you and they are probably engaging, energizing, and comfortable for you to use. Your family and friends would immediately agree these are important strengths that you have. Finding ways to use and express these strengths is likely to bring you many benefits”. (Viame.org.uk)

The first step to realizing the benefits of our strengths is to know what they are. The activities below use the “Viastrengths”^{*} framework developed by psychologists to help you to identify your own signature strengths. Use the table and descriptions that follow to identify your top 5-7 strengths,

The strengths are listed below, there are 24 strengths organised into six categories Please note your strengths may be scattered across the different categories or may cluster, your profile will be unique to you.

Having identified your strengths, take a few moments to consider the questions that follow

**Peterson, C., & Seligman, M. E. P. (2004). Character strengths and virtues: A handbook and classification. New York: Oxford University Press and Washington, DC: American Psychological Association. www.viacharacter.org*

1. Wisdom and knowledge - Cognitive strengths that entail acquisition and use of knowledge.

- **Creativity:** Thinking of novel and productive ways to conceptualise and do things
- **Curiosity:** Taking an interest in on going experience for its own sake
- **Judgement:** Thinking things through and examining them from all sides
- **Love of learning:** Mastering new skills, topics and bodies of knowledge
- **Perspective:** Being able to provide wise counsel to others

2. Courage-emotional strengths that involve the exercise of will to accomplish goals in the face of opposition, external and internal.

- **Courage:** Not shrinking from threat, challenge, difficulty or pain
- **Perseverance:** Finishing what one starts; persisting in a course of action in spite of obstacles
- **Honesty:** Speaking the truth but more broadly presenting oneself in a genuine way
- **Zest:** Approaching life with excitement and energy; not doing anything half heartedly

3. Humanity-interpersonal strengths that involve tending and befriending others.

- **Love and being loved:** Valuing close relations with others, in particular those in which caring is reciprocated
- **Kindness:** Doing favours and good deeds for others; helping them; taking care of them
- **Social intelligence:** Being aware of the motives and feelings of other people and oneself

4. Justice-civic strengths that underlie healthy community life

- **Team work:** Working well as a member of a group or team; being loyal to a group
- **Fairness:** Treating all people the same according to the notions of fairness and justice
- **Leadership:** Encouraging a group of which one is a member to get things done

5. Temperance strengths that protect against excess.

- **Forgiveness:** Forgiving those who have done wrong; accepting others' faults

- **Humility/modesty:** Letting one's accomplishments speak for themselves
- **Prudence:** Being careful about one's choices; not taking undue risks
- **Self-control:** Regulating what one feels and does; being disciplined

6. Transcendence strengths that forge connections to the larger universe and provide meaning

- **Appreciation of beauty and excellence:** Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life
- **Gratitude:** Being aware of and thankful for the good things that happen
- **Hope:** Expecting the best in the future and working to achieve it
- **Humour:** Liking to laugh and tease; bringing smiles to other people
- **Spirituality:** Having coherent beliefs about higher purpose/ meaning of universe

Using strengths

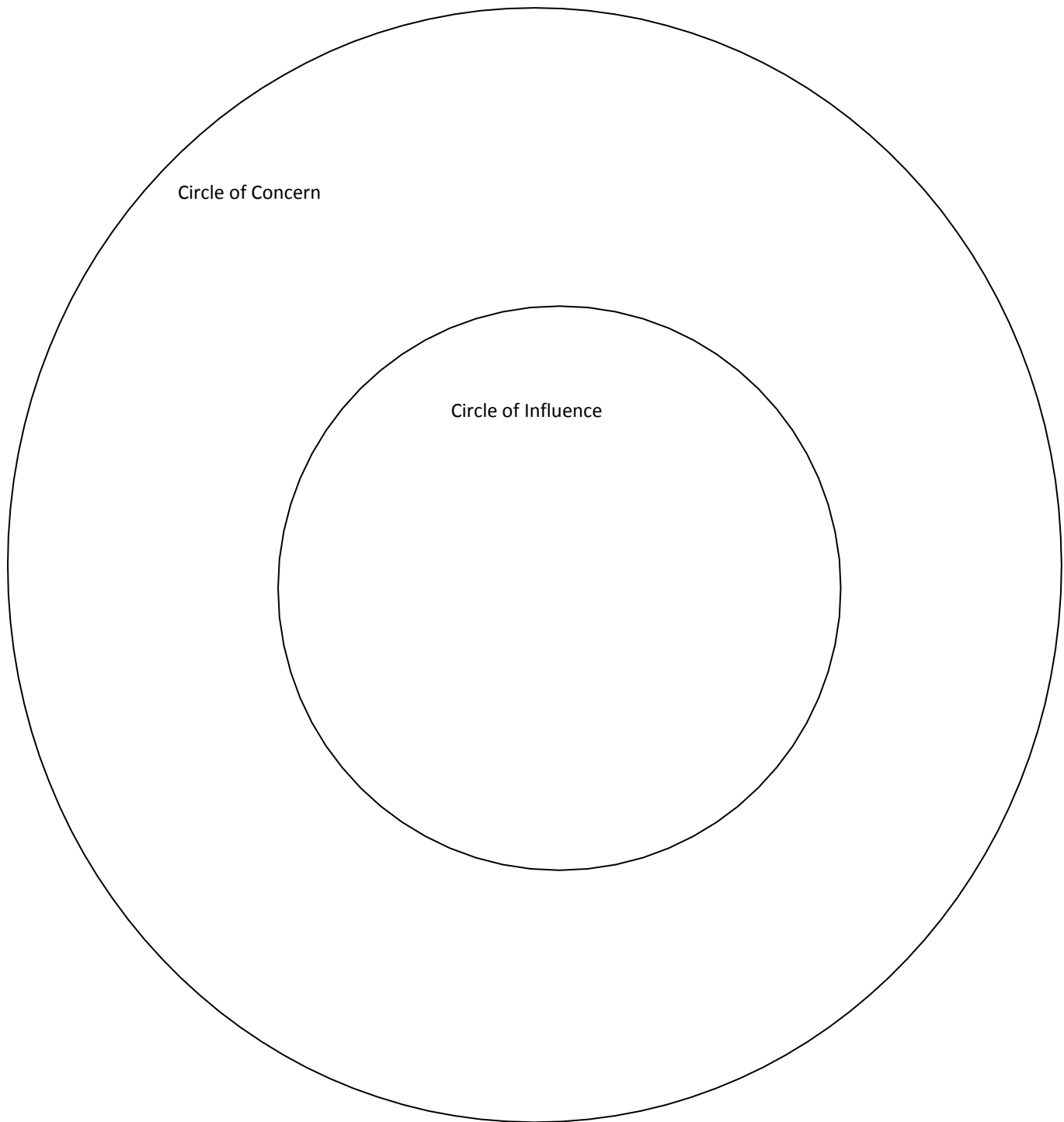
Which 5 strengths do you feel best represent you ? Why ? What examples do you have?

Are you using strengths daily? How could you use them more frequently?

How could your strengths help you deal with challenges and setbacks?

YOUR CIRCLE OF INFLUENCE

What are your concerns about organisational change? What is within your influence and what is not?



The well-being Five-a-day

According to a government report¹, these are the well-being equivalent of “five fruit and vegetables a day”. How are you doing?

Connect...

With the people around you. With family, friends, colleagues and neighbours. At home, work, school or in your local community. Think of these as the cornerstones of your life and invest time in developing them. Building these connections will support and enrich you every day.

How am I doing currently and what else could I do?

Be active...

Go for a walk or run. Step outside. Cycle. Play a game. Garden. Dance. Exercising makes you feel good. Most importantly, discover a physical activity you enjoy and that suits your level of mobility and fitness.

How am I doing currently and what else could I do?

Take notice...

Be curious. Catch sight of the beautiful. Remark on the unusual. Notice the changing seasons. Savour the moment, whether you are walking to work, eating lunch or talking to friends. Be aware of the world around you and what you are feeling. Reflecting on your experiences will help you appreciate what matters to you.

How am I doing currently and what else could I do?

Keep learning...

Try something new. Rediscover an old interest. Sign up for that course. Take on a different responsibility at work. Fix a bike. Learn to play an instrument or how to cook your favourite food. Set a challenge you will enjoy achieving. Learning new things will make you more confident as well as being fun.

How am I doing currently and what else could I do?

Give...

Do something nice for a friend, or a stranger. Thank someone. Smile. Volunteer your time. Join a community group. Look out, as well as in. Seeing yourself, and your happiness, linked to the wider community can be incredibly rewarding and creates connections with the people around you.

How am I doing currently and what else could I do?

Interested in this? see www.fivewaystowellbeing.org for more information and ideas

1 Five ways to wellbeing NEF (New Economics Foundation) 2011

Next Steps Setting Goals to boost your well-being and resilience

Identify one or two goals which you could progress over the next two weeks (think SMART)

What might stop you making progress and how might you overcome this

On a scale of 1-10 how motivated are you to achieve this goal ?

Appendix M: Workshop Materials – Session 2

Well-being and resilience During Organisational Change

Session 2



Reviewing goals from session 1 – WINNER review

What was your goal (s)?

Identify pathways/approaches you used to reach this goal.

Name the barriers encountered and avoided

How did you Navigate around these barriers?

Where did you find the Energy to pursue your goals?

Reflecting on your approach- how did you do , what would you do differently?

Thinking Traps Exercise

Think about your own unhelpful ways of thinking? Can you recognise any patterns?

My main unhelpful ways of thinking are:

The next time I notice myself using them, I will try to:

Support Networks

An individual's network of relationships has an important impact upon how they respond to challenges and pressures. Developing and using good social support systems is a key way to strengthen our well-being and resilience.

Our network can be made up of people from various areas of our life, work, family friends, social groups and people may provide different forms of support, the important thing is that our connections can be a great "buffer" and a valuable resource. Consider your support network by working through the following questions:

<i>Your support network</i>	
<i>Form of support</i>	<i>W</i>
Someone who listens to me?	
Someone who is fun to be with/makes me laugh?	
Someone who makes me feel wanted?	
Someone who is good in a crisis?	
Someone who talks straight to me, is open/honest?	
Someone who will do practical things for me e.g. repairs, lifts, childcare	
Someone who makes me feel good about myself?	
Someone who cares about me/shows me affection?	
Someone who helps me put things in perspective?	
Someone who gives good advice or helps me solve problems?	
Someone who can console/comfort me when I am upset?	
Someone to do things with/go places with?	
Someone I can tell anything to?	
<i>Your approach</i>	<i>Comment below</i>
I am able to ask for help when I need it	
I can share how I am feeling with others	
I make time to spend with people who can support me/or are good for me	
I support others when they need it	
I am able to accept help and support when others offer it	

Strengthening your connections

Having considered your support network and your approach to using others for support, consider the following:

What form of support would be helpful right now?

Is there any form of support I am missing within my network – who might provide this?

Who would it be good to spend more time with?

What might I need to do to make better use of my support network?

Any other thoughts or things to consider?

What action should I take very soon?

“Can do” Thinking

Think of a time recently when you faced a challenge at work *where you initially felt daunted by the task and lacked confidence in your ability to succeed, but eventually arrived at a place of “can do ” thinking (i.e. feeling you could/would take on the challenge)

Make a brief note of the situation below.

**(NB a non-work related example is fine if you are unable to recall a workplace one)*

What got you to can do thinking? Think about what helped you to get there and what it felt like

Things that might help get us to “can do”

Approaches that help	Approaches you use (tick those you use or have used)
Chunking: Breaking the challenge down into smaller parts, e.g. several milestones	
Visualising the end point: seeing its appeal/benefits	
Getting perspective: taking time out to think about the challenge or considering “what’s the worst that could happen”? or “compared to x challenge this is easy” for example	
Drawing on past experience – reminding yourself of past achievements, challenges and skills	
Other people relying on you: i.e. the achievement or non-achievement of the task/ challenge will impact upon staff, family service users for example	
Wanting to make a difference : having a sense of purpose or need to make a meaningful contribution	
Seeking resources: maybe time, expertise, support etc.	
Making use of a role model/mentor talking it through with someone whose experience or advice you value or observing/shadowing someone with relevant experience	
Seeking out those who believe in you: getting encouragement and perspective on your capability	
Avoidance no longer works: too painful or stressful, easier to just get on with it	
Self-talk: using positive inner talk to generate self- belief and confidence	
Looking after yourself: getting a good night’s sleep for example	

Which from the above list would you consider using in future challenges?

Goal setting activity

Identify activities and goals that you can focus on in the next few weeks between workshop sessions

Optimistic thinking actions

Over the coming weeks be alert to situations that may trigger unhelpful thinking or challenge your *can do* thinking. Identify here how you might prepare yourself for this i.e. what can you do to address unhelpful thinking or assist you in getting to *can do* in the future :

Social Support Goals

Formulate one or two SMART goals that will enable you to strengthen social support

Identify any barriers you anticipate and how you aim to overcome these

On a scale of 1-10 how motivated are you to achieve this goal?

Now share your intentions with your partner/group

Appendix N: Study 3 - Workshop Materials Session 3

Well-being and resilience During Organisational Change

Session 3

Reviewing goals from session 2 – WINNER review

What was your goal (s)?

Identify pathways/approaches you used to reach this goal.

Name the barriers encountered and avoided

How did you **N**avigate around these barriers?

Where did you find the **E**nergy to pursue your goals?

Reflecting on your approach- how did you do , what would you do differently?

Affirming strengths

- 1 What are some of the things from the past about which you are most proud ?
- 2 What energizes you in the present?
- 3 What are you looking forward to in the near future?

Take turns to listen to each others accounts , be curious , prompt and explore and then reflect back what strengths /values you hear being expressed – what is important to your partner ?



Note below your strengths and values that came out of this exercise:

You at your best

Imagine waking up tomorrow and being at your peak in terms of well-being , resilience to challenges etc.

- What would be different?
- Who would notice and what would they say or do ?
- What habits /behaviours have you changed to get here ?

vitalwork
POSITIVELY ENGAGING ORGANISATIONS

Once in awhile
someone amazing
comes along....
and here I am
- Tiger



Your Notes:

A personal *provocative proposition/* *possibility statement*

- A statement of desired personal future
- Grounded in reality- but exciting
- Positive - move towards something
- Present tense
- A stretch



vitalwork
POSITIVELY ENGAGING ORGANIZATIONS

Your Statement . Note below sentences that capture your desired future state of well-being and resilience:

Resilient people set goals.....

What changes do you need to make or actions do you need to take to make your provocative proposition a reality ?

Identify one action you can take tomorrow or in the next 4 weeks to bring you closer to your vision

vitalwork
POSITIVELY BREAKING ORGANISATIONS



Record your intended goals/ actions below – aim for SMART

What might get in the way and how might you overcome this?

What is your level of motivation for making this happen? 1-10 scale

Appendix O: Study 3 – Participant Information Sheet and Consent Form

PARTICIPANT INFORMATION

Name of Researcher: Mandi Sherlock-Storey

Project Title: Evaluation of a personal resilience during organisational change intervention

What is the purpose of the project?

The purpose of this study is to evaluate the impact of a programme of “Well-being through organisational change” workshops on participant levels of resilience and how they deal with organisational change.

Why have I been selected to take part?

Your organisation is undergoing organisational change. These changes may be affecting your role and causing you to have to adapt to and deal with, change in the workplace. We are interested in exploring how interventions such as workshops you have expressed an interest in may help individuals like you who are affected by change, to deal more positively with organisational change and maintain their well-being for example.

What will I have to do?

We will require you to complete a short on line questionnaire three times over a 10-12 week period from February to May. The questionnaire will be administered on line, will take around 10-15 minutes to complete and will consist of questions designed to explore your experience of dealing with organisational change.

You will attend three short (90 -120 minute) workshops focused upon enhancing well-being and resilience during change, these will be delivered at two weekly intervals. It is important that you are able to attend all three workshops in a given programme i.e. one workshop at two weekly intervals commencing either February or May depending upon the programme you are booked on to. The timing of questionnaire completion will be dependent upon the workshop programme you have booked on to and may be before you commence any workshops or before and after attending the workshops.

Your organisation has given consent to your release to attend the study workshops and complete questionnaires. You should however follow standard training attendance procedures for consulting and advising your manager of your participation in the workshops.

Will my participation involve any psychological discomfort or embarrassment?

Discomfort is not anticipated in completing the on line questionnaire, you are free to omit any questions and/or to withdraw from the research at any stage.

Participation in the workshops will include some activities involving personal reflection and consideration of the changes happening in your organisation, some individuals may find this challenging. Participants are free to choose their own level of participation and disclosure within workshops and the workshops will be delivered by an experienced facilitator.

How will confidentiality be assured and who will have access to the information that I provide?

You will use a unique identification code which will be used throughout your participation in the study questionnaire all of your questionnaires and data will bear this identifier only. Your

CXXXV

e-mail address will be required with the first questionnaire in order to establish a list of participants and to create a database for emailing links to subsequent questionnaires. Your email and matching participant code will be recorded and maintained securely by the researcher so that she may contact you as required at the various stages in the study, your email will be removed from any stored data. Your questionnaire data will bear your identifier only. Please note that the online survey may automatically collect your IP address this will be deleted before data is downloaded.

At the end of the study you and your organisation will be provided with a report outlining the findings of the study. No individual data or contribution will be identified within any report.

The data collected in this study may also be published in scientific journals or presented at conferences. Should the research be presented published or shared in any form, all data will be anonymous (i.e. your personal information or data will never be identifiable).

All identifiable paper records will be stored in a locked filing cabinet, accessible only to the research team and all electronic information will be stored on a password-protected computer. All of the information you provide will be treated in accordance with the Data Protection Act. If the research is published in a scientific journal it may be kept for up to 7 years before being destroyed. During that time the data may be used by members of the research team only for purposes appropriate to the research question, but at no point will your personal information or data be revealed.

Will I receive any financial rewards for taking part?

No

How can I withdraw from the project?

Questionnaire data

The research is dependent upon participants agreeing to take part in all three of the planned questionnaire administrations so that we can explore effects over time. Your participation would be particularly valued in supporting us with this. If however you would like to withdraw, this is possible at various points. You can withdraw from completing a questionnaire at any time by exiting the questionnaire and browser and advising the researcher to remove any data you may have provided. You can also withdraw after you have completed the study by emailing the researcher (mandi.sherlock-storey@northumbria.ac.uk) within two weeks of completing the final questionnaire. If you do this, any information that you have provided will be destroyed. If you request to be withdrawn from the study after this time then it may not be possible to remove you from the study as your data may have been incorporated into analyses or reports.

Workshops

You are free to withdraw from participation in the workshops at any point during the programme delivery. Please advise the researcher as soon as possible if you intend to withdraw.

If you have any concerns or worries concerning this research or if you wish to register a complaint, please direct it to the Faculty Director of Ethics address below, or by Email: Nick.Neave@northumbria.ac.uk

This study and its protocol have received full ethical approval from the Department of Psychology Ethics Committee in accordance with the School of Health and Life Sciences Ethics Committee. If you require confirmation of this please contact the Faculty Director of Ethics, stating the title of the research project and the name of the researcher:

Dr Nick Neave
Faculty Director of Ethics

Northumbria University
Newcastle upon Tyne
NE1 8ST

Study consent – (administered via Qualtrics preceded by participant brief which will be presented on line as the introduction to the questionnaire)

Please read and if you agree tick the box

I have read the participant brief I understand the nature of the study, and what is required from me. I understand I am free to withdraw from the study at any time, without having to give a reason for withdrawing, and without prejudice. I agree to provide information to the investigator and understand that my contribution will remain confidential.

Please enter your e-mail address:

Please enter a participant code comprised of the first two letters of your mother's maiden name, the first two letters of your birth town and the month (in numbers) of your birth e.g. My mother's maiden name is Byron, I was born in Gateshead in November, my participant code is "BYGA11"

Enter your participant code

Please click on the appropriate box to indicate the following:

Male Female

Age 20-30 31-40 41-50 51-60 60+

My current job role : Non managerial Supervisor Manager Senior Manager Other (please specify)

Length of employment with the organisation

0-1 year 1-5 years 5-10 years 10 -15 years 15 years +

Thank You for completing the questionnaire. I will contact you when it is time for you to complete the questionnaire again. If you have any questions in the meantime, get in touch. Mandi.sherlock-storey@northumbria.ac.uk

References

- Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research, 38*(1), 4-23.
- Abbott, J. A., Klein, B., Hamilton, C., & Rosenthal, A. J. (2009). The impact of online resilience training for sales managers on wellbeing and performance. *Sensoria: A Journal of Mind, Brain & Culture, 5*(1), 89-95.
- Ablett, J. R., & Jones, R. S. P. (2007). Resilience and well-being in palliative care staff: a qualitative study of hospice nurses' experience of work. *Psycho-Oncology, 16*(8), 733-740.
- Alvarez, J., & Hunt, M. (2005). Risk and resilience in canine search and rescue handlers after 9/11. *Journal of Traumatic Stress, 18*(5), 497-505.
- Armenakis, A. A., & Bedeian, A. G. (1999). Organizational change: A review of theory and research in the 1990s. *Journal of management, 25*(3), 293-315.
- Arnetz, B.B., Nevedal, D. C., Lumley, M. A., Backman, L., & Lublin, A. (2009). Trauma resilience training for police: Psychophysiological and performance effects. *Journal of Police and Criminal Psychology, 24*, 1-9. Doi: 10.1007/s11896-008-9030-y
- Arthur Jr, W., Bennett Jr, W., Stanush, P. L., & McNelly, T. L. (1998). Factors that influence skill decay and retention: A quantitative review and analysis. *Human performance, 11*(1), 57-101.
- Avey, J. B., Patera, J. L., & West, B. J. (2006). The implications of positive psychological capital on employee absenteeism. *Journal of Leadership & Organizational Studies, 13*(2), 42-60.

- Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *The Journal of Applied Behavioral Science*, 44(1), 48-70.
- Avramidis, E., & Smith, B. (1999). An introduction to the major research paradigms and their methodological implications for special needs research. *Emotional and Behavioural Difficulties*, 4(3), 27-36.
- Baddeley, A. D. (1999). *Essentials of human memory*. Hove, East Sussex: Psychology Press
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), 309-328.
- Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: a review and practical implications. *Personnel Psychology*, 41, 63-105.
- Bamberger, S. G., Vinding, A. L., Larsen, A., Nielsen, P., Fonager, K., Nielsen, R. N., Ryom, P., & Omland, Ø. (2012). Impact of organisational change on mental health: a systematic review. *Occupational and environmental medicine*, 69(8), 592-598.
- Bandura, A. (1997) *Self-efficacy: The Exercise of Control*. New York, NY: Macmillan
- Bartone, P. T. (2003). Hardiness as a resiliency resource under high stress conditions. *Promoting capabilities to manage posttraumatic stress: Perspectives on resilience*, 59-73.
- Bazeley, P. (2007). *Qualitative analysis with NVivo*. London: Sage
- BBC News (2012). Austerity country by country. Retrieved 13/03/2014 from <http://www.bbc.co.uk/news/10162176>
- Beck, A. T. (1972). Measuring depression: The depression inventory. In T. A. Williams, M. M. Katz & J. A. Shield (Eds.), *Recent advances in the psychobiology of the depressive illnesses*: (pp. 299-302). Washington: Government Printing Office

- Bernard, B. (1997). Turning it around for all youth: From risk to resilience (Report No. EDO-UD-97-7). *New York, NY: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. ED412309).*
- Bhaskar, R. (1978). On the possibility of social scientific knowledge and the limits of naturalism. *Journal for the Theory of Social Behaviour*, 8(1), 1-28.
- Blau, G. (2003). Testing for a four-dimensional structure of occupational commitment. *Journal of occupational and organizational psychology*, 76(4), 469-488.
- Block, J. H., & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In *Development of cognition, affect, and social relations: The Minnesota symposia on child psychology* (Vol. 13, pp. 39-101).
- Bloom, B. S. (1956). *Taxonomy of educational objectives, handbook 1: Cognitive domain*. New York: Longmans Green
- Bonanno, G. A. (2012). Uses and abuses of the resilience construct: Loss, trauma, and health-related adversities. *Social science & medicine*, 74(5), 753-756
- Bonanno, G. A., Westphal, M., & Mancini, A. D. (2011). Resilience to loss and potential trauma. *Annual review of clinical psychology*, 7, 511-535.
- Bonanno, G. A. (2004). Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events?. *American psychologist*, 59(1), 20.
- Bonanno, G. A., & Diminich, E. D. (2013). Annual Research Review: Positive adjustment to adversity—trajectories of minimal–impact resilience and emergent resilience. *Journal of Child Psychology and Psychiatry*, 54(4), 378-401.

- Bonanno, G. A., Galea, S., Bucciarelli, A., & Vlahov, D. (2006). Psychological resilience after disaster New York city in the aftermath of the September 11th Terrorist Attack. *Psychological Science, 17*(3), 181-186.
- Bonanno, G. A., Wortman, C. B., Lehman, D. R., Tweed, R. G., Haring, M., Sonnega, J., Carr, D., & Nesse, R. M. (2002). Resilience to loss and chronic grief: a prospective study from preloss to 18-months postloss. *Journal of personality and social psychology, 83*(5), 1150.
- Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, V. J. (2004). Uncertainty during organizational change: Types, consequences, and management strategies. *Journal of Business and Psychology, 18*(4), 507-532.
- Bridges, W. (1995). *Managing transitions: Making the most of change*. London: Nicholas Brealey Publishing
- Bright, D., & Crockett, A. (2012). Training combined with coaching can make a significant difference in job performance and satisfaction. *Coaching: An International Journal of Theory, Research and Practice, 5*(1), 4-21.
- Briner, R. B., & Rousseau, D. M. (2011). Evidence-based I–O psychology: not there yet. *Industrial and Organizational Psychology, 4*(1), 3-22.
- 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*(1), 77-95.
- Brouwers, E. P., Tiemens, B. G., Terluin, B., & Verhaak, P. F. (2006). Effectiveness of an intervention to reduce sickness absence in patients with emotional distress or minor mental disorders: a randomized controlled effectiveness trial. *General hospital psychiatry, 28*(3), 223-229.
- Brunwasser, S. M., Gillham, J. E., & Kim, E. S. (2009) A meta-analytic review of the Penn Resiliency Program's effect on depressive symptoms. *Journal of Consulting and Clinical Psychology, 77*, 1042-1054. doi: 10.1037/a0017671

- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done?. *Qualitative research*, 6(1), 97-113.
- Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human resource development review*, 6(3), 263-296.
- Burman, E. (1994). Interviewing. In P. Bannister, I. Parker, E. Burman, M. Taylor, & C. Tindall (Eds.), *Qualitative Methods in Psychology*. (pp. 49-71). London: Open University Press.
- Burns, D. D. (1999). *The feeling good handbook*. New York: Plume.
- Burton, N. W., Pakenham, K. I., & Brown, W. J. (2010). Feasibility and effectiveness of psychosocial resilience training: a pilot study of the READY program. *Psychology, health & medicine*, 15(3), 266-277.
- Caldwell, S. D., Herold, D. M., & Fedor, D. B. (2004). Towards an understanding of the relationships between organizational change, individual differences, and changes in person-environment fit: Across-level study. *Journal of Applied Psychology*, 89, 868– 882.
- Campbell-Sills, L., & Stein, M. B. (2007). Psychometric analysis and refinement of the Connor-Davidson Resilience Scale (CD-RISC): validation of a 10-item measure of resilience. *Journal of traumatic stress*, 20(6), 1019.
- 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(4), 585-599.
- Carr, W., Bradley, D., Ogle, A. D., Eonta, S. E., Pyle, B. L., & Santiago, P. (2013). Resilience training in a population of deployed personnel. *Military Psychology*, 25(2), 148.
- Castro, C. A., Adler, A. B., McGurk, D., & Bliese, P. D. (2012). Mental health training with soldiers four months after returning from Iraq: Randomization by platoon. *Journal of Traumatic Stress*, 25(4), 376-383.

- Caza, B. B., & Milton, L. P. (2012). Resilience at work: Building capability in the face of adversity. In K. S. Cameron & G. M. Spreitzer (Eds.), *The Oxford handbook of positive organizational scholarship* (pp. 895–908). New York, NY: Oxford University Press.
- Chen, S., Westman, M., & Hobfoll, S. E. (2015). The commerce and crossover of resources: Resource conservation in the service of resilience. *Stress and Health, 31*(2), 95-105.
- Cicchetti, D. (2010). Resilience under conditions of extreme stress: A multilevel perspective. *World Psychiatry, 9* (3), 145–154.
- Cigrang, J. A., Todd, S. L., & Carbone, E. G. (2000). Stress management training for military trainees returned to duty after a mental health evaluation: effect on graduation rates. *Journal of occupational health psychology, 5*(1), 48.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences* (2nd edn). Hillsdale, NJ; Lawrence Erlbaum Associates
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological bulletin, 98*(2), 310.
- Cohn, A., & Pakenham, K. (2008). Efficacy of a cognitive-behavioral program to improve psychological adjustment among soldiers in recruit training. *Military medicine, 173*(12), 1151-1157.
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and anxiety, 18*(2), 76-82.
- Conway, E., & Monks, K. (2011). Change from below: the role of middle managers in mediating paradoxical change. *Human Resource Management Journal, 21*(2), 190-203.
- Cooper, C. L., Flint-Taylor, J., & Pearn, M. (2013). *Building resilience for success: a resource for managers and organizations*. Basingstoke: Palgrave Macmillan.

- Cooperrider, D., & Whitney, D. D. (2005). *Appreciative inquiry: A positive revolution in change*. San Francisco: Berrett-Koehler Publishers.
- Cornum, R., Matthews, M. D., & Seligman, M. E. (2011). Comprehensive soldier fitness: building resilience in a challenging institutional context. *American Psychologist, 66*(1), 4.
- Coutu, D. L. (2002). How resilience works. *Harvard business review, 80*(5), 46-56.
- Covey, S. (1990). *Seven habits of effective people*. New York: Simon & Schuster
- Crotty, M. (1998). *The foundations of social research: meaning and perspective in social research*. London: Thousands Oak
- Cunningham, C. E., Woodward, C. A., Shannon, H. S., MacIntosh, J., Lendrum, B., Rosenbloom, D., & Brown, J. (2002). Readiness for organizational change: A longitudinal study of workplace, psychological and behavioural correlates. *Journal of Occupational and Organizational Psychology, 75*(4), 377-392.
- Datta, L. E. (1994). Paradigm wars: A basis for peaceful coexistence and beyond. *New directions for program evaluation, 1994*(61), 53-70.
- Davidson, J. R., Payne, V. M., Connor, K. M., Foa, E. B., Rothbaum, B. O., Hertzberg, M. A., & Weisler, R. H. (2005). Trauma, resilience and saliostasis: effects of treatment in post-traumatic stress disorder. *International clinical psychopharmacology, 20*(1), 43-48.
- Davis, M. C., Luecken, L., & Lemery-Chalfant, K. (2009). Resilience in common life: Introduction to the special issue. *Journal of personality, 77*(6), 1637-1644.
- Day, C., & Schmidt, M. (2007). Sustaining resilience. *Developing sustainable leadership, 65-86*.

- Deegan, P. E. (2005). The importance of personal medicine: A qualitative study of resilience in people with psychiatric disabilities. *Scandinavian Journal of Public Health*, 33(66 suppl), 29-35
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2000). A model of burnout and life satisfaction among nurses. *Journal of Advanced Nursing*, 32, 454-464. doi:10.1046/j.1365-2648.2000.01496
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, 86(3), 499.
- Denhardt, J., & Denhardt, R. (2010). Building organizational resilience and adaptive management. *Handbook of adult resilience*, 333-349.
- Denscombe, M. (2008). Communities of practice a research paradigm for the mixed methods approach. *Journal of mixed methods research*, 2(3), 270-283.
- DeVellis, R. F. (2012). *Scale development: Theory and applications* (3rd edn.) Thousand Oaks, California:Sage publications
- Doe, P. J. (1994). Creating a resilient organization. *Canadian Business Review*, 21, 22-22.
- Earvolino-Ramirez, M. (2007). Resilience: A concept analysis. *In Nursing Forum* (pp. 73–82). doi: 10.1111/j.1744–6198.2007.00070.x
- Eidelson, R., Pilisuk, M., & Soldz, S. (2011). The dark side of comprehensive soldier fitness. *American Psychologist*, 66(7), 643-644. doi:http://dx.doi.org/10.1037/a0025272
- Ellam-Dyson, V. (2012) Coaching psychology research: Building the evidence, developing awareness. *OP Matters No.16*, 13-16
- Ellis, A. (1962). *Reason and emotion in psychology*. New York: Lyle Stuart.
- Emmons, R. A. (2007). *Thanks! How the new science of gratitude can make you happier*. New York, NY: Houghton Mifflin.

- Eysenbach, G. (2005). The law of attrition. *Journal of medical Internet research*, 7(1).
- Farber, E. W., Schwartz, J. A., Schaper, P. E., Moonen, D. J., & McDaniel, J. S. (2000). Resilience factors associated with adaptation to HIV disease. *Psychosomatics*, 41(2), 140-146.
- Feder, A., Nestler, E. J., & Charney, D. S. (2009). Psychobiology and molecular genetics of resilience. *Nature Reviews Neuroscience*, 10, 446–457.
- Fedor, D. B., Caldwell, S., & Herold, D. M. (2006). The effects of organizational changes on employee commitment: A multilevel investigation. *Personnel Psychology*, 59, 1–29.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. London Sage.
- Fisk, G. M., & Dionisi, A. M. (2010). Building and sustaining resilience in organizational settings: The critical role of emotion regulation. *Research on emotion in organizations*, 6, 167-188.
- Flach, F. F. (1997). *Resilience: How to bounce back when the going gets tough!*. New York, NY: Hatherleigh Press.
- Fletcher, D., & Sarkar, M. (2013). Psychological resilience: A review and critique of definitions, concepts, and theory. *European Psychologist*, 18(1), 12.
- Folkman, S. (2008). The case for positive emotions in the stress process. *Anxiety, Stress, and Coping*, 21, 3-14
- Fortney, L., Luchterhand, C., Zakletskaia, L., Zgierska, A., & Rakel, D. (2013). Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: a pilot study. *The Annals of Family Medicine*, 11(5), 412-420.
- Frankl, V. E. (1985). *Man's search for meaning*. Simon and Schuster.

- Fraser, M. W., Kirby, L. D., & Smokowski, P. R. (2004). *Risk and resilience in childhood* in M.W. Fraser (Ed.), *Risk and resilience in childhood: an ecological perspective* (second ed.), NASW Press, Washington, DC, pp. 13–66
- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition & emotion*, *19*(3), 313–332.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American psychologist*, *56*(3), 218.
- Fredrickson, B. L. (1998). What good are positive emotions?. *Review of general psychology*, *2*(3), 300.
- Fulton, J., Kuit, J., Sanders, G., & Smith, P. (2013). *The Professional Doctorate: A Practical Guide*. New York: Palgrave Macmillan
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of personality and social psychology*, *87*(2), 228.
- Gardner, B., Rose, J., Mason, O., Tyler, P., & Cushway, D. (2005). Cognitive therapy and behavioural coping in the management of work-related stress: An intervention study. *Work & Stress*, *19*(2), 137-152.
- Garnezy, N. (1991). Resilience and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist*, *34*, 416-430.
- Garnezy, N. E., & Rutter, M. E. (1983). Stress, coping, and development in children. In *Seminar on Stress and Coping in Children, 1979, Ctr for*

Advanced Study in the Behavioral Sciences, Stanford, CA, US. Johns Hopkins University Press.

Garnezy, N., Masten, A. S., & Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. *Child development*, 55, 97-111.

Gillespie, B. M., Chaboyer, W., Wallis, M., & Grimbeek, P. (2007). Resilience in the operating room: Developing and testing of a resilience model. *Journal of advanced nursing*, 59(4), 427-438.

Gillham, J. E., Hamilton, J., Freres, D. R., Patton, K., & Gallop, R. (2006). Preventing depression among early adolescents in the primary care setting: A randomized controlled study of the Penn Resiliency Program. *Journal of Abnormal Child Psychology*, 34, 203–219. doi:10.1007/s10802-005-9014

Gillham, J. E., Jaycox, L., Reivich, K. J., Seligman, M. E. P., & Silver, T. (1990). The Penn Resiliency Program . *Unpublished manual, University of Pennsylvania, Philadelphia, U.S.*

Gillham, J. E., Reivich, K. J., Freres, D. R., Chaplin, T. M., Shatte´, A. J., Samuels, B., & Seligman, M. E. P. (2007). School-based prevention of depressive symptoms: A randomized controlled study of the effectiveness and specificity of the Penn Resiliency Program. *Journal of Consulting and Clinical Psychology*, 75, 9 –19. doi:10.1037/0022-006X.75.1.9

Gillham, J., Jaycox, L. J., Reivich, K. J., Hollon, S. D., Freeman, A., DeRubeis, R. J., & Seligman, M. E. (1991). The apex project manual for group leaders. *Unpublished manuscript, University of Pennsylvania.*

Gist, M. E., & Mitchell, T. R. (1992). Self-efficacy: A theoretical analysis of its determinants and malleability. *Academy of Management review*, 17(2), 183-211.

- Grafton, E., Gillespie, B., & Henderson, S. (2010). Resilience: the power within. In *Oncology nursing forum* (Vol. 37, No. 6, pp. 698-705). Oncology Nursing Society.
- Grant, A. M., Curtayne, L., & Burton, G. (2009). Executive coaching enhances goal attainment, resilience and workplace well-being: A randomised controlled study. *The Journal of Positive Psychology*, 4(5), 396-407.
- Grant, L., & Kinman, G. (2013). 'Bouncing Back? 'Personal Representations of Resilience of Student and Experienced Social Workers. *Practice*, 25(5), 349-366.
- Green, J., & Thorogood, N. (2004). *Qualitative methods for research*. London: Sage
- Griffin, B., & Hesketh, B. (2003). Adaptable behaviours for successful work and career adjustment. *Australian Journal of psychology*, 55(2), 65-73.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2), 327-347.
- Grime, P. R. (2004). Computerized cognitive behavioural therapy at work: a randomized controlled trial in employees with recent stress-related absenteeism. *Occupational Medicine*, 54(5), 353-359.
- Grunberg, L., Moore, S., Greenberg, E. S., & Sikora, P. (2008). The Changing Workplace and Its Effects A Longitudinal Examination of Employee Responses at a Large Company. *The Journal of Applied Behavioral Science*, 44(2), 215-236.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field methods*, 18(1), 59-82.
- Haglund, M. E., Nestadt, P. S., Cooper, N. S., Southwick, S. M., & Charney, D. S. (2007). Psychobiological mechanisms of resilience: Relevance to prevention

and treatment of stress-related psychopathology. *Development and psychopathology*, 19(03), 889-920.

Halbesleben, J. R. B., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the "COR". Understanding the role of resources in conservation of resources theory. *Journal of Management*, 40, 1334-1364. doi:10.1177/0149206314527130

Hammermeister, J., Pickering, M. A., & Ohlson, C. J. (2009). Teaching mental skills for self-esteem enhancement in a military healthcare setting. *Journal of Instructional Psychology*, 36, 203–209.

Harms, P. D., Krasikova, D. V., Vanhove, A. J., Herian, M. N., & Lester, P. B. (2013). Stress and emotional well-being in military organizations. *Research in Occupational Stress and Well-being*, 11, 103-132.

Harzer, C., & Ruch, W. (2013). The application of signature character strengths and positive experiences at work. *Journal of Happiness Studies*, 14(3), 965-983.

Head, J., Kivimäki, M., Martikainen, P., Vahtera, J., Ferrie, J. E., & Marmot, M. G. (2006). Influence of change in psychosocial work characteristics on sickness absence: The Whitehall II Study. *Journal of epidemiology and community health*, 60(1), 55-61.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American psychologist*, 44(3), 513.

Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of general psychology*, 6(4), 307.

Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of personality and social psychology*, 84(3), 632.

- Hodges, T. D. (2010). An experimental study of the impact of psychological capital on performance, engagement, and the contagion effect. *Dissertations and Theses from the College of Business Administration*, 7.
- Holloway, I. (1997) *Basic Concepts for Qualitative Research*. Oxford: Blackwell Science.
- Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for Organizational Change The Systematic Development of a Scale. *The Journal of applied behavioral science*, 43(2), 232-255.
- Horne, J. F., & Orr, J. E. (1998) Assessing behaviors that create resilient organizations. *Employment Relations Today*, 24, 29–39.
- Houston, S. (2010). Prising Open the Black Box Critical Realism, Action Research and Social Work. *Qualitative Social Work*, 9(1), 73-91.
- Hunter, E. J. (1993). The Vietnam prisoner of war experience. In *International handbook of traumatic stress syndromes* (pp. 297-303). New York; Plenum Press.
- Hunter, D. (2006). Leadership resilience and tolerance for ambiguity in crisis situations. *The Business Review*, 5(1), 44-50.
- Ipsos Mori, (2014). National Housing Federation: Impact of welfare reform on housing associations: Early effects and responses by landlords and tenants. Accessed 13/03/2014 from <http://www.ipsos-mori.com/researchpublications/publications/1648/National-Housing-Federation-Impact-of-welfare-reform-on-housing-associations.assx>.
- Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for surviving and thriving in the face of workplace adversity: a literature review. *Journal of advanced nursing*, 60(1), 1-9.

- Jacqueline, A. M., & Kessler, I. (2003). The employment relationship in the UK public sector: A psychological contract perspective. *Journal of Public Administration Research and Theory*, 13(2), 213-230.
- Jaycox, L. H., Reivich, K. J., Gillham, J., & Seligman, M. E. P. (1994). Prevention of depressive symptoms in school children. *Behaviour Research & Therapy*, 32, 801–816. doi:10.1016/0005-7967(94)90160-0
- Jennings, P. A., Frank, J. L., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2013). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of a randomized control trial. *School of Psychology Quarterly*, 28, 374-390. doi: 10.1037/spq0000035
- Jimmieson N.L., Terry, D.J., & Callan, V. J. (2004) A longitudinal study of employee adaptation to organizational change. The role of change –related information and change related self-efficacy. *Journal of Occupational health Psychology*, 9, 11-27
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14-26.
- Jones, D. E., Perkins, K., Cook, J. H., & Ong, A. L. (2008). Intensive coping skills training to reduce anxiety and depression for forward-deployed troops. *Military medicine*, 173(3), 241-246.
- Journal of Occupational and Organizational Psychology, (2013). Call for papers: Designing and evaluating resource-oriented interventions to enhance well-being, health and performance at work. *Journal of Occupational and Organizational Psychology*, 86(4), 617.
- Judge, T. A., Thoresen, C. J., Pucik, V., & Welbourne, T. M. (1999). Managerial coping with organizational change: A dispositional perspective. *Journal of applied psychology*, 84(1), 107.

- Kantur, D., & İşeri-Say, A. (2012). Organizational resilience: A conceptual integrative framework. *Journal of Management & Organization*, 18(06), 762-773.
- Kent M, Davis MC. (2010). The emergence of capacity-building programs and models of resilience. In: Reich J. W., Zautra, A. J., Hall, J. S., editors. *Handbook of adult resilience*. New York: Guilford Press; pp. 427–449.
- Kent, G. (2000). Understanding the experiences of people with disfigurements: an integration of four models of social and psychological functioning. *Psychology, health & medicine*, 5(2), 117-129.
- King, N. (2015). *Template Analysis Website*. Accessed 4/5/2015 <http://www.hud.ac.uk/hhs/research/template-analysis/>
- King, D. W., King, L. A., Foy, D. W., Keane, T. M., & Fairbank, J. A. (1999). Posttraumatic stress disorder in a national sample of female and male Vietnam veterans: risk factors, war-zone stressors, and resilience-recovery variables. *Journal of abnormal psychology*, 108(1), 164.
- King, G., & Rothstein, M. G. (2010). Resilience and leadership: The self-management of failure. In M. G. Rothstein, & R. J. Burke, *Self-management and leadership development* (pp. 361-394). Cheltenham, UK: Edward Elgar.
- King, N. (1998) Template Analysis. In: G, Symon., C.Cassell (eds.) *Qualitative Methods and Analysis in Organizational Research*. Sage: London
- King, N. (2012). Doing Template Analysis . In: Symon, G., & Cassell, C. (Eds.). (2012). *Qualitative organizational research: core methods*, Sage Publications, London.
- King, N., Carroll, C., Newton, P., & Dornan, T. (2002). “You can’t Cure it so you have to Endure it”: The Experience of Adaptation to Diabetic Renal Disease. *Qualitative Health Research*, 12(3), 329-346.
- Kirkpatrick, D. L. (1994). *Evaluating training programs: the four levels*. San Francisco: Berrett-Koehler

- Kirkwood, T., Bond, J., May, C., McKeith, I. & Teh, M. (2008). Foresight Mental Capital and Wellbeing Project. Mental Capital through Life: Future Challenges (Government Office for Science, 2008).
- Kivimäki, M., Vahtera, J., Elovainio, M., Pentti, J., & Virtanen, M. (2003). Human costs of organizational downsizing: comparing health trends between leavers and stayers. *American Journal of Community Psychology*, 32(1-2), 57-67.
- Kobasa, S. C., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: a prospective study. *Journal of personality and social psychology*, 42(1), 168.
- Kotter, J. P. (1996). *Leading change*. Harvard Business Press.
- Larson, M., & Luthans, F. (2006). Potential added value of psychological capital in predicting work attitudes. *Journal of leadership & organizational studies*, 13(2), 75-92.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, coping and appraisal*. New York: Springer
- Lewis, R., Donaldson-Feilder, E., & Pangallo, A. (2011). *Developing resilience: an evidence based guide for practitioners*. Accessed 13/03/2014 from <http://www.cipd.co.uk/hr-resources/guides/developing-resilience-evidence-guide.aspx>
- Lester, P. B., Harms, P. D., Herian, M. N., Krasikova, D. V., & Beal, S. J. (2011). *The Comprehensive Soldier Fitness Program Evaluation. Report 3: Longitudinal Analysis of the Impact of Master Resilience Training on Self-Reported Resilience and Psychological Health Data*. Washington DC: Department of the Army; 61.

- Lindquist, T.L., & Cooper, C.L. (1999). Using lifestyle and coping to reduce job stress and improve health in 'at risk' office workers. *Stress Medicine*, 15, 143-152.
- Linley, P. A., & Joseph, S. (2004). Positive change following trauma and adversity: A review. *Journal of Traumatic Stress*, 17, 11–21.
- Linley, P. A., & Joseph, S. (2011). Meaning in life and posttraumatic growth. *Journal of Loss and Trauma*, 16(2), 150-159.
- Liossis, P. L., Shochet, I. M., Milllear, P. M., & Biggs, H. (2009). The Promoting Adult Resilience (PAR) Program: The effectiveness of the second, shorter pilot of a workplace prevention program. *Behaviour Change*, 26(02), 97-112.
- Litz, B. T. (2014). Resilience in the aftermath of war trauma: a critical review and commentary. *Interface focus*, 4(5), 20140008.
- Litz, B. T., Engel, C. C., Bryant, R. A., & Papa, A. (2007). A randomized, controlled proof-of-concept trial of an Internet-based, therapist-assisted self-management treatment for posttraumatic stress disorder. *The American journal of psychiatry*, 164(11), 1676-1684.
- Longstaff, P. H. (2009). Managing surprises in complex systems: multidisciplinary perspectives on resilience. *Ecology and Society*, 14(1), 49.
- Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *The Academy of Management Executive*, 16(1), 57-72.
- Luthans, F. (2003). Positive organizational behavior (POB): Implications for leadership and HR development and motivation. *Motivation and leadership at work*, 178-195.
- Luthans, F., & Jensen, S. M. (2002). Hope: A new positive strength for human resource development. *Human Resource Development Review*, 1(3), 304-322.

- Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning & Education, 7*(2), 209-221.
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human resource development quarterly, 21*(1), 41-67.
- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. J. (2006). Psychological capital development: towards a micro-intervention. *Journal of Organizational Behavior, 27*, 387-393.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel psychology, 60*(3), 541-572.
- Luthans, F., Avolio, B. J., Walumbwa, F. O., & Li, W. (2005). The psychological capital of Chinese workers: Exploring the relationship with performance. *Management and Organization Review, 1*(2), 249-271.
- Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. *Human Resource Development Review, 5*(1), 25-44.
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007). Psychological capital: Investing and developing positive organizational behavior. *Positive organizational behavior, 9*-24.
- Luthar, S. S. (1996). Resilience: A construct of value? *Paper presented at the 14th Annual Convention of the American Psychological Association*. Toronto, Ontario.

- Luthar, S. S., & Cicchetti, D. (2000) "The construct of resilience: Implications for interventions and social policies." *Development and psychopathology*, 12, (4) 857-885.
- Luthar, S. S., & Zigler, E. (1991). Vulnerability and competence: a review of research on resilience in childhood. *American journal of Orthopsychiatry*, 61(1), 6.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71, 543-562. doi: 10.1111/1467-8624.00164
- Macedo, T., Wilhelm, L., Gonçalves, R., Coutinho, E. S., Vilete, L., Figueira, I., & Ventura, P. (2014). Building resilience for future adversity: a systematic review of interventions in non-clinical samples of adults. *BMC psychiatry*, 14(1), 227.
- Maddi, S. R., Kahn, S., & Maddi, K. L. (1998). The effectiveness of hardiness training. *Consulting Psychology Journal: Practice and Research*, 50(2), 78.
- Mallak, L. A. (1998). Measuring resilience in health care provider organizations. *Health Manpower Management*, 24(4), 148-152.
- Masten , A. S. & Wright, M.O'D, (2010) Resilience over the Lifespan : Developmental Perspectives on Resistance, Recovery and Transformation , Cited in reich et al (2012) pp213-237
- Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity, in Wang, M. C., & Gordon, E. W. (Eds.). (1994). *Educational resilience in inner-city America: Challenges and prospects*. Erlbaum; Hillsdale, NJ
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American psychologist*, 56(3), 227.

- Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, *19*, 921-930. doi: 10.1017/s0954579407000442
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, *53*, 205-220. doi: 10.1037/0003-066X.53.2.205
- Masten, A. S., & Obradović, J. (2006). Competence and resilience in development. *Annals of the New York Academy of Sciences*, *1094*(1), 13-27.
- Masten, A. S., & Osofsky, J. (2010). Disasters and their impact on child development: Introduction to the special section. *Child Development*, *81*, 1029–1039.
- Masten, A.S., & Reed, M.G.J. (2002). Resilience in development. In C. R. E. L. Snyder, Shane J. (Ed.), *Handbook of positive psychology.*, 74-88. London: Oxford University Press.
- Masten, A. S., Best, K. M., & Garnezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and psychopathology*, *2*(04), 425-444.
- McCann, C. M., Beddoe, E., McCormick, K., Huggard, P., Kedge, S., Adamson, C., & Huggard, J. (2013). Resilience in the health professions: A review of recent literature. *International Journal of Wellbeing*, *3*(1).
- McCrae, R. R., & Costa, P. T. (2003). *Personality in adulthood: A five-factor theory perspective*. New York: Guilford Press.

- McCraty, R., & Atkinson, M. (2012). Resilience training program reduces physiological and psychological stress in police officers. *Global Advances in Health and Medicine, 1*(5), 44-66.
- McCubbin, M. A., and H. I. McCubbin. (1996). Resiliency in families: A conceptual model of family adjustment and adaptation in response to stress and crises. *Family assessment: Resiliency, coping and adaptation: Inventories for research and practice, 1-64.*
- McLarnon, M. J., & Rothstein, M. G. (2013). Development and initial validation of the workplace resilience inventory. *Journal of Personnel Psychology, 12*(2), 63-73.
- McGonagle, A. K., Beatty, J. E., & Joffe, R. (2014). Coaching for workers with chronic illness: Evaluating an intervention. *Journal of occupational health psychology, 19*(3), 385.
- Mealer, M., Jones, J., & Moss, M. (2012). A qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses. *Intensive care medicine, 38*(9), 1445-1451.
- Meichenbaum, D. (1985). *Stress inoculation training*. New York, NY; Pergamon.
- Meichenbaum, D. (2005). Understanding resilience in children and adults: Implications for prevention and interventions; *Paper presented at the annual conference of Strengthening Resilience in Children and Adults*; Miami, FL. 2005. May
- Meichenbaum, D. (2007). Stress inoculation training: A preventative and treatment approach. *Principles and practice of stress management, 3*, 497-518.
- Meredith, L. S., Sherbourne, C. D., & Gaillot, S. J. , Hansell, L., Ritschard, H. V., Parker, A. M., & Wrenn, G.(2011). *Promoting psychological resilience in the US military*. Santa Monica, CA:Rand Corporation.

- Millear, P., Liossis, P., Shochet, I. M., Biggs, H., & Donald, M. (2008). Being on PAR: Outcomes of a pilot trial to improve mental health and wellbeing in the workplace with the Promoting Adult Resilience (PAR) program. *Behaviour Change*, 25(04), 215-228.
- Moos, R. H., & Schaefer, J. A. (1993). Coping resources and processes: Current concepts and measures.
- Mulligan, K., Fear, N. T., Jones, N., Wessley, S., & Greenberg, N. (2011). Psycho-educational interventions designed to prevent deployment-related psychological ill-health in Armed Forces Personnel: A review. *Psychological Medicine*, 41, 673-686. doi: 10.1017/s003329171000125x
- Murphy, L. R., & Sauter, S. L. (2003). The USA perspective: Current issues and trends in the management of work stress. *Australian Psychologist*, 38(2), 151-157.
- Neenan, M. M. (2009). *Developing resilience: a cognitive-behavioural approach*. Routledge.
- New economics foundation (2014). *Five ways to wellbeing*. Retrieved 03/03/2014 from <http://www.neweconomics.org/projects/entry/five-ways-to-well-being>
- Newman, T. (2003). Children, Resilience and Risk. *CEBSS Newsletter Evidence Based Social Care*, 15, 7.
- Niedhammer, I., Chastang, J. F., David, S., Barouhiel, L., & Barrandon, G. (2006). Psychosocial work environment and mental health: Job-strain and effort-reward imbalance models in a context of major organizational changes. *International Journal of Occupational and Environmental Health*, 12(2), 111-119.
- Noe, R. A. (2008). *Employee Training and Development (4th edn)*. Boston, MA: Irwin-McGraw.

- Noel, D. (1998). Layoff Survivor Sickness: What it is and what to do about it. In M. K. Gowing, J.D. Kraft, & J. C. Quick (Eds.), *The new organizational reality – downsizing, restructuring and revitalisation*, Washington, DC: American Psychological Association
- Norman, S., Luthans, B., & Luthans, K. (2005). The proposed contagion effect of hopeful leaders on the resiliency of employees and organizations. *Journal of Leadership & Organizational Studies*, 12(2), 55-64.
- North, C. S., Tivis, L., McMillen, J. C., Pfefferbaum, B., Spitznagel, E. L., Cox, J., Nixon, S., Bunch, K. P., & Smith, E. M. (2002). Psychiatric disorders in rescue workers after the Oklahoma City bombing. *American Journal of Psychiatry*, 159(5), 857-859.
- Ong, A. D., Bergeman, C. S., Bisconti, T. L., & Wallace, K. A. (2006). Psychological resilience, positive emotions, and successful adaptation to stress in later life. *Journal of personality and social psychology*, 91(4), 730.
- Onwuegbuzie, A. J. (2003). Effect sizes in qualitative research: A prolegomenon. *Quality and Quantity*, 37(4), 393-409.
- Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology*, 8(5), 375-387.
- Oreg, S. (2003). Resistance to change: developing an individual differences measure. *Journal of applied Psychology*, 88(4), 680.
- Oreg, S., Vakola, M., & Armenakis, A. (2011). Change recipients' reactions to organizational change A 60-year review of quantitative studies. *The Journal of Applied Behavioral Science*, 47(4), 461-524.

- Ouweneel, E., Le Blanc, P. M., & Schaufeli, W. B. (2013). Do-it-yourself: An online positive psychology intervention to promote positive emotions, self-efficacy, and engagement at work. *Career Development International*, 18(2), 173-195.
- Pahkin, K. (2015). Staying well in an unstable world of work: Prospective cohort study of the determinants of employee well-being. *People and work*. <http://urn.fi/URN:ISBN:978-952-261-515-2>
- Pallant, J. (2013). *SPSS survival manual*. McGraw-Hill Education (UK).
- Pangello, A., Zibarass, L., Lewis, R., & Flaxman, P. (2014). Resilience through the Lens of Interactionism: A Systematic Review. *Psychol Assessment*. Advance online publication. Retrieved from <http://openaccess.city.ac.uk/4810/>
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Paul, H., & Garg, P. (2012). Elevating organizational consequences through employee resilience. In *conference proceeding of National Conference on Emerging Challenges for Sustainable Business held at IIT Roorkee during June* (pp. 1-2).
- Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. London, UK: Sage.
- Petree, R. D., Broome, K. M., & Bennett, J. B. (2012). Exploring and reducing stress in young restaurant workers: Results of a randomized field trial. *American Journal of Health Promotion*, 26(4), 217-224.
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association
- Pidgeon, A. M., O'Brien, B., Hanna, A., & Klaassen, F. (2014). Cultivating a Resilient Response to Stress through Mindfulness and Cognitive Re-appraisal: A Pilot Randomised Control Trial. *Journal of Psychology (JPsych)*, 1(2).

- Pipe, T. B., Buchda, V. L., Launder, S., Hudak, B., Hulvey, L., Karns, K. E., & Pendergast, D. (2012). Building personal and professional resources of resilience and agility in the healthcare workplace. *Stress and Health, 28*(1), 11-22.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology, 88*(5), 879.
- Polk, L. V. (1997). Toward a middle-range theory of resilience. *Advances in Nursing Science, 19*(3), 1-13.
- Pollard, T. M. (2001). Changes in mental well-being, blood pressure and total cholesterol levels during workplace reorganization: The impact of uncertainty. *Work & Stress 15*.1 14-28.
- Proctor, C., Maltby, J., & Linley, P. A. (2011). Strengths use as a predictor of well-being and health-related quality of life. *Journal of Happiness Studies, 12*(1), 153-169
- Rafferty, A. E., & Griffin, M. A. (2006). Perceptions of organizational change: a stress and coping perspective. *Journal of Applied Psychology, 91*(5), 1154.
- Rafferty, A. E., Jimmieson, N. L., & Armenakis, A. A. (2013). Change Readiness A Multilevel Review. *Journal of Management, 39*(1), 110-135.
- Reich, J. W., Zautra, A. J., & Davis, M. (2003). Dimensions of affect relationships: Models and their integrative implications. *Review of General Psychology, 7*(1), 66.
- Reivich, K. J., Seligman, M. E., & McBride, S. (2011). Master resilience training in the US Army. *American Psychologist, 66*(1), 25.

- Reivich, K., Shatte, A., & Gillham, J. (2003). Penn resilience training for college students: Leader's guide and participant's guide. *Unpublished manuscript, University of Pennsylvania.*
- Richards, D. (2001). A field study of critical incident stress debriefing versus critical incident stress management. *Journal of Mental Health, 10*(3), 351-362.
- Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of clinical psychology, 58*(3), 307-321.
- Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programs: a meta-analysis. *Journal of occupational health psychology, 13*(1), 69.
- Rioli, L., & Savicki, V. (2003). Optimism and Coping as Moderators of the Relation Between Work Resources and Burnout in Information Service Workers. *International Journal of Stress Management, 10*(3), 235.
- Robertson, I. T., Cooper, C. L., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology.*
- Robertson, I., & Cooper, C. L. (2013). Resilience. *Stress and health, 29*(3), 175-176.
- Robertson, I. T., Cooper, C. L., Sarkar, M. and Curran, T. (2015), Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology.* Advance access available from <http://onlinelibrary.wiley.com/doi/10.1111/joop.12120/abstract>. doi: 10.1111/joop.12120
- Robson, C. (2011). *Real World Research: A resource for Users of Social Research Methods in applied settings 3rd Edition.* Chichester: Wiley
- Rose, R. D., Buckey, J. C., Zbozinek, T. D., Motivala, S. J., Glenn, D. E., Cartreine, J. A., & Craske, M. G. (2013). A randomized controlled trial of a self-guided,

- multimedia, stress management and resilience training program. *Behaviour Research and Therapy*, 51(2), 106-112.
- Rousseau, D. M., & Barends, E. G. (2011). Becoming an evidence-based HR practitioner. *Human Resource Management Journal*, 21(3), 221-235.
- Rutter, M. (1985). Resilience in the face of adversity : protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 598 – 611
- Rutter, M. (1979). Maternal deprivation, 1972-1978: New findings, new concepts, new approaches. *Child development*, 283-305.
- Rutter, M. (1981). Stress, coping and development: Some issues and some questions. *Journal of Child Psychology and Psychiatry*, 22(4), 323-356.
- Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Sciences*, 1094(1), 1-12.
- Salanova, M., Llorens, S., & Schaufeli, W. B. (2011). “Yes, I can, I feel good, and I just do it!” On gain cycles and spirals of efficacy beliefs, affect, and engagement. *Applied Psychology*, 60(2), 255-285.
- Salanova, M., Llorens, S., Cifre, E., & Martínez, I. M. (2012). We need a hero! Toward a validation of the healthy and resilient organization (HERO) model. *Group & Organization Management*, 37(6), 785-822.
- Sarason, I. G., Levine, H. M., Basham, R. B., & Sarason, B. R. (1983). Assessing social support: the social support questionnaire. *Journal of personality and social psychology*, 44(1), 127.
- Sarason, I. G., Johnson, J. H., Berberich, J. P., & Siegel, J. M. (1979). Helping Police Officers to Cope with Stress: A Cognitive—Behavioral Approach. *American journal of community psychology*, 7(6), 593-603.

- Schaufeli, W. B., & Taris, T. W. (2014). *A critical review of the Job Demands-Resources Model: Implications for improving work and health*. In *Bridging occupational, organizational and public health* (pp. 43-68). Netherlands: Springer.
- Scheier, M. F., & Carver, C. S. (1985). Optimism, coping, and health: assessment and implications of generalized outcome expectancies. *Health psychology, 4*(3), 219.
- Schok, M. L., Kleber, R. J., & Lensvelt-Mulders, G. J. (2010). A model of resilience and meaning after military deployment: Personal resources in making sense of war and peacekeeping experiences. *Aging & mental health, 14*(3), 328-338
- Seligman, M. E. (2011). *Learned optimism: How to change your mind and your life*. Vintage.
- Seligman, M.E.P., Steen, T.A., Park, N., & Peterson, C. (2005). Positive psychology progress. *American Psychologist, 60*, 410-421.
- Sharpley, J. G., Fear, N. T., Greenberg, N., Jones, M., & Wessely, S. (2008). Pre-deployment stress briefing: does it have an effect?. *Occupational Medicine, 58*(1), 30-34.
- Sheldon, K. M., & Lyubomirsky, S. (2006). How to increase and sustain positive emotion: The effects of expressing gratitude and visualizing best possible selves. *The Journal of Positive Psychology, 1*(2), 73-82.
- Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social science & medicine, 32*(6), 705-714.
- Sherlock-Storey, M., Moss, M. & Timson, S. (2013). Brief coaching for resilience during organisational change; an exploratory study. *The Coaching Psychologist, (9)1*, 19-26
- Shin, J., Taylor, M. S., & Seo, M. G. (2012). Resources for change: The relationships of organizational inducements and psychological resilience to

employees' attitudes and behaviors toward organizational change. *Academy of Management Journal*, 55(3), 727-748.

Silk, J. S., Vanderbilt-Adriance, E., Shaw, D. S., Forbes, E. E., Whalen, D. J., Ryan, N. D., & Dahl, R. E. (2007). Resilience among children and adolescents at risk for depression: Mediation and moderation across social and neurobiological contexts. *Development and psychopathology*, 19(03), 841-865.

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of clinical psychology*, 65(5), 467-487.

Snyder, C. R. (1995). Conceptualizing, measuring, and nurturing hope. *Journal of Counseling & Development*, 73(3), 355-360.

Snyder, C. R. (Ed.). (2000). *Handbook of hope: Theory, measures, and applications*. San Diego, CA: Academic press.

Snyder, C. R., Irving, L. M., & Anderson, J. R. (1991). Hope and health. Handbook of social and clinical psychology: The health perspective. In C. R. Snyder & D. R. Forsyth (Eds.), *Handbook of social and clinical psychology: The health perspective, Pergamon general psychology series* (Vol. 162, pp. 285-305). Elmsford, NY: Pergamon Press.

Sood, A., Prasad, K., Schroeder, D., & Varkey, P. (2011). Stress management and resilience training among Department of Medicine faculty: a pilot randomized clinical trial. *Journal of general internal medicine*, 26(8), 858-861.

Southwick SM, Vythilingam M, & Charney DS. (2005). The psychobiology of depression and resilience to stress: Implications for prevention and treatment. *Annual Review of Clinical Psychology*, 1, 255–291

- Southwick, S. M., Litz, B. T., Charney, D., & Friedman, M. J. (Eds.). (2011). *Resilience and mental health: Challenges across the lifespan*. Cambridge University Press.
- Steenkamp, M. M., & Litz, B. T. (2013). Psychotherapy for military-related posttraumatic stress disorder: Review of the evidence. *Clinical psychology review, 33*(1), 45-53.
- Stoiber, K. C., & Gettinger, M. (2011). Functional assessment and positive support strategies for promoting resilience: Effects on teachers and high-risk children. *Psychology in the Schools, 48*(7), 686-706
- Stevenson, A. D., Phillips, C. B., & Anderson, K. J. (2011). Resilience among doctors who work in challenging areas: a qualitative study. *British Journal of General Practice, 61*(588), e404-e410.
- Strauman, T. J., Goetz, E. L., Detloff, A. M., MacDuffie, K. E., Zaunmüller, L., & Lutz, W. (2013). Self-Regulation and Mechanisms of Action in Psychotherapy: A Theory-Based Translational Perspective. *Journal of personality, 81*(6), 542-553.
- Sutcliffe, K. M., & Vogus, T. J. (2003). Organizing for resilience. *Positive organizational scholarship: Foundations of a new discipline, 94*, 110.
- Taylor, S. E. (1983). Adjustment to threatening events: A theory of cognitive adaptation. *American psychologist, 38*(11), 1161.
- Teddlie, C., & Tashakkori, A. (Eds.). (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Sage Publications Inc.
- Terry, D. J., & Jimmieson, N. L. (2003). A stress and coping approach to organisational change: Evidence from three field studies. *Australian Psychologist, 38*(2), 92-101.

- Timson, S. (2013) Exploring the impact of a brief coaching programme on individual resilience during organisational change. *Thesis dissertation, Masters in Occupational Psychology, Northumbria University.*
- Truffino, J. C. (2010). Resilience: an approach to the concept. *Revista de Psiquiatría y Salud Mental (English Edition)*, 3(4), 145-151.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of personality and social psychology*, 86(2), 320.
- Tugade, M. M., Fredrickson, B. L., & Feldman Barrett, L. (2004). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Journal of personality*, 72(6), 1161-1190.
- Tvedt, S. D., Saksvik, P. Ø., Lau, B., Finne, L. B., Buvik, M. P., Ingstad, G. Z., & Vaag, J. R.(2009). Developing the Healthy Change Process Index: a new measure assessing management of organizational change processes. *Paper presentation at the APA Work, Stress, and Health Conference, San Juan, Puerto Rico*
- Tvedt, S. D., Saksvik, P. Ø. (2012). Perspectives on the intervention process as a special case of organizational change. In C. Biron., M. Karanika-Murray, & C. L. Cooper, *Improving Organizational Interventions for Stress and Well-Being. Addressing Process and Context* (pp. 102-119). Routledge, UK.
- Van Breda, A. (1999). Developing resilience to routine separations: An occupational social work intervention. *Families in Society: The Journal of Contemporary Social Services*, 80(6), 597-605.
- Van Breda, A. D. (2011). Resilient workplaces: An initial conceptualization. *Families in Society: The Journal of Contemporary Social Services*, 92(1), 33-40.

- Van den Heuvel, M., Demerouti, E., & Bakker, A. B. (2014). How psychological resources facilitate adaptation to organizational change. *European Journal of Work and Organizational Psychology*, 23(6), 847-858.
- Van den Heuvel, M. (2013) .Adaptation to Organizational Change: The Role of Meaning-making and other Psychological Resources. PhD thesis, Eindhoven University of Technology, ISBN: 978-90- 393-5925-9, pp. 14, 190
- Van den Heuvel, M., Demerouti, E., Bakker, A. B., & Schaufeli, W. B. (2010). Personal resources and work engagement in the face of change. In J. Houdmont, & S. Leka (Eds.), *Contemporary occupational health psychology* (Vol. 1, pp. 124–150). Chichester: John Wiley & Sons Ltd.
- Vanhove, A. J., Herian, M. N., Perez, A. L. U., Harms, P. D. and Lester, P. B. (2015). Can resilience be developed at work? A meta-analytic review of resilience-building programme effectiveness. *Journal of Occupational and Organizational Psychology*. Advanced access available from <http://onlinelibrary.wiley.com/doi/10.1111/joop.12123/abstract>.
doi: 10.1111/joop.12123
- Via Strengths: Via organization. Retrieved 13/06/2014 from <http://www.viacharacter.org/www/>
- Vuori, J., & Silvonen, J. (2005). The benefits of a preventive job search program on re-employment and mental health at 2-year follow-up. *Journal of Occupational and Organizational Psychology*, 78(1), 43-52.
- Vuori, J., Toppinen-Tanner, S., & Mutanen, P. (2012). Effects of resource-building group intervention on career management and mental health in work organizations: randomized controlled field trial. *Journal of Applied Psychology*, 97(2), 273.
- Wagnild, G. M., & Young, H. M. (1993). The Resilience Scale (RS). *Literature Review of Konzept. Psychological Resiliency*, 6

- Waite, P. J., & Richardson, G. E. (2004). Determining the efficacy of resiliency training in the work site. *Journal of Allied Health, 33*(3), 178-183.
- Waugh, C. E., Wager, T. D., Fredrickson, B. L., Noll, D. C., & Taylor, S. F. (2008). The neural correlates of trait resilience when anticipating and recovering from threat. *Social Cognitive and Affective Neuroscience, 3*, 322–332.
- Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology, 85*(1), 132.
- Waring, T., & Wainwright, D. (2008). Innovative developments in the use of template analysis: Two comparative case studies from the field. In *7th European Conference on Research Methodology for Business and Management Studies: Ecrm 2008* (p. 293). Academic Conferences Limited.
- Warner, R., & April, K. (2012). *Building personal resilience at work* (2012). Accessed 13/03/2014 from [http://ashridgeweddings.org.uk/Website/IC.nsf/wFARATT/Building%20personal%20resilience%20at%20work/\\$File/BuildingPersonalResilienceAtWork.pdf](http://ashridgeweddings.org.uk/Website/IC.nsf/wFARATT/Building%20personal%20resilience%20at%20work/$File/BuildingPersonalResilienceAtWork.pdf)
- Warr, P., & Parker, S. (2010). IWP multi-affect Indicator. *Sheffield: Institute of Work Psychology, University of Sheffield. Paper not published.*
- Waugh, C. E., Fredrickson, B. L., & Taylor, S. F. (2008). Adapting to life's slings and arrows: Individual differences in resilience when recovering from an anticipated threat. *Journal of research in personality, 42*(4), 1031-1046.
- Weick, K. E., & Sutcliffe, K. M. (2001). *Managing the unexpected* (pp. 10-11). San Francisco: Jossey-Bass.

- Werner, E. E. (1990). Protective factors and individual resilience. In: Shonkoff J, Meisels S, editors. *The handbook of early interventions*. Cambridge, UK: Cambridge University Press.
- Werner, E. E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai Longitudinal Study. *Development and psychopathology*, 5(04), 503-515.
- Werner, E. E., & Smith, R. S. (1989). *Vulnerable but invincible: a longitudinal study of resilient children and youth*. New York: McGraw-Hill.
- Werner, E. E., & Smith, R. S. (1992). *Overcoming the odds: High risk children from birth to adulthood*. Cornell University Press.
- Werner, E.E. (1995). Resilience in Development. *Current directions in psychological science*, 4(3),81-85
- Williams, A., Hagerty, B. M., Yousha, S. M., & Horrocks, J. (2004). Psychosocial effects of the BOOT STRAP intervention in Navy recruits. *Military medicine*, 169(10), 814.
- Williams, A., Hagerty, B. M., Andrei, A. C., Yousha, S. M., Hirth, R. A., & Hoyle, K. S. (2007). STARS: strategies to assist navy recruits' success. *Military medicine*, 172(9), 942-949.
- Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, 21(2), 152-169.
- Woodman, R. W., & Dewett, T. (2004). Organizationally relevant journeys in individual change. *Handbook of organizational change and innovation*, 95.
- Wright, M. O. D., Masten, A. S., & Narayan, A. J. (2013). Resilience processes in development: Four waves of research on positive adaptation in the context of adversity. In *Handbook of resilience in children* (pp. 15-37). New York, NY: Kluwer (Academic Plenum).

- Xanthopoulou, D., Baker, A. B., Heuven, E., Demerouti, E., & Schaufeli, W. B. (2008). Working in the sky: a diary study on work engagement among flight attendants. *Journal of Occupational Health Psychology, 13*(4), 345.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009a). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational behavior, 74*(3), 235-244.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009b). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology, 82*(1), 183-200.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the job demands-resources model. *International journal of stress management, 14*(2), 121.
- Yehuda, R., Flory, J. D., Southwick, S., & Charney, D. S. (2006). Developing an agenda for translational studies of resilience and vulnerability following trauma exposure. *Annals of the New York Academy of Sciences, 1071*(1), 379-396.
- Youssef, C. M., & Luthans, F. (2007). Positive Organizational Behavior in the Workplace: The Impact of Hope, Optimism, and Resilience. *Journal of Management, 33*(5), 774-800.
- Zautra, A. J., Hall, J. S., & Murray, K. E. (2010). Resilience: A new definition of health of people and communities. In J. W. Reich, A. J. Zautra, & J. S. Hall (Eds.), *Handbook of adult resilience* (pp. 3–34). New York: Guilford.
- Zautra, A. J., Johnson, L. M., & Davis, M. C. (2005). Positive affect as a source of resilience for women in chronic pain. *Journal of consulting and clinical psychology, 73*(2), 212.

Zautra, A., Smith, B., Affleck, G., & Tennen, H. (2001). Examinations of chronic pain and affect relationships: applications of a dynamic model of affect. *Journal of Consulting and Clinical Psychology, 69*(5), 786.