

**A Systemic Approach to Building Resilience at Work: Exploring
the Resilience of Individuals, Leaders, and Teams**

Emily J. Lawrie

This report is submitted in partial fulfilment of the degree of Master of Psychology
(Organisational and Human Factors)

School of Psychology
The University of Adelaide

October 2017

Prepared for the International Coaching Psychology Review
Instructions to Authors (Appendix A)

Word Count
Literature Review: 4,506
Research Paper: 6,665

Declaration

This report contains no material which has been accepted for the award of any other degree or diploma in any University, and, to the best of my knowledge, this report contains no materials previously published except where due reference is made.

Emily Lawrie

October 2017

Acknowledgements

First and foremost, I would like to express my sincerest gratitude to my supervisor, Kathryn McEwen. Your knowledge and passion for building resilience is truly inspiring, and I am privileged to receive your guidance and support. I also wish to thank Neil Kirby for providing useful feedback on my paper.

I would also like to thank Mike Dawson, who along with Kathryn McEwen, conducted excellent team coaching sessions that assisted the completion of my thesis – but also provided me with priceless practical experience.

My study would not have been possible without the interest and enthusiasm of my participants. I truly appreciate their involvement in the resilience program, and hope they found the experience valuable.

I also wish to thank my mum, dad, brothers, grandparents, and partner Nathan. I have appreciated the interest you've shown in my work and would like to say a huge thank you for the support you've provided this year.

Table of Contents

Literature Review

Current Approaches to Measuring Individual and Team Resilience in the Workplace

Abstract.....	9
Introduction.....	10
The Nature of Resilience in the Workplace Domain.....	11
Section of Studies for Review.....	12
The Current State of the Literature.....	13
Definitions of Resilience.....	13
Individual Resilience.....	13
Team Resilience.....	14
Selecting an Effective Assessment Tool.....	15
Individual Resilience Measures.....	16
Clinical Measures Adapted for Workplace Use.....	16
Workplace Relevant Measures.....	17
Team Resilience Measures.....	22
Encouraging a Systemic Approach.....	23
Team Resilience as a Unique Construct.....	23
The Role Leaders Play in Fostering Resilience.....	25
Recommendations.....	25
Conclusion.....	26
References.....	27

Research Report

A Targeted Approach to Building Resilience at Work: Coaching Leaders to Foster Team

Resilience

Abstract.....	33
Introduction.....	34
Defining Resilience from an Organisational Perspective.....	34
Current Approaches to Building Resilience	37
The Current Study.....	38
A Systemic Approach to Building Resilience.....	39
Method.....	41
Design.....	41
Measures.....	41
Procedure.. ..	42
Statistical Analysis.....	43
Case Study 1.....	44
Participants.....	44
Results.....	44
Case Study 2.....	47
Participants.....	47
Results.....	48
Discussion.....	51
Outcomes and Implications.....	51
Strengths, Limitations and Suggestions for Future Research.....	55
Conclusion.....	57
References.....	58

List of Appendices

Appendix A. Instructions to Authors.....	61
Appendix B. Summary Table Showing the Key Features of each Study Selected for Review (Table 1)	63
Appendix C. Behaviour Change Wheel Modifications.....	75
Appendix D. Intervention Workbook.....	76
Appendix E. Tables Contained in the Literature Review	99
Table 2. Measures of Individual Resilience.....	99
Table 3. Seven Factors of Resilience at Work (R@W) Scale.....	100
Table 4. Four factors of the Workplace Resilience Instrument	101
Table 5. Eight Factors of Workplace Resilience Inventory (WRI).....	102
Table 6. Four Factors of the Team Resilience Scale.....	103
Table 7. Summary of Recommendations to Address the Key Issues within the Literature on Resilience in the Workplace.....	104
Appendix F. Tables Contained in the Research Report	106
Table 8. Areas to Invest in to Build Individual Resilience.....	106
Table 9. Areas to Invest in to Build Team Resilience.....	107
Table 10. The Workshop Focus for Each Resilience-Based Coaching Session	108
Appendix G. Figures Contained in the Research Report.....	110
Figure 1. Individual Resilience Levels Pre- and Post- Intervention (Operations Manager)	110
Figure 2. Individual Resilience Levels Pre- and Post- Intervention (Service Manager)	110

Figure 3. Organisational Resilience Levels Pre- and Post- Intervention.....	111
Figure 4. Service Manager’s Team Resilience Levels Pre- and Post- Intervention..	111
Figure 5. Operation’s Manager’s Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct-Reports.....	112
Figure 6. Service Manager’s Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct-Reports.....	112
Figure 7. Individual Resilience Levels Pre- and Post- Intervention (Manager 1).....	113
Figure 8. Individual Resilience Levels Pre- and Post- Intervention (Manager 2).....	113
Figure 9. Individual Resilience Levels Pre- and Post- Intervention (Manager 3).....	113
Figure 10. Team Resilience Levels Pre- and Post- Intervention (Manager 1).....	114
Figure 11. Team Resilience Levels Pre- and Post- Intervention (Manager 2)....	114
Figure 12. Team Resilience Levels Pre- and Post- Intervention (Manager 3).....	114
Figure 13. Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct- Reports (Manager 1).....	115
Figure 14. Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct- Reports (Manager 2).....	115
Figure 15. Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct- Reports (Manager 3).....	115

**Current Approaches to Measuring Individual and Team
Resilience in the Workplace**

Emily J. Lawrie

School of Psychology

The University of Adelaide

Abstract

There is growing interest amongst practitioners and managers regarding strategies to increase resilience in the workplace. While the occurrence of resilience programs has been increasing over the past decade, research on measuring and conceptualising resilience is only in its infancy (Bardoel, Pettit, De Cieri & McMillan, 2014). A sound understanding of the current measures used to assess resilience within the workplace domain will help to inform approaches to building resilience with individuals and teams. Accordingly, a narrative review including 25 peer-reviewed articles explored how resilience is currently conceptualised and measured, and identified improvements that could be made to ensure organisations have access to valid and practical resilience tools. A range of issues are discussed and recommendations are made to improve the conceptualisation of resilience, selection of measurement tools, and areas requiring further exploration. Overall, this review serves as a resource to inform practitioners of the best available resilience measures to capture an organisations' current capacity for resilience, or measure the efficacy of resilience training. Additionally, information on issues requiring further research is provided for scholars who are attempting to advance this line of inquiry.

Keywords: workplace resilience, employee resilience, team resilience, measuring resilience

Current Approaches to Measuring Individual and Team Resilience in the Workplace

Resilience has gained considerable interest in organisations, with an increasing number of requests for resilience-building workshops and interventions (Robertson, Cooper, Sarkar & Curran, 2015). In an era of uncertainty and volatility employees are faced with more intense workloads and higher expectations, leading to higher rates of work-related stress (Winwood, Colon & McEwen, 2013). Investing in the resilience of employees and teams is often seen as a means of ensuring employees ‘survive and thrive’ in the current environment (Vanhove, Herian, Perez, Harms & Lester, 2016).

While it seems that resilience programs are well-received in organisations, research has not kept pace with its growth in practice (Bardoel, Pettit, De Cieri & McMillan, 2014). In particular there are mixed views on conceptualising and measuring resilience, and the efficacy of resilience programs remains unclear (Vanhove, Herian, Perez, Harms & Lester, 2015).

Resilience has been conceptualised in a range of disciplines, such as child development, sport psychology, clinical psychology, and more recently – organisational psychology (Masten, 2011; Windle, 2011). A large proportion of research into the area of resilience has focused on how individuals “bounce back” following significant trauma or adversities (Connor & Davidson, 2003). However, applying these original concepts to everyday challenges in the workplace requires a significant shift in the way resilience is conceptualised and measured. It is particularly crucial that resilience programs are measured and evaluated in organisations to ensure resources are effectively utilised – particularly to avoid investing in untested training fads (Bunch, 2007).

The Nature of Resilience in the Workplace Domain

Resilience was originally considered a trait or a fixed attribute, reflecting the general tendency to be resilient (Shin, Taylor & Seo, 2012). While this still holds some truth, as people do vary in their level of resilience, more recently it has been acknowledged that resilience is a state that varies according to environmental influences and the strategies a person employs to tackle their current challenges (Luthans, 2002; Winwood et al., 2013). Conceptualising resilience as a state implies that it is a malleable construct that can be changed through interventions and training. It also means that resilience needs regular review and maintenance, and is a process rather than something that can be 'achieved'. Robertson et al.'s (2015) recent systematic review looked across the body of workplace resilience literature and found that resilience interventions are associated with a range of benefits including reduced depression, stress, and negative affect, as well as increased goal attainment, productivity, observed behavioural performance, motivation and job satisfaction (Robertson et al., 2015).

Research examining resilience in the workplace can be separated into two domains; studies of individual resilience, and collective resilience of teams. Individual resilience has gained far greater attention in the literature, compared with team resilience (Alliger, Cerasoli, Tannenbaum & Vessey, 2015). While the concept of team resilience has only recently emerged in the literature, it is an important and unique aspect of resilience. As jobs become more complex, work is increasingly structured around teams as several skills sets are required to produce results. Teams are shown to benefit organisations in terms of productivity, flattening management structure, and facilitating organisational learning (Edmondson & Nembhard, 2009). However, it is common for teams to face difficulties or setbacks that can impact the resilience of the whole team rather than only individuals. A resilient group of individuals does not necessarily translate into a resilient team if their strategies are not

aligned (McEwen, 2016a). As resilience is considered multileveled, it is important to address both individual and team resilience to produce sustainable change (Alliger, Cerasoli, Tannenbaum & Vessey, 2015).

The current understanding of resilience in the workplace is only partially established in the literature, as research on team resilience is still emerging. Therefore, it is important to review the literature on workplace resilience while it is still in its infancy to (a) examine our present understanding about how individual and team resilience are conceptualised; (b) understand the best methods to measure both individual and team resilience to design and evaluate effective resilience interventions and training; (c) highlight the importance of investigating resilience in a systemic way by addressing team and individual resilience; and (d) identify concerns with current measures, and significant gaps in the literature to guide future research.

Selection of Studies for Review

Studies were selected for review based on the following inclusion criteria; peer reviewed journal articles, published in English, and reporting a primary empirical research study that used a measure of individual or team resilience with a working population. Due to the recent emergence of team resilience research, and subsequently the limited number of relevant studies available for review, no publication time frame was specified. A broad search was conducted using the following search engines, University Library Search, and Google Scholar. Specific databases include PsychINFO and PsychARTICLES. Search terms were *resilience* in the title and *team*, *individual*, or *workplace* in the keywords, which resulted in 778 results for possible inclusion. The title, abstract, and method section of the articles were reviewed to identify their eligibility, based on the inclusion criteria. In total 25 articles were eligible for review, with publication years ranging from 2003 to 2017.

The Current State of the Literature

Of the 25 articles eligible for review, 28.0% measured team resilience ($n = 7$) and none of the studies measured a combination of team resilience and individual resilience. Table 1 provides a summary of the studies selected for review by outlining important research findings related to resilience, as well as providing information on resilience definitions, resilience measures, participants, and psychometric properties of the measures used (see Appendix B).

Definitions of Resilience

Individual Resilience

As depicted in Table 1, diverse conceptual definitions of individual resilience have been used across the workplace resilience literature. However, none of the definitions are specific to everyday workplace stressors. One point of difference in conceptual approaches is whether adversity or trauma is considered necessary for resilience to manifest. Most commonly the definitions mention overcoming adversity (50.0%, $n = 9$), while four state that resilience occurs in response to trauma (22.2% $n = 4$). Alternatively, Youseff and Luthans (2007) suggest that resilience can occur as a result of the stress associated with positive events or increased responsibility. While some workplaces situations may involve trauma, workplace resilience also applies to dealing with everyday work stressors and adversities related to a wide variety of work – rather than only those experiencing trauma (e.g. armed forces). The lack of clear, workplace-relevant definitions may explain why four studies (22.2%) failed to provide a conceptual definition at all.

Another differentiation between definitions is whether resilience is categorised as a capacity or a process. More specifically, resilience may be regarded as a capacity that makes effective adaptation more likely, or a mechanism (psychological, behavioural, and social) by which effective adaptation is achieved, or some combination of both (Winwood et al., 2013).

Of the 14 definitions, 64.3% conceptualise resilience as a capacity, and 35.7% view it as a process via certain mechanisms. A consensus between studies defining resilience as a capacity, is that resilience is viewed as an ability that can be developed and is amenable to intervention and training. However, McLarnon & Rothstein (2013) suggest that resilience is a process involving cognitive, behavioural and affective domains. The other four studies defining resilience as a process of adapting to stressors are less clear in terms of mechanisms.

In order to improve the construct validity and communication about resilience, a definition should be crafted to address resilience specifically in the workplace. For example, McEwen (2016b, p. 12) define resilience as “an individual’s capacity to manage the everyday stress of work and remain healthy, rebound and learn from unexpected setbacks, and prepare for future challenges proactively.” It is essential that researchers or practitioners are clear about how they conceptualise resilience – i.e. whether they are referring to work resilience or trauma resilience. For example, it is possible that a person may demonstrate resilience in the face of considerable changes at work, but may not be as resilient in response to trauma (e.g. the death of a family member).

Team Resilience

Turning to team resilience, there is far greater consistency between definitions compared with individual resilience. All seven studies define team resilience as an ability or capacity. Additionally, rather than drawing from clinical studies and suggesting trauma is a prerequisite for resilience to manifest, these studies mention more common workplace factors such as failure, setbacks, conflict, and disturbances of normal workflow (Salanova, Llorens, Cifre & Martinez, 2012; van der Kleij, Molenaar & Schraagen, 2011; West, Patera & Carsten, 2009).

Several of the definitions also explicitly align themselves with team resilience at work, e.g. “...team resilience serves to provide teams with the capacity to bounce back from

failure, setbacks, conflicts, or any other threat to well-being that a team may experience.” (West, Patera & Carsten, 2009). However, several of the definitions (42.9%, $n = 3$) could be strengthened by explicitly stating that team resilience involves the capacity of teams or groups, otherwise the definition could be easily translated to relate to individual resilience.

Selecting an Effective Assessment Tool

As several measures of individual and team resilience have been identified in the literature it is important to determine which measures are the most useful in practice. The most important step in evaluating a measure is determining the validity – i.e. is there evidence to suggest the tool measures what it is intended to measure (Messick, 1995). In relation to resilience, an effective assessment tool should measure all facets of resilience that are specific to the workplace – as determined by expert consensus and factor analysis (Haynes, Richard & Kubany, 1995). Measures that underrepresent certain elements of individual or team resilience at work limit the level of inferences that can be drawn from the assessment information. This limitation is particularly pertinent to the practical usefulness of a tool, as a measure with a greater number of factors and items can provide valuable information to inform development during coaching or workplace interventions.

Another important aspect, particularly in workplace research, is that a measure demonstrates criterion validity – i.e., show significant correlations between resilience and certain constructs that are theoretically expected to relate to resilience (e.g., job engagement and reduced burnout) (Winwood et al., 2013). For organisations, it is important that the methods used to measure resilience also relate to important organisational outcomes (e.g. adapting to change) otherwise the tool offers limited value. Measures of resilience that contain items specific to the workplace are expected to relate most strongly to workplace outcomes, and are considered more useful in the workplace context (Robertson et al., 2015).

While many researchers attest to the importance of ensuring assessment tools have strong psychometric properties (i.e., reliability and validity), it is not the only consideration that should be made when evaluating a measure (McGlynn & Adams, 2014). Certain measures are more suitable for research purposes, while others are designed for practical application. Shorter measures of resilience may be more appropriate for research purposes, provided the psychometric properties are sound. However, for practical purposes, such as resilience coaching or training, it is crucial that measures provide sufficient detail to inform development. Additionally, the usefulness of a tool is increased if the components being measured are within the person's capacity to change and can be easily understood and translated into strategies or identify issues to be considered in a resilience training program (Winwood et al., 2011).

Individual Resilience Measures

Robertson et al. (2015) review found that only 6 of 14 studies directly measured resilience when conducting resilience training. They recommend the use of contextually relevant measures including the Resilience at Work Scale (Winwood et al., 2013) and the Workplace Resilience Inventory (McLarnon & Rothstein, 2013). Table 2 outlines the measures of individual resilience used in the studies selected for review. The items of each scale were examined to determine if they are specific to the workplace or assessing a more global measure of resilience. Evaluation could not be made adequately if sample items were not available.

[Insert Table 2 around here]

Clinical Measures Adapted for Workplace Use

The resilience measures in Table 2 were mainly developed and validated using clinical populations, rather than in workplace settings (63.6%, $n = 7$). These scales attempt to

measure resilience as a broad and general personal attribute. However, these instruments are being applied in workplace research, where the relevance to workplace settings is questionable.

The most commonly used measure of resilience amongst the studies selected for review is the Connor Davidson Scale, which is a clinically-derived tool that has recently been applied in the workplace context (Connor & Davidson, 2003). While it is a widely used measure of resilience, its use in assessing workplace resilience is disputed (Robertson et al., 2015). It consists of 25 items grouped into five factors; personal competence and tenacity, tolerance and strengthening effects of stress, acceptance of change and secure relationships, control, and spiritual influences. Items are scored on a 5-point Likert Scale and include items such as ‘adapt to change’, ‘things happen for a reason’, ‘Sometimes fate or God can help’ and ‘think of self as a strong person’ (Connor & Davidson, 2003). While some of these items could be adapted for use in the workplace, overall the generalisability is limited as some items have no relevance to workplace resilience.

Workplace Relevant Measures

Resilience at Work Scale. The Resilience at Work (R@W) scale was developed from accumulating 45 statements that are believed to underpin resilience in the workplace – represented in both the peer-reviewed literature and clinical practice (Winwood et al., 2013). The statements were reduced to 20 items, and seven factors, determined through exploratory and confirmatory factor analyses (see Table 3). Working professionals from a diverse range of sectors were included in the validation process (e.g. health, education, commerce, IT, finance, and manufacturing). The measure has good internal consistency ($\alpha = 0.84$) as well as convergent and discriminate validity supported by negative correlations with maladaptive outcomes of work pressure such as chronic fatigue, poor sleep, physical health and emotional health problems, and positive correlations between resilience and recovery, health and

engagement. Items include ‘the work that I do fits well with my personal values and beliefs’, ‘negative people at work tend to pull me down’, and ‘I have developed some reliable ways to relax when I am under pressure at work.’

The R@W scale is primarily designed for practical usage in organisations for development purposes, as the factors are all in the power of the employee to change. Rogerson et al. (2016) used the R@W scale to measure pre- and post- effects of a resilience intervention, finding an increase in resilience overall after brief training. The R@W scale measures an individual’s current capacity for performing actions that offset work strain, and responses are expected to change when a person’s circumstances change or they alter their behaviours (Winwood et al., 2013).

[Insert Table 3 around here]

Workplace Resilience Instrument. The Workplace Resilience Instrument is adapted from Mallak’s (1998) resilience measure for use in healthcare (Mallak & Yildiz, 2016). There are 20 items that relate to both individual and team factors e.g. ‘I understand my team’s overall goals’ and ‘when the situation becomes chaotic, I am able to make sense of the situation’. The factors include active problem-solving, team efficacy, confident sense-making, and bricolage (creating order out of what is available) (see Table 4).

The measure was validated with hospital based nurses and hospital executives. Convergent validity is partly established by the correlations between the subscales and a job stress questionnaire. The scale demonstrated good internal consistency, with Cronbach’s alpha ranging from 0.77 to 0.83. However, criterion validity cannot be determined as outcome measures were not examined. Mallak and Yildiz (2016) suggest resilience should lead to higher quality decision making, job satisfaction, and reduced stress. However, it cannot be determined if resilience, as measured by the Workplace Resilience Instrument,

actually relates to these outcomes. Additionally, the content validity is questionable, as the factor Team Efficacy may be more relevant to measuring the collective resilience of a team rather than an individual. Future research should explore validation of the measure against predictive criteria.

As this tool was designed and validated specifically with employees in the health care industry, applicability in other sectors is questionable. This tool largely focuses on resilient decision making, which may be more relevant in the healthcare industry compared with occupations with less decision-making authority e.g. trade industry, manufacturing. Studies should be conducted with other occupations to determine the relevance these factors have in shaping resilience.

[Insert Table 4 around here]

Workplace Resilience Inventory. The Workplace Resilience Inventory was developed based on the theoretical model by King and Rothstein (2010) (McLarnon & Rothstein, 2013). It examines an individual's personal characteristics, social support network, initial responses to a significant and life changing event, and self-regulatory processes. Internal consistency is considered acceptable and the measure is significantly correlated with well-being criteria including depression, perceived stress, and satisfaction with life. Incremental validity is successfully demonstrated with the Psychological Capital (PsyCap) questionnaire. However, it may have been more useful to measure workplace relevant outcomes such as job satisfaction, or work performance to validate relevance in the workplace – rather than clinical measures.

McLarnon & Rothstein (2013) consider the cognitive, behavioural and emotional adjustments that must be made when an employee faces an adverse event at work. Their model suggests that these factors are invoked by an employee's initial reaction to the stressor,

and bolstered by personal characteristics, support and resources (see Table 5). The WRI requires participants to think about a recent adverse or significant event when responding to the items. Items include ‘following the event I was able to maintain a positive outlook on things’, ‘I am able to put a new perspective on adversities’, ‘I know there is someone I can depend on when I am troubled’, and ‘since the adverse event I have paid closer attention to the causes of my emotions.’

These items do not seem restricted to the workplace, and could be used to assess many adverse events. Additionally, the participants used to validate the WRI were Canadian University students, of which only 31.5% were employed. The usefulness of this scale in assessing the success of a resilience training intervention is limited, as people are recalling their actions following a past event rather than their current capacity. Additionally, results will depend on the event employees choose to focus on when responding to the questionnaire. The WRI requires further validation with working populations to determine its usefulness in a practical environment.

[Insert Table 5 around here]

Usefulness in Practice. The benefits of measuring resilience before and after a resilience training program are two-fold, (1) the information can be used to determine the effectiveness of the training (i.e., return on investment), and (2) certain tools can identify an individual’s current capacity for resilience and highlight areas for development that can be addressed during the training program.

This review has identified three contextually-relevant measures, which were all constructed on the basis that resilience is a process or capacity that can be developed, rather than a fixed trait. However, the Workplace Resilience Inventory looks directly at cognitive, behavioural and emotional processes a person employs following an adverse event. While

this has great academic value in terms of identifying resilience mechanisms and processes, the practical application of this tool is limited as it does not identify a person's current capacity or provide achievable actions for improvement. Although how the person dealt with the identified situation could be explored through coaching, it still may not directly relate to how well they manage challenges on a daily basis.

While the R@W contains similar mechanisms as the WRI, it is presented in a more practical way for managers and employees to interpret. For example, the factor Maintaining Perspective involves mechanisms related to controlling ineffective thoughts and thinking patterns. However the items highlight aspects that are within the individual's capacity to change, such as managing the impact that negative people have on their morale. The items are directed at an individual's current behaviours, rather than how they have approached a specific past event. Additionally, the R@W approach addresses everyday work behaviours that are expected to contribute to the way an employee handles general work challenges and prepares proactively for the future. While resilience is often discussed in response to trauma and adversity, it is also considered a practical skill required in current work environments presented with change, uncertainty, and increasing workloads (Winwood et al., 2013).

Overall the Workplace Resilience Instrument provides a relevant tool that can identify an employee's capacity to solve problems and overcome challenges at work (Mallak & Yildiz, 2016). However the content validity of the Workplace Resilience Instrument scale may not be as strong as the R@W scale, which includes a broader sample of components of resilience that are specific to the workplace. Specifically, the Workplace Resilience Instrument does not include factors of job-fit, social support, or work-life balance which are expected to be important for resilience, as persevering at the expense of your health (i.e. stoicism) is not beneficial for sustaining resilience and well-being (McEwen, 2016b).

Team Resilience Measures

The measures assessing team resilience are less validated and widely-applied compared with the individual resilience instruments. Only two instruments have been validated, the Team Resilience scale (Sharma & Sharma, 2016), and a seven-item scale by Salanova et al. (2012). As shown in Table 1, the number of items included in the team resilience measures ranges from three to seven – apart from Sharma and Sharma (2016) who have 50 items in their Team Resilience scale. As with individual resilience, team resilience is a multidimensional construct and cannot be validly measured using an insufficient number of items. While Salanova et al.'s (2012) team resilience items address many important aspects of resilience (e.g. 'my team tries to look on the positive side', 'my team gives support to each other'), the scale may be useful for research, but inadequate for practical application due to the limited scope it provides for identifying specific team behaviours requiring development.

Additionally, many of the team resilience scales were developed using the referent-shift approach, by altering the items to reflect a group capacity rather than individual (Blatt, 2009; West, Patera & Carsten, 2009). This approach to item development may not be appropriate to truly capture the construct of team resilience, as it is a unique construct that is considered to differ from individual resilience (McEwen, 2016a).

Team Resilience Model. Sharma & Sharma's (2016) Team Resilience Model was developed based on Morgan et al's (2013) framework for team resilience in elite sport. Psychometric evaluation occurred with 160 executives in internet technology (IT) companies in India, including team leaders and project managers. The instrument suggests there are four facilitating factors of team resilience: group structure, mastery approaches, social capital, and collective efficacy (see Table 6). The scale demonstrated good internal reliability, and construct validity by showing discriminant and convergent validity between the four factors.

However, it would have been useful to measure outcomes, such as performance and problem solving that are expected to relate to team resilience (Alliger et al., 2015).

[Insert Table 6 around here]

While the self-report questionnaire is intended to be completed by managers, it is possible that perceptions of how well teams are organised and functioning may differ between leaders and team members themselves – particularly when addressing ‘the groups’ shared belief in its ability’ and ‘shared attitudes and behaviours of the team’. Further analyses should be conducted to measure inter-rater reliability between team members and leaders. Additionally, the validation only occurred with IT professionals, so the scale should be validated with other professions before it can be widely used.

Encouraging a Systemic Approach

Team Resilience as a Unique Construct

As most employees operate within teams, a holistic approach is the most appropriate to explore resilience within the workplace, involving individuals as well as the teams they operate in. Addressing individual resilience is a good ‘starting point’ in organisations, particularly equipping people with strategies to maintain perspective, manage stress, and improve support networks (Winwood et al., 2013). However, a resilient group of individuals does not always translate into a resilient team if their strategies are incompatible (McEwen, 2016a). A core component of team resilience is that team members have shared beliefs and attitudes about the goals and values related to their work (McEwen, 2016a; Sharma & Sharma, 2017). Additionally, the team must have the capacity and skills needed to perform their role (McEwen, 2016a; Sharma & Sharma, 2017). Therefore, measures of individual resilience are not capable of assessing factors such as group alignment, or collective efficacy.

Relevant workplace measures of individual and team resilience should be selected to gain a more accurate and detailed picture of organisational functioning.

Investigation into team resilience in the workplace is a relatively unexplored area requiring far greater attention until team resilience can be deemed a unique construct. Preliminary research suggests that resilience does operate at the team level and impacts organisational outcomes such as team in-role performance, work engagement, team coordination, cohesion, and cooperation (Salanova et al., 2012; West et al., 2009). However, the measures used to assess team resilience in these studies is questionable as it involved a unidimensional approach with 7 (or fewer) items. Future research should examine both individual resilience and team resilience using workplace relevant measures such as the Resilience at Work Scale or Workplace Resilience Instrument and the Team Resilience Measure (Mallak & Yildiz, 2016; Sharma & Sharma, 2016; Winwood et al., 2013). Currently no studies have measured both individual and team resilience within the same study; therefore we cannot determine their degree of overlap, and how they individually contribute to workplace outcomes (e.g. engagement, performance, and burnout).

Overall there is a limited amount of research conducted on resilience in the workplace – both at the individual and team level. As work becomes more complex, many organisations recognise the importance of structuring tasks within teams to combine expertise (Kozlowski & Ilgen, 2006). Therefore, the performance of organisations depends largely on the performance of teams and their ability to overcome challenges and adapt to change (Alliger et al., 2015). Academics and practitioners have an opportunity to contribute to this increasingly popular field of inquiry, which is only in its infancy. While certain outcomes have been identified, greater investigation is required until we can develop a far richer understanding of how resilience operates at work, including the benefits and mechanisms that foster or hinder resilient processes.

The Role Leaders Play in Fostering Resilience

Future research should address resilience at the leadership level, to determine the degree to which managers and senior executives promote and role-model resilience within the organisation and the teams they lead. Current research suggests that a person's capacity for resilience changes depending on their circumstances, particularly in terms of the support and resources available to them (McLarnon & Rothstein, 2013). It is expected that a leader's actions will impact the resilience of individuals as well as teams by determining the culture of resilience within the organisation. For example, leaders who openly support work-life balance and are alert to signs of overload in employees are likely to have a positive impact on their team's resilience. Additionally, leaders who can harness team members' strengths and develop processes that focus on priorities, while also celebrating success, are likely to influence the way their team handles difficult challenges at work.

However, in certain cases leaders may need to consider broader structural or cultural issues (e.g. bullying or excessive workloads) that impact upon employees' ability to be resilient. It is important that resilience is not confused with coping or stoicism, or used as a strategy by managers to increase employees' workload as this is likely to have negative long-term implications for employee wellbeing (Winwood et al., 2013). Exploring the role leaders, and organisational culture play in determining the resilience of their teams would aid practitioner in designing effective and sustainable resilience interventions by employing a systemic approach.

Recommendations

As outlined in this review, the workplace resilience literature is in its infancy and therefore suggestions can be made to improve the literature as it grows. The key issue that is apparent from reviewing the literature is a lack of context-specific tools measuring resilience in the workplace. However, there are also conceptualisation issues evident in the current

studies, and areas requiring exploration. Table 7 presents a summary of the recommendations discussed in the review to assist in the progression of the field.

[Insert Table 7 around here]

Conclusion

Organisations investing in resilience programs should be aware of the most effective ways to measure the resilience of their employees and teams. While useful measures currently exist, careful consideration is required to ensure instruments are appropriate for workplace use. This review provides guidance for practitioners who are considering assessing resilience within an organisation, and can assist academics in advancing the growth of this important area of inquiry.

References

*References marked with an asterisk indicate studies included in the literature review.

- Alliger, G., Cerasoli, C., Tannenbaum, S., & Vessey, W. (2015). Team resilience. *Organizational Dynamics*, 44(3), 176-184.
- *Aniței, M., Chraif, M., & Chiriac, G. (2012). Resilience to Stress Evidence-Based Improvements in Integrative Psychotherapy Working Groups. *Procedia - Social and Behavioral Sciences*, 33, 1042-1046.
- Bardoel, E., Pettit, T., De Cieri, H., & McMillan, L. (2014). Employee resilience: An emerging challenge for HRM. *Asia Pacific Journal of Human Resources*, 52(3), 279-297.
- *Blatt, R. (2009). Resilience in entrepreneurial teams: Developing the capacity to pull through. *Frontiers of Entrepreneurship Research*, 29(11), 1-9.
- Bunch, K. J. (2007). Training failure as a consequence of organizational culture. *Human Resource Development Review*, 6(2), 142-163.
- *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.
- Connor, K., & Davidson, J. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18(2), 76-82.
- Edmondson A, Nembhard I. (2009). Product development and learning in project teams: The challenges are the benefits. *Journal of Product Innovation Management*, 26, 123-138.
- *Gillespie, B. M., Chaboyer, W., & Wallis, M. (2009). The influence of personal characteristics on the resilience of operating room nurses: A predictor study. *International Journal of Nursing Studies*, 46(7), 968-976.

- *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.
- *Harland, L., Harrison, W., Jones, J. R., & Reiter-Palmon, R. (2005). Leadership behaviors and subordinate resilience. *Journal of Leadership & Organizational Studies, 11*(2), 2-14.
- Haynes, S. N., Richard, D., & Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological assessment, 7*(3), 238-245.
- *Hsieh, H. F., Hung, Y. T., Wang, H. H., Ma, S. C., & Chang, S. C. (2016). Factors of resilience in emergency department nurses who have experienced workplace violence in Taiwan. *Journal of Nursing Scholarship, 48*(1), 23-30.
- Luthans F. (2002). The need for and meaning of positive organizational behavior. *Journal of Organizational Behaviour, 23*, 695–706
- Mallak, L. A. (1998). Measuring resilience in health care provider organizations. *Health Manpower Management, 24*, 148-152.
- *Mallak, L. A., & Yildiz, M. (2016). Developing a workplace resilience instrument. *Work, 54*(2), 241-253.
- Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology, 23*(2), 493-506.
- McGlynn, E. A., & Adams, J. L. (2014). What makes a good quality measure? *Jama, 312*(15), 1517-1518.

- *Meneghel, I., Salanova, M., & Martínez, I. M. (2016). Feeling good makes us stronger: How team resilience mediates the effect of positive emotions on team performance. *Journal of Happiness Studies*, 17(1), 239-255.
- Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50(9), 741-758.
- McEwen, K. (2016a). *Building team resilience*. Adelaide: Mindset Publications.
- McEwen, K. (2016b). *Building your resilience: how to thrive in a challenging job*. Adelaide: Mindset Publications.
- *McLarnon, M. J., & Rothstein, M. G. (2013). Development and initial validation of the Workplace Resilience Inventory. *Journal of Personnel Psychology*, 12(2), 63-73.
- *Pidgeon, A. M., Ford, L., & Klaassen, F. (2014). Evaluating the effectiveness of enhancing resilience in human service professionals using a retreat-based mindfulness with metta training program: A randomised control trial. *Psychology, Health & Medicine*, 19(3), 355-364.
- Robertson, I., Cooper, C., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology*, 88(3), 533-562.
- *Rogerson, S., Meir, R., Crowley-McHattan, Z., McEwen, K., & Pastoors, R. (2016). A randomized controlled pilot trial investigating the impact of a workplace resilience program during a time of significant organizational change. *Journal of Occupational and Environmental Medicine*, 58(4), 329-334.
- *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.

- *Shakespeare-Finch, J., & Daley, E. (2017). Workplace belongingness, distress, and resilience in emergency service workers. *Psychological Trauma: Theory, Research, Practice, and Policy*, 9(1), 32.
- *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.
- *Sharma, S., & Sharma, S. K. (2016). Team resilience: Scale development and validation. *Vision*, 20(1), 37-53.
- *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, Seo, M. (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, 727-748.
- *Stephens, J. P., Heaphy, E. D., Carmeli, A., Spreitzer, G. M., & Dutton, J. E. (2013). Relationship quality and virtuousness: Emotional carrying capacity as a source of individual and team resilience. *The Journal of Applied Behavioral Science*, 49(1), 13-41.
- *Stevens, G., Jones, A., Smith, G., Nelson, J., Agho, K., Taylor, M., & Raphael, B. (2010). Determinants of paramedic response readiness for CBRNE threats. *Biosecurity and Bioterrorism: Biodefense Strategy, Practice, and Science*, 8(2), 193-202.
- *van der Kleij, R., Molenaar, D., & Schraagen, J. M. (2011, September). Making teams more resilient: Effects of shared transformational leadership training on resilience. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 55, No. 1, pp. 2158-2162). Sage CA: Los Angeles, CA: SAGE Publications.

- Vanhove, A., Herian, M., Perez, A., Harms, P., & Lester, P. (2015). Can resilience be developed at work? A meta-analytic review of resilience-building programme effectiveness. *Journal of Occupational and Organizational Psychology*, *89*(2), 278-307.
- * Tian, X., Liu, C., Zou, G., Li, G., Kong, L., & Li, P. (2015). Positive resources for combating job burnout among Chinese telephone operators: Resilience and psychological empowerment. *Psychiatry Research*, *228*(3), 411-415.
- * 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.
- * West, B. J., Patera, J. L., & Carsten, M. K. (2009). Team level positivity: Investigating positive psychological capacities and team level outcomes. *Journal of Organizational Behavior*, *30*(2), 249-267.
- Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, *21*, 152-169
- * Winwood, P. C., Colon, R., & McEwen, K. (2013). A practical measure of workplace resilience: Developing the resilience at work scale. *Journal of Occupational and Environmental Medicine*, *55*(10), 1205-1212.
- * 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.

**A Targeted Approach to Building Resilience at Work: Coaching
Leaders to Foster Team Resilience**

Emily J. Lawrie

School of Psychology

The University of Adelaide

Prepared for the International Coaching Psychology Review

Instructions to Authors (Appendix A)

Abstract

Objectives: Workplace resilience interventions are most commonly delivered in group based workshops with universal content that addresses individual resilience. The aim of this study was to explore the impact of coaching leaders, with the aim to design and implement a resilience program targeting the individual, leader, and team actions required to develop a work climate of resilience.

Design: The study involved two separate case studies, with five managers from two organisations. The program was developed based on the Resilience at Work Toolkit and the Behaviour Change Wheel Framework (McEwen, 2016a; Michie, van Stralen & West, 2011).

Methods: Each case study involved three 90-minute coaching sessions with an organisational psychologist, completion of an intervention workbook, as well three resilience assessment tools that measured the leaders' individual resilience, the resilience of their team, and their ability to promote resilience within their teams. A 6-week follow up was conducted by re-administering the surveys and conducting an interview with each group of managers.

Results: In all cases the usefulness of the coaching sessions was expressed by participants; however, strategies were only translated into the workplace in some cases but not others. The most significant increase was seen in the leaders' ability to foster resilience within their teams, as rated by their direct-reports.

Conclusions: The results provide insight into the complexities of building workplace resilience and provide support for future research to continue exploring the benefits of systemic, targeted approaches based on the comprehensive measures of work related resilience.

Keywords: Resilience, coaching, team resilience, behaviour change

A Targeted Approach to Building Resilience at Work: Coaching Leaders to Foster Team Resilience

Investing in the resilience of employees and teams has become a necessity for organisations to ensure fast-paced, and dynamic work environments are conducive to productivity and adaptability rather than stress and burnout (Winwood, Colon & McEwen, 2013). The direct financial impact of stress on Australian businesses is around eight billion Australian dollars each year resulting from absenteeism and presenteeism (i.e. reduced productivity) (Dollard & Bailey, 2014). To address these problems, organisations are looking towards resilience to mitigate the effects of stress on employee health and well-being, and optimise organisational effectiveness (Bardoel, Pettit, De Cieri & McMillan, 2014). While no “gold standard” of building resilience currently exists, coaching is considered crucial to developing a targeted and sustainable approach within multiple levels of an organisation (Vanhove, Herian, Perez, Harms & Lester, 2015).

Defining Resilience from an Organisational Perspective

Individual Resilience. The concept of resilience has mainly been researched in the field of clinical and developmental psychology; however, recently resilience has been recognised as an important skill for individuals facing daily challenges and adversity in the workplace (Silk et al., 2007; Masten, 2011; Windle, 2011). Research findings show that individual resilience is related to a range of important outcomes, including lower risk of burnout, higher job satisfaction, organisational commitment, engagement and recovery, and higher response readiness in ambulance drivers (Stevens et al., 2010; Tian et al., 2015; Winwood, Colon & McEwen, 2013; Youseff & Luthans, 2007)

In the workplace context, resilience can be viewed as “an individual’s capacity to manage the everyday stress of work and remain healthy, rebound and learn from unexpected setbacks, and prepare for future challenges proactively” (McEwen, 2016b). This approach implies that resilience involves being adaptable, authentic, and connected to others as opposed to workers simply being stoic, or persevering at the expense of their health. Winwood et al. (2013) identified seven elements of resilience that are relevant to the workplace. Investing in resilience at work means remaining realistically optimistic and solution focused, buffering negative energy, seeking feedback, asking for and providing support, maintaining a healthy lifestyle, employing good self-care routines and strategies to balance work and life, and developing and maintaining a strong personal and professional network. Additionally, resilience is increased when people live authentically by knowing and living their core values and capitalising on their strengths, as well as ensuring their job matches their purpose and values (McEwen, 2016b; The Resilience at Work Sustain 7 Model; Winwood et al., 2013).

Team Resilience. Resilience is often conceptualised from an individual perspective. However, it is imperative that a broader approach is taken when working with organisations as people often work within teams (Kozlowski & Ilgen, 2006). A team is a group of people with complementary skills who share a common purpose and performance goals for which they hold themselves mutually accountable (Katzenbach & Smith, 1993, p. 45). Investigation into team resilience in the workplace is a relatively unexplored area; however, research suggests that resilience does operate at the team level and impacts organisational outcomes such as team in-role performance, work engagement, team coordination, cohesion, and cooperation (Salanova, Llorens, Cifre & Martínez, 2012; West, Patera & Carsten, 2009). Teams capable of regrouping, rebounding, and learning from setbacks may be a critical

element in determining the performance of an organisation (DeChurch & Mesmer-Magnus, 2010; West et al., 2009).

Here team resilience is defined as “the capacity of a group of employees to collectively manage the everyday stress of work and remain healthy, to adapt to change and to be proactive in positioning for future challenges” (McEwen, 2016a). When under pressure, teams that are resilient are more likely to solve problems proactively, harness team members’ strengths, are aligned in their values and purpose, stay optimistic, have a solution focus, remain alert to signs of overload in members, cooperate and support each other, seek feedback, and celebrate success (McEwen, 2016a). These factors differ from individual resilience, as there is a team, rather than individualised, focus and the team members needs to be aligned in their strategies. Resilient individuals may exist within a team; however, a group of resilient individuals does not necessarily create a resilient team. A team comprised of highly resilient individuals may still miss signs of overload in team members, lack shared purpose and values, struggle to resolve interpersonal conflicts promptly, or simply lack a mental model about how to work together (Alliger, Cerasoli, Tannenbaum, & Vessey, 2015).

Resilience as a Dynamic, Multidimensional State. While some people are seen to possess more resilient traits (e.g. optimism, openness to change), ultimately resilience can also be considered as a dynamic state (rather than a fixed trait) that can be modified through coaching and interventions (Masten, 2001). Conceptualising resilience as a state means it arises through an interaction between the individual and their external environment. The resilience of teams is likely to differ depending on experiences they are currently facing, and depending on how aligned team members are. Additionally, the team’s manager is likely to have a significant influence on the team culture and can implicitly (or explicitly) promote resilience within the teams they lead. Currently, no studies have explored the impact of leaders promoting resilience within their teams.

Construing resilience as a dynamic state tells us several things; (1) the workplace context must be considered when examining both individual and team resilience; (2) resilience is not something that can be achieved indefinitely, rather it is always changing depending on the team's circumstances; (3) the resilience of individuals and teams can be coached and developed.

Current Approaches to Building Resilience

Research on resilience interventions continues to increase, with much of it conducted in the field of clinical psychology (Windle, 2011). However, the benefits of fostering resilience in the workplace has become increasingly recognised over the past decade.

Robertson, Cooper, Sarkar and Curran's (2015) recent systematic review of work-based resilience training interventions identified a range of benefits in terms of mental health, subjective well-being, physical/biological factors, psychosocial factors and performance outcomes. In particular, resilience training was associated with reducing depression, stress, and negative affect, as well as increasing goal attainment, productivity, observed behavioural performance, motivation and job satisfaction (Robertson et al., 2015).

Vanhove et al.'s (2015) review on resilience-building programs found that targeted coaching programs were the most effective – although the majority (72%) used a classroom based group delivery format. However, overall these programs have a relatively small effect in the workplace ($d = 0.21$), and the effects diminish over time. Other formats include computer-based training, and train-the-trainer, where leaders receive resilience training and share their knowledge and skills with the rest of the team or organisation. Coaching is likely to be the most beneficial approach as workers have direct and personalised contact with the coach, and therefore the approach to build resilience can be tailored to meet their needs, they can get direct feedback and professional support for their specific situation, and are held accountable.

Current resilience training tends to have an individualised focus – addressing how employees can enhance their own resilience at work. While this approach seems to be valuable, a systemic multi-level approach may be more appropriate as most employees operate within teams. It may be useful to combine coaching with a train-the-trainer approach as engaging and training senior leaders is likely to have flow-on effects to other levels of the organisation. Vanhove et al., (2015) review identified limited use of train-the-trainer approaches, making it difficult to evaluate their effectiveness. However, Lester, McBride, Bliese & Adler (2011) employed the train-the-trainer approach in an army environment, showing units with leaders who engaged in the Master Resilience training program had higher scores on aspects of social and emotional fitness compared with units without a resilience trained leader (Lester et al., 2011). Greater investigation is required to understand how this approach can be implemented in more common work environments.

The Current Study

This study involved providing a resilience coaching program for two non-for-profit organisations that addresses the resilience of the leaders and their teams within the organisation. The aims of this study were to: (1) design and implement a resilience program targeting the individual, leader, and team actions required to build resilience; and (2) examine the impact of the program in terms of building collective resilience within leadership and work teams. Providing a tailored research training program is expected to offer a valuable alternative to universal programs by empowering leaders to address factors specific to their team's environment. This study will add to the coaching literature, as the bulk of studies currently consists of descriptive papers, and the focus is usually individualised rather than focusing on improving team outcomes (Theeboom, Beersma & van Vianen, 2014).

Often the effects of training are reduced over time, presumably because workers do not use the knowledge and skills taught during resilience workshops or training – or the skills

are not directly transferable to the workplace (Vanhove et al., 2015). Therefore, this study will also include a follow-up to determine whether the resilience training effects are sustained over time.

A Systemic Approach to Building Resilience

To assist in creating sustainable change the resilience program was delivered through a series of coaching sessions. Coaching is known to facilitate a unique learning process as the coach provides insightful questions to create a generative learning environment where positive change can be achieved (Gray, 2016).

A solution-focused approach to coaching was employed, and emphasis was placed on empowering leaders and guiding them through a process of clarifying their organisational challenges that impact upon the resilience of their team or themselves and then identifying measurable and achievable actions that are in their control to alter. Therefore, it was crucial to involve senior leaders who have greater leverage to implement any procedural changes identified in the coaching action plan. Additionally, implementing programs within senior leadership teams is shown to offer benefits by gaining management support regarding initiatives so they are more engaged and clear about spreading their learning to other levels of the organisation (Ovretveit et al., 2002). Actions taken by the leaders is likely to promote, or inhibit, what people can do individually and together (Dubois & Singh, 2009).

There is an increasing awareness that coaching practitioners should ground their practice in solid theoretical understanding and empirically tested models (Wang, 2013). The approach used in this study also integrates the principles of the Behaviour Change Wheel (BCW) which is a powerful tool for designing and evaluating behavior change interventions (Michie, van Stralen & West, 2011). Interventions are less likely to be successful if they are developed without a systematic method or theoretical basis, and fail to take the context into account. The BCW suggests that for an intervention to be successful it is important to

consider a range of contextual factors to determine what behaviours need to change, how realistic is it in the current work context, and *how* it will be most effectively achieved (Michie et al., 2011). While the BCW has been used extensively in health and community programs, the process required significant adaptation to be deemed appropriate for organisational use. In particular, technical terms have been removed as well as psychological concepts that may be unnecessarily complicated (Appendix C).

Central to the BCW framework is the proposition that behaviours must be specific and well-defined to achieve change (Michie et al., 2011). Therefore, to provide leaders with a guiding language around resilient behaviours that is simple to follow, the study utilised the research-based Resilience at Work models developed by McEwen and colleagues (Winwood et al., 2013). Based on this research McEwen (2016) proposes the following areas of focus for developing individual resilience (Table 8) and team resilience (Table 9).

[Insert Table 8 around here]

[Insert Table 9 around here]

To aid in the leaders' learning a workbook was constructed to be used alongside the coaching process, which integrates the Resilience at Work Toolkit and the BCW framework (Appendix D). The workbook involved leaders addressing their key organisational challenges that impact their resilience, describing desired behaviors, identifying strengths to build on, determining where to focus attention in terms of the seven areas of team resilience (see Table 8), and determining actions to alter behavior that align with organisational policies, procedures and structures to support desired behaviors. While the BCW process is time consuming, it provides a comprehensive framework that ensures the intervention is targeting areas of resilience that require change, and are achievable within the current organisational context.

The study addressed the following research questions:

1. Can brief resilience coaching increase an individual leader's level of resilience?
2. Can brief resilience coaching increase the extent to which a leader fosters resilience within their team?
3. Can brief resilience coaching of a leader increase their team's level of resilience?

Method

Design

Two separate resilience programs were conducted with three 90 minute sessions over an eight-week period, with a six-week follow-up. The time between sessions allowed for participants to practice applying their strategies and complete 'homework' activities to gain deeper insight.

Measures

Individual Resilience. The Resilience at Work Scale (R@W; Winwood et al., 2013) was used to capture personal resilience at work. The R@W Scale is a 25-item scale comprising seven resilience dimensions: living authentically (e.g. 'I have important core values that I hold fast to in my work-life), finding your calling (e.g., 'The work I do helps to fulfil my sense of purpose in life'), staying healthy (e.g., 'I have a good level of physical fitness'), mastering stress (e.g., 'I have developed some reliable ways to relax when I am under pressure at work'), interacting co-operatively (e.g., 'I believe in giving help to my colleagues as well as receiving it'), building networks (e.g., 'I have a strong and reliable network of supportive colleagues at work'), and maintaining perspective (e.g., 'Nothing at work ever really fazes me for long'). Each item is scored on a 7-point scale (0 = strongly disagree, 6 = strongly agree).

Team Resilience. The Resilience at Work Team Scale (R@W Team) has been developed by Kathryn McEwen and Carolyn Boyd (McEwen 2016a). The R@W Team has

43-items comprising seven dimensions representing team resilience: robust (e.g., ‘We have the full range of skills and abilities we need to be effective’), resourceful (e.g., ‘We monitor and manage the workload together’), perseverance (e.g., ‘We focus on generating solutions to problems rather than worrying about them’), self-care (e.g., ‘We are alert to and respond to early signs of overload in team members’), capability (e.g., ‘We seek out and act on our feedback relating to our performance’), connected (e.g., ‘We encourage each other to feel part of the team’), alignment (e.g., ‘We see team successes as our successes’). The items are scored on a 7-point scale where 0 = strongly disagree, and 6 = strongly agree.

Leader Resilience. The Resilience at Work Leader Scale (R@W Leader) is an adaptation of the R@W Team scale where the questions are altered to rate the resilience of the leader or manager of the team. There are two forms of the leader scale: leader self-report and direct-report. The leader self-report scale asks the leader to report on their own perceived resilience (e.g., ‘In leading my team I develop ways to ensure the workload is shared’). Whereas the leader direct-report scale is completed by team members or others who observe the leader (e.g., ‘In leading their team, this person manages negativity within the team’).

Procedure

The University of Adelaide Human Research Ethics Committee granted ethics approval prior to the commencement of research. Several managers from non-for-profit organisations were contacted by SACOSS (South Australian Council of Social Services) via email and provided with a copy of the research flyer and an invitation to attend an information session that provided an overview of the program. Two organisations contacted the researchers and expressed interest in participating in the program. The first case study consisted of two managers, an operations manager who self-selected to participate and a service manager who was invited by the other manager. The second case study involved three managers who were invited by their human resources manager to participate.

The three Resilience at Work (R@W) surveys – Individual, Team, and Leader – were administered online via Qualtrics. One survey was completed before each coaching session to ensure a gradual process of survey completion. Individually the leaders completed the Individual survey, and the Self-Report Leader survey. The Team Resilience and Leader Direct-Report surveys were completed by the leaders’ teams to gain a more accurate (i.e. less biased) perception. Leaders were asked to identify their team and invite them to participate in the Team survey, assessing their resilience as a team, and the Leader survey, assessing their manager’s ability to foster resilience within the team. It was the responsibility of the leaders to introduce the program to their teams and involve them in aspects of the change process, such as survey completion and identifying team development areas.

The managers from both organisations engaged in coaching provided by organisational psychologists with considerable experience in staff coaching. The coaching was structured in groups to ensure managers from the same organisation could assist each other by providing support and sharing ideas. The managers were then guided in developing and implementing an integrated resilience plan for their teams’ by completing a workbook based around the Resilience at Work (R@W) Toolkit and the Behaviour Change Wheel intervention and evaluation framework. More in-depth information of what was involved in each session is detailed below (Table 10).

[Insert Table 10 around here]

Statistical Analyses

The intervention was evaluated by re-administering the individual, team, and leader surveys. As recommended by Manolov, Losada, Chacon-Moscoso and Sanduvete-Chaves (2016) pre- to post-changes were assessed using visual analysis complimented with quantitative analysis technique, non-overlap of all pairs (NAPs) – which measures the extent

to which each data point in phase A (baseline) overlaps with each data point in phase B (intervention) (Brown & Symons, 2012; see further Parker & Vannest, 2009). Inferential statistics have not been used as they are considered inappropriate for single-case quasi-experimental designs, and can overestimate the effectiveness of an intervention (Barlow et al., 2009). In addition, an interview was conducted with the managers from each organisation to gain insight into the benefits and usefulness of the intervention beyond the quantitative measures.

Case Study 1

Participants

The first organisation involved in the resilience intervention was a small non-for-profit organisation in Adelaide, South Australia. The organisation consists of three teams providing services to at-risk youth (e.g. offering temporary and semi-permanent accommodation, and education and employment assistance), as well as an administration team. The operations manager, and one of three service managers attended the three workshops, and completed the intervention workbook, and were responsible for implementing the actions within their teams. The service manager identified their immediate team ($N = 9$), whereas the operations managers identified the whole organisation as their team ($N = 26$).

Survey Results

The survey results (pre- and post- intervention) for case study 1 are compared in figures 1-6, and shows the leaders' mean scores on the seven individual resilience dimensions and their teams' ratings on the seven team/leader resilience dimensions.

Individual Resilience. The first research question explored the extent to which the program increased individual resilience. It can be seen in figure 1 that scores before training were relatively high (4 or more out of 6) indicating a relatively high level of individual

resilience. It can be seen for the operations manager that there were increases on five of the seven factors. However, these increases were not significant. In figure 2 it can be seen that for the Service Manger there were increases on all factors except Finding Your Calling. The resilience of the Service Manager significantly increased following the program ($p = 0.05$) according to the NAP test.

[Insert Figure 1 around here]

[Insert Figure 2 around here]

Team Resilience. The second research question was to assess whether team resilience increased after the program. It can be seen that in figure 3 and 4 that pre-training levels of organisational and team resilience were relatively high (only one factor was below 4 in the Service Manager's team). It can also be seen in figure 3 that the ratings on most of the factors for organisational resilience were either the same or slightly less after training. Figure 4 shows a slight increase on most factors for team resilience after training (particularly for self-care) but these changes were not significant.

[Insert Figure 3 around here]

[Insert Figure 4 around here]

Leader Resilience. The final research question concerned the effect of the intervention on the ability of the leaders to foster resilience within their teams. It can be seen in figure 5 that the ratings for the Operation's Manager were very high before training (most ratings were 5 or above) indicating a high perceived capacity to foster team resilience. In figure 6 the ratings before training are lower for the Service Manager (most being between 3 and 4) indicating a greater capacity for improvement. The ability to foster resilience for both the Operation's Manager and the Service Manager increased significantly, according to the NAP tests ($p = 0.018$ and $p = 0.004$ respectively). Increases can be seen in all components of

resilience, particularly self-care and capability (i.e., seeking feedback and building on what works well).

[Insert Figure 5 around here]

[Insert Figure 6 around here]

Qualitative Comments

In answer to the question ‘which aspects of the program did you find most useful’ the leaders in case study 1 both reported that they found the program offered a great form of self-reflection, and increased their awareness about how they project resilience and how it is perceived by others in the organisation. They reported being able to make changes to the resilience strategies they use themselves, as well as the ways they promote resilience within the organisation.

One of the leaders commented:

I think the biggest message I heard from the surveys was that the teams thought I didn't look after myself. I really reflected on what promoting self-care actually looks like, because I thought it was one of my strengths. What I've done over the last few months is actually talk very openly with people right across the organisation about how I am looking after myself.

The other leader commented:

One of the things I've noticed, is the impact that my demeanour has on the rest of the team. This has shown me that if I'm stressed, but if I come into work happy and joking it has a ripple effect with the team.

In answer to the question concerning ‘what specific changes you have observed from the intervention’, both leaders explained that they did not expect changes to occur at the

organisational level as more effort was put into building the resilience of the service managers' team. Additionally, both leaders were absent for three weeks in between coaching sessions – making it difficult to implement organisation-wide changes.

One leader commented:

I felt I didn't give the program the time and effort it deserved, I'm just so busy and had multiple things on my plate and we've both taken three weeks of leave during the program. I've have a lot more to do with [the other leader's teams] than the other three teams in the organisation which are more established.

With respect to the question concerning 'how beneficial did you find the resources provided' both leaders found the books *Building Your Resilience* and *Building Team Resilience* useful, but found the intervention workbook was overly complicated. One leader commented:

I think they were good resources. The intervention workbook was a bit cumbersome, we found quite a few parts where we had different interpretations about what it was asking. Compared to the books it was not as simple and easy to follow.

Case Study 2

Participants

The second organisation who participated in the resilience program was a large non-for-profit organisation in Adelaide, South Australia which was currently preparing for significant change. The organisation exists to provide disability support, including in-home support, accommodation options, supported employment, lifestyle services, and respite. The three senior operations managers attended all three workshops, completed workbook activities, and implemented actions with their three teams. The three teams the leaders

identified included 15 managers (manager 1), three managers (manager 2) approximately 20 allied health workers (manager 3).

Survey Results

The survey results (pre- and post- intervention) are compared in figures 7-15, which show the leaders' mean scores on the seven individual resilience dimensions and their teams' ratings on the seven team/leader resilience dimensions.

Individual Resilience. It can be seen in figure 7 that several of the first leader's resilience scores before training were relatively low (i.e. below 3 out of 6) – i.e. Staying Healthy, Mastering Stress, and Maintaining Perspective. These factors were all seen to increase following the training. However, the other factors were relatively high at baseline, and resilience was not shown to increase significantly overall. The resilience of the other two leaders was reasonably high pre-training (mostly scoring between 4-5) and no significant changes were observed following the training. However, figures 8 and 9 shows some aspects of resilience remained the same or slightly increased, while others slightly decreased following the training.

[Insert Figure 7 around here]

[Insert Figure 8 around here]

[Insert Figure 9 around here]

Team Resilience. The first team's level of resilience was reasonably high prior to training (scores between 4 and 5). Post-intervention resilience scores remained above 4 out of 6, but each factor of resilience was seen to decrease incrementally. According to the NAP test this decrease was considered significant ($p = 0.02$). Figure 11 shows the leader's team scored relatively high on the resilience scale at baseline. While increases were seen on 6 of the 7 factors it was not considered significant. The third leaders' team scored lower on some

factors (e.g. Resourceful), which were seen to increase following the training. However, overall resilience was not shown to increase significantly.

[Insert Figure 10 around here]

[Insert Figure 11 around here]

[Insert Figure 12 around here]

Leader Resilience. The final research question was to discover the effect of the intervention on the ability of the leaders to foster resilience within their teams. It can be seen in figures 13-15 that the leader's team rated them as relatively effective at fostering resilience (scores mainly between 4 – 5). The first leader's scores were seen to increase on 6 of the 7 factors, which according to the NAP test was statistically significant ($p = 0.02$). No significant changes were observed in the other two cases. Figure 14 shows increases in resilience occurred in four of the factors, whereas figure 15 shows the third leader's scores decreased in four of the factors.

[Insert Figure 13 around here]

[Insert Figure 14 around here]

[Insert Figure 15 around here]

Qualitative Comments

In answer to the question 'what aspects of the program did you find the most useful' the three leaders thought the program was useful for starting conversations, and being aware of how they are viewed from their team's perspective. However, due to the massive changes the organisation is currently experiencing, the leaders believed their team's resilience may suffer despite the strategies they deploy as leaders.

One leader commented:

I'm suspecting the scores are probably worse than they were at the beginning because I think it's been a high degree of change and we've really been under the pump. Both myself and my team. But I don't think that's necessarily reflective of the program I think it's just the timing of it.

They also commented on strategies that were implemented from the program:

Following the survey feedback, I spent a lot of time thinking what can I do to support my team more effectively together. I started promoting [a disliked team member] verbally and singing her praises and people's views changed. I think it has had an impact.

A second leader commented:

In my management team, we discussed a few of these aspects of the program and I think for them it was helpful in that we were reflecting back on each other in terms of being resilient and projecting it, especially to support staff. I think I'm more mindful of projecting resilience, even being really under the pump.

In answer to the question concerning 'the usefulness of the resources provided' the leaders thought there were slightly too many workbooks that they were not able to complete. However, one leader reported that they found the books *Building Your Resilience* and *Building Team Resilience* useful for providing strategies to build their own resilience, which was not as deeply addressed during the coaching sessions. The first leader commented:

Reading the books did make me really focus on the health component for me personally I put some things in place there that I think are really helpful, like getting enough sleep and eating lunch.

The second leader commented:

I think the books were good but I think I only filled in half of one of the workbooks I think that was a bit much.

Concerning the question about ‘what got in the way of achieving the outcomes you had hoped for’ all three leaders were unable to follow-through on the action plan set during coaching, as they felt they had insufficient time and required the support of other senior leaders to implement structural/procedural changes.

The first leader commented:

Because my team's so big I think my team needs a bit more work, the program couldn't deliver those concrete outcomes in such a short time, but nevertheless it was very helpful. I think maybe we could have focused a few sessions on what we can do to pull other people to assist us with changes.

The third leader commented:

The three of us just don't have enough clout to be able to make significant changes across the whole organisation. We need those other senior managers as part of the team.

Discussion

Outcomes and Implications

While workplace resilience programs are increasing in popularity, research on the efficacy of interventions and training is lagging (Vanhove et al., 2015). The present study was designed to provide insight into the effectiveness of short coaching programs by engaging two organisations and multiple leaders. The program produced mixed results, suggesting that the organisational context and individual circumstances must be considered when interpreting the results (Nielson, 2017). The primary research questions were whether

brief resilience coaching could increase resilience at the (1) individual, (2) team, and (3) leader level within organisations. The results from descriptive and quantitative analyses provided partial support for the research questions, and suggests that coaching leaders is most effective for increasing the degree to which they are seen to promote resilience within their teams.

Firstly, the results suggest that individual resilience is more likely to increase when leaders are guided to develop action plans based on their survey results. In both case studies, individual resilience was only seen to increase when leaders were seen to actively invest in building their own resilience by setting personal goals. As the coaching was conducted in groups, individual strategies were not deeply discussed. While resources were provided for participants to read as homework, individual strategies could have been provided more effectively during one-on-one coaching. Although no causal conclusions can be drawn from either case study, it is worthwhile ensuring resilience programs dedicate sufficient time guiding leaders to develop individual action plans that are achievable and within their control to change.

Increasing team resilience was one of the main objectives of this study; however, the results suggest that the program was not sufficient to enable the leaders to create behaviour change within teams. When evaluating the program, it is important to note that the team's resilience scores were all relatively high prior to the training, therefore there was less capacity for improvement and the results may be attributable to ceiling effects. Vanhove et al., (2016) suggest that employees deemed at greater risk of experiencing stress or trauma are more likely to benefit from resilience training, or those lacking the skills and resources needed to overcome adversity. However, as resilience requires active maintenance it is important that even those who have higher levels of resilience still invest in sustaining resilience individually and within their teams (Winwood et al., 2013). Additionally, as

resilience is multifaceted, increases on several aspects of resilience may still have a meaningful impact on the ability of leaders and their teams to manage challenges.

To understand the findings within the context of the program, it is important to look at the results of the R@W Leader Scale, which assesses the extent to which the leader fosters resilience within their team. As the R@W Team and Leader Scales are both completed by the leader's team, it provides a comparison of the behaviours the team believe they are performing (i.e. 'we readily share the workload'), and the behaviours their leader is promoting (i.e. 'our leader develops ways to ensure workload is shared').

In the first case study, both leaders displayed improvements in the degree to which they foster resilience within their teams. While overall the resilience of the service managers' team did not increase significantly, changes can be seen in the extent to which the team invest in self-care behaviours. As this team are a 24-hour youth homelessness service, self-care is considered a crucial element in maintaining their resilience and is still likely to create meaningful change. No improvements were observed amongst the whole organisation, which is most likely due to the insufficient time available to address resilience within multiple teams. Alternatively, the findings could suggest that promoting resilience does not necessarily translate into an increase in those behaviours in the short-term, and may require more time or clear and specific action plans to alter team behaviour.

In the second case study, the leaders did not use the intervention workbook to identify priority areas within their individual teams. Instead they focused on altering organisation systems to support behaviour change – a component of the Behaviour Change Wheel (BCW) (Michie et al., 2011). As these changes were not achieved, it is not surprising that none of the teams' resilience increased following the program. For the first manager's team, resilience significantly reduced post- intervention. This negative result is not expected to be a result of the intervention or the leader's actions, as the same pattern was not observed in the R@W

Leader results. Instead, the leader's team rated them as significantly improving their ability to promote resilience. Additionally, the qualitative data highlighted the stressful period of change that the leader and their team were experiencing during the program.

These findings indicate that the coaching did not allow for successful implementation of the BCW framework, as deep understanding about the different teams' challenges was not achievable in the timeframe. To enhance the program's impact, it may be useful for the coach to conduct several sessions with the team, or coach the leaders individually to gain more in-depth understanding about their teams. The qualitative data show the intervention workbook was too complex to follow without assistance and therefore it should have been completed collaboratively during additional sessions.

From a practical perspective, these results highlight that the efficacy of resilience interventions depends on the implementation of clear and achievable goals. As most managers are faced with high workloads, practitioners must ensure the goals set during coaching are realistic and sustainable so they are not seen as arduous or interfering with managers' day-to-day work. This study offers an alternative to classroom based resilience training, and sheds light on the usefulness of implementing programs within leadership teams. While Vanhove et al. (2015) meta-analysis suggests train-the-trainer approaches are less effective than coaching in terms of building resilience, the current study attempted to combine both approaches by offering leaders with tailored support through coaching.

While this intervention was shown to increase the degree to which leaders promote resilience within their teams, human resource practitioners and organisational psychologists should be aware that greater investment is required to achieve behaviour change at the team-level. In particular, programs should allow sufficient time to ensure leaders can develop clear action plans within sessions, and should consider conducting a combination of individual and leadership team sessions.

Strengths, Limitations and Suggestions for Future Research

A major strength of the current study was the tailored support provided through brief solution-focused coaching. Coaching in small groups provided a way for leaders to get expert support to develop strategies to improve their individual resilience, but also to find ways to address resilience within their teams. Many resilience training programs deliver information in a classroom-setting, which limits the depth of two-way interaction and tailored support that leaders can receive (Vanhove et al., 2015). The tailored approach in this study meant the organisational context was considered when addressing team challenges, as the coaches generated questions about the current climate and influences both internally and externally within their teams.

One of the largest gaps in the coaching literature is the lack of rigorous investigations showing mechanisms by which coaching interventions are effective (Theeboom et al., 2013). Most studies do not evaluate the long-term effectiveness of coaching by measuring the effects over time (Robertson et al., 2015). A strength of this study is that it offers both quantitative and qualitative evaluation from the leaders as well as their teams, and involved a six-week follow up. Using a combination of leader self-report and team-reports (e.g. 180 degree surveys) provides a less biased, and more accurate perception of the resilience of the leaders and their teams. The six-week follow up was designed to allow sufficient time for the leader to implement resilience related strategies from the training program.

Additionally, Robertson et al. (2015) recommend the use of contextually-relevant measures when evaluating resilience programs in the workplace – such as the Resilience at Work (R@W) Scale. The use of the R@W framework offered benefits in terms of identifying areas where resilience can be developed, but conveyed in a language that is simple to understand and identifies areas of resilience that are in control of the teams to change (e.g. providing early response to team members' signs of overload, and celebrating achievements

and sharing success). Therefore, using the R@W not only provided an effective way to evaluate the program, but also guided the coaching sessions by identifying specific areas of resilience requiring development.

Turning to the limitations, the purpose of the current study was not to establish causal links between the resilience program and scale outcomes, but rather to explore what works for the teams involved, and in what circumstances. In organisational research, it is difficult to determine what program content is responsible for observed outcomes, as a range of contextual factors operate alongside the program delivery. Therefore, we cannot confidently predict that the same effects would occur if the program was conducted in a different organisation due to heterogeneity between the way coaching is delivered and the organisational context (Gray, 2016). Additionally, whether the participants self-select themselves to participate in the program is likely to impact their openness to coaching and motivation to engage in the program (Bell, Toth, Little & Smith, 2016).

While it was beneficial to conduct a follow-up after the program, it cannot be confidently ascertained whether any increases in resilience are enduring. As resilience is a dynamic state, rather than a fixed trait, it is expected that resilience levels will only increase or remain stable if employees invest in areas of resilience (Winwood et al., 2013). This requires a continued commitment from the leaders to communicate with their teams and be aware of how they are tracking in terms of their resilience. The level of long-term success in organisational programs depends on the degree to which participants continue utilising the skills and knowledge gained during the program (Vanhove et al., 2015). This commitment is likely to depend on their level of motivation, workload, and prioritisation. It is hoped that involving multiple leaders in this program may increase accountability to implement actions. However, this cannot be determined without tracking resilience over a longer timeframe which was not practical in the current study.

Future research should examine the benefits of extending the program by conducting a coaching session with the leaders' teams. Allowing the team to have input into the action plan may assist in creating behaviour change if the team feel committed and responsible for the strategy. However, from a financial perspective conducting individual coaching with leaders, as well as sessions with all members of the team is reasonably costly – particularly compared with the format of the current study.

Conclusion

While a number of studies have identified beneficial outcomes of offering a tailored approach to building individual resilience, very little is known about building collective resilience within teams (Vanhove et al., 2015). The approach in the present study combined the Resilience at Work Toolkit and Behaviour Change Wheel framework to conduct solution-focused coaching with leaders aimed at building the resilience of leaders and their teams. The program was conducted in two organisations, with mixed findings, as resilience increased in some cases but not others. The findings draw attention to the importance of guiding leaders to develop specific action plans for themselves and their teams, and most importantly allowing sufficient time to implement behaviour change strategies. Future research should continue to investigate the benefits of moving beyond an individualised focus to building resilience, by considering contextual organisational factors, and how leaders can influence their teams' collective resilience.

References

- Alliger, G., Cerasoli, C., Tannenbaum, S., & Vessey, W. (2015). Team resilience. *Organizational Dynamics*, 44(3), 176-184.
- Bardoel, E., Pettit, T., De Cieri, H., & McMillan, L. (2014). Employee resilience: An emerging challenge for HRM. *Asia Pacific Journal of Human Resources*, 52(3), 279-297.
- Baron, L., & Morin, L. (2009). The coach-coachee relationship in executive coaching: A field study. *Human Resource Development Quarterly*, 20(1), 85-106.
- Bell, B. T., Toth, N., Little, L., & Smith, M. A. (2016). Planning to save the planet: Using an online intervention based on implementation intentions to change adolescent self-reported energy-saving behavior. *Environment and Behavior*, 48(8), 1049-1072.
- Dollard, M. F., & Bailey, T. S. (Eds.). (2014). *The Australian workplace barometer: Psychosocial safety climate and working conditions in Australia*. Australian Academic Press.
- Dubois, C. A., & Singh, D. (2009). From staff-mix to skill-mix and beyond: towards a systemic approach to health workforce management. *Human Resources for Health*, 7(1), 87-90.
- Kozlowski, S. W., & Ilgen, D. R. (2006). Enhancing the effectiveness of work groups and teams. *Psychological Science in The Public Interest*, 7(3), 77-124.
- Lester, P. B., McBride, S., Bliese, P. D., & Adler, A. B. (2011). Bringing science to bear: an empirical assessment of the Comprehensive Soldier Fitness program. *American Psychologist*, 66(1), 77-88.
- Masten, A. S. (2011). Resilience in children threatened by extreme adversity: Frameworks for research, practice, and translational synergy. *Development and Psychopathology*, 23(02), 493-506.

- McEwen, K. (2016a). *Building team resilience*. Adelaide: Mindset Publications.
- McEwen, K. (2016b). *Building your resilience: how to thrive in a challenging job*. Adelaide: Mindset Publications.
- Michie, S., van Stralen, M., & West, R. (2011). The behaviour change wheel: A new method for characterising and designing behaviour change interventions. *Implementation Science, 6*(1).
- Øvretveit, J., Bate, P., Cleary, P., Cretin, S., Gustafson, D., McInnes, K., ... & Shortell, S. (2002). Quality collaboratives: Lessons from research. *Qual Saf Health Care, 11*(4), 345-351.
- Robertson, I., Cooper, C., Sarkar, M., & Curran, T. (2015). Resilience training in the workplace from 2003 to 2014: A systematic review. *Journal of Occupational and Organizational Psychology, 88*(3), 533-562.
- 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.
- Silk, J., Vanderbilt-Adriance, E., Shaw, D., Forbes, E., Whalen, D., Ryan, N., & Dahl, R. (2007). Resilience among children and adolescents at risk for depression: Mediation and moderation across social and neurobiological contexts. *Development and Psychopathology, 19*(03), 841-859.
- Theeboom, T., Beersma, B., & van Vianen, A. E. (2014). Does coaching work? A meta-analysis on the effects of coaching on individual level outcomes in an organizational context. *The Journal of Positive Psychology, 9*(1), 1-18.
- Vanhove, A., Herian, M., Perez, A., Harms, P., & Lester, P. (2015). Can resilience be developed at work? A meta-analytic review of resilience-building programme

effectiveness. *Journal of Occupational and Organizational Psychology*, 89(2), 278-307.

West, B. J., Patera, J. L., & Carsten, M. K. (2009). Team level positivity: Investigating positive psychological capacities and team level outcomes. *Journal of Organizational Behavior*, 30(2), 249-267.

Winwood, P. C., Colon, R., & McEwen, K. (2013). A practical measure of workplace resilience: Developing the resilience at work scale. *Journal of Occupational and Environmental Medicine*, 55(10), 1205-1212.

Information for contributors

Submission of academic articles, systematic reviews and other research reports which support evidence-based practice are welcomed. The ICPR may also publish conference reports and papers given at the British Psychological Society Special Group in Coaching Psychology (BPS SGCP) and Australian Psychological Society Interest Group in Coaching Psychology (APS IGCP) conferences, notices and items of news relevant to the International Coaching Psychology Community. Case studies and book reviews will be considered.

Length

Papers should normally be no more than 6000 words, although the Co-Editors retain discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length.

Reviewing

The publication operates a policy of anonymous peer review. Papers will normally be scrutinised and commented on by at least two independent expert referees (in addition to the relevant Co-Editor) although the Co-Editor may process a paper at his or her discretion. The referees will not be aware of the identity of the author. All information about authorship including personal acknowledgements and institutional affiliations should be confined to the title page (and the text should be free of such clues as identifiable self-citations, e.g. 'In our earlier work...').

Online submission process

- (1) All manuscripts must be submitted to a Co-ordinating Editors by email
- (2) The submission must include the following as separate files:

- Title page consisting of manuscript title, authors' full names and affiliations, name and address for corresponding author.
- Abstract.
- Full manuscript omitting authors' names and affiliations. Figures and tables can be attached separately if necessary.

Manuscript requirements

- Contributions must be typed in double spacing with wide margins. All sheets must be numbered.
- Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.
- Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate page. The resolution of digital images must be at least 300 dpi.
- For articles containing original scientific research, a structured abstract of up to 250 words should be included with the headings: Objectives, Design, Methods, Results, Conclusions. Review articles should use these headings: Purpose, Methods, Results, Conclusions.
- Overall, the presentation of papers should conform to the British Psychological Society's Style Guide. Non-discriminatory language should be used throughout. Spelling should be Anglicised when appropriate. Text should be concise and written for an international readership of applied psychologists. Sensationalist and unsubstantiated views are discouraged. Abbreviations, acronyms and unfamiliar specialist terms should be explained in the text on first use.
- Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full. Referencing should follow BPS formats. For example:
Billington, T. (2000). *Separating, losing and excluding children: Narratives of difference*. London: Routledge/Falmer.

Elliott, J.G. (2000). Dynamic assessment in educational contexts: Purpose and promise. In C. Lidz & J.G. Elliott (Eds.), *Dynamic assessment: Prevailing models and applications* (pp.713–740). New York: J.A.I. Press.

Palmer, S. & Whybrow, A. (2006). The coaching psychology movement and its development within the British Psychological Society. *International Coaching Psychology Review* 1(1), 5–11.

- SI units must be used for all measurements, rounded off to practical values if appropriate, with the Imperial equivalent in parentheses.
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations, etc. for which they do not own copyright.

Brief reports

These should be limited to 1000 words and may include research studies and theoretical, critical or review comments whose essential contribution can be made briefly. A summary of not more than 50 words should be provided.

Publication ethics

BPS Code of Conduct – Code of Conduct, Ethical Principles and Guidelines. Principles of Publishing – Principle of Publishing.

Supplementary data

Supplementary data too extensive for publication may be deposited with the British Library Document Supply Centre. Such material includes numerical data, computer programs, fuller details of case studies and experimental techniques. The material should be submitted to the Editor together with the article, for simultaneous refereeing.

Post acceptance

PDF page proofs are sent to authors via email for correction of typesetting but not for rewriting or the introduction of new material. Corrections at this stage in production due to errors made by an author may incur a fee payable by the author or their institution.

Copyright

To protect authors and publications against unauthorised reproduction of articles, The British Psychological Society requires copyright to be assigned to itself as publisher, on the express condition that authors may use their own material at any time without permission. On acceptance of a paper, authors will be requested to sign an appropriate assignment of copyright form.

Checklist of requirements

- Abstract (100–200 words).
- Title page (include title, authors' names, affiliations, full contact details).
- Full article text (double-spaced with numbered pages and anonymised).
- References (see above). Authors are responsible for bibliographic accuracy and must check every reference in the manuscript and proofread again in the page proofs.
- Tables, figures, captions placed at the end of the article or attached as separate files.

Appendix B – Summary Table Showing the Key Features of each Study Selected for Review

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Anitei, Chraif & Chiriac (2012)	<i>Individual resilience</i> No definition	The Romanian Scale of Resilience to Occupational Stress (SROS)	83 adults from the credit department in banks	Not provided	Resilience increased after 6 integrative psychotherapy group sessions.
Blatt (2009)	<i>Team resilience</i> “...the capacity to rebound from adversity strengthened and more resourceful.”	Six-item team resilience measure with questions modified from the “Safety Organizing Survey” (Vogus & Sutcliffe, 2007) and the Brief Resilient Coping Scale (Sinclair & Wallston, 2004). E.g. We actively look for ways to overcome the challenges we encounter.	122 entrepreneurial teams	Author reported high reliability and discriminant validity, however statistics are not reported.	Cross-sectional, correlational design. SEM analyses of aggregated team data showed that creativity: (a) partially mediated the relationship between contracting practices and team resilience, and (b) fully mediated the relationship between communal schemas and team resilience.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Carr et al. (2013)	<i>Individual resilience</i> No definition	Connor-Davidson Resilience Scale (25-item scale) which assesses resilient thinking	160 personnel in a military facility in Afghanistan (27 female)	Cronbach's alpha 0.89	Small positive relationship between resilient thinking and self-reported morale, however morale and resilience decreased across the deployment period.
Gillespie, Chaboyer & Wallis (2009)	<i>Individual resilience</i> "Resilience is defined as the ability to 'rebound' and regain original shape following trauma or shock (Oxford, 1989)."	Connor-Davidson Resilience Scale	735 operation room nurses	Cronbach's alpha ranges from 0.61 – 0.83 for subscales	Years of operation room experience predicted resilience.
Grant, Curtayne & Burton (2009)	<i>Individual resilience</i> No definition	18 item Cognitive Hardiness Scale (Nowack 1990)	Forty-one executives and senior managers from the nursing sector in Australian public health.	Nowack (1990) reports an internal consistency of 0.83	Resilience scores increased after participants completed a leadership development program. Intervention resulted in decreased depression, anxiety, and stress, and increased subjective well-being.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Harland, Harrison, Jones & Reiter-Palmon (2005)	<i>Individual resilience</i> “the capability of individuals to cope successfully in the face of significant change, adversity, or risk.”	4 item resilience measure E.g.How much did you learn from this difficult or challenging experience?	150 part-time MBA students	Cronbach’s alpha .85.	After controlling for Optimism, Attributed Charisma, Idealized Influence, Intellectual Stimulation, Individual Consideration, and Contingent Reward were still significantly positively correlated with resilience.
Hsieh, Chen, Wang, Chang & Ma (2016)	<i>Individual resilience</i> “...a trait or capacity which can be learned and has also been recognised as one of the most important factors in successful adaptation after exposure to a traumatic event”	The Resilience Scale was developed by Friborg <i>et al.</i> (2006) and the Chinese version was established by Wang and Chen. 29-items.	180 emergency department nurses	Internal reliability of 0.89	Nurses who have suffered from workplace violence without depressive tendency had more social support, especially peer support, and a higher resilience score.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Mallak & Yildiz (2016)	<i>Individual resilience</i> “How one proceeds from the point of being confronted with adverse events and the associated risk factors”	Development of 20-item Workplace Resilience Instrument E.g. I take delight in solving difficult problems.	540 executives and nurses in the United States hospital setting	Cronbach’s alpha range from 0.77 – 0.83	Males scored significantly higher as a group than females among all four WRI factors and hospital executives scored significantly higher than nurses on all four factors. Years of healthcare experience was positively correlated with each of the four WRI factors.
Meneghel, Salanova & Martinez (2016)	<i>Team resilience</i> “...the capacity to bounce back from failure, setbacks, conflicts, or any other threat to well-being that they may experience.”	Seven-item team resilience measure previously validated from Salanova et al. (2012) E.g. In difficult situations, my team tries to look on the positive side	1076 employees nested in 216 teams from 40 companies in service, industry, and construction sectors	Internal consistency: Cronbach’s alpha is .85 at individual level and .87 at team level.	SEM analyses of aggregated team data showed that self-rated team resilience mediated the relationship between self-rated collective positive emotions and supervisor-rated in- and extra-role performance.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
McLarnon & Rothstein (2013)	<i>Individual resilience</i> “...a higher-order, multidimensional construct that incorporates the domains of affective, behavioral, and cognitive protective factors and self-regulatory processes.”	Workplace Resilience Inventory E.g. Following the event I was able to maintain a positive outlook on things.	232 university students (31% currently employed)	Cronbach’s alpha ranged from 0.76 – 0.87	The results of this study present evidence of significant bivariate and multivariate empirical relations between resiliency, as assessed by the WRI, and well-being outcome variables (e.g., depression, stress, and life satisfaction).
Pidgeon, Ford & Klaassen (2014)	<i>Individual resilience</i> Resilience defined as competence to cope and adapt in the face of adversity and to bounce back when stressors become overwhelming	The resilience scale (RS-14) Developed to measure an individual’s ability to cope effectively when faced with adversity.	44 human services professionals	Previous studies found Cronbach’s alpha ranging between 0.85 - 0.94.	No significant differences between the retreat and control groups were found on resilience, mindfulness and self-compassion variables following the Mindfulness with Metta Training Program (MMTP). However, significant improvements were observed over time for the retreat group for resilience at four-month post MMTP intervention.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Rogerson, Meir, Crowley-Mchattan, McEwen & Pastoors (2016)	<i>Individual resilience</i> Resilience is often broadly characterized as the ability to positively adapt to adversity. There is now a broad consensus that resilience is a dynamic process that can be taught and developed.	The 20-item Resilience at Work (R@W) Scale E.g. I have a strong and reliable network of supportive colleagues at work	28 participants from an Australian power distribution company	Cronbach's alpha 0.84 for the overall scale	A 5-week resilience intervention resulted in improved resilience, in 5 out of 7 R@W subscales (finding your calling, maintaining perspective, managing stress, interacting cooperatively, and staying healthy).
Salanova, Llorens, Cifre & Martinez (2012)	<i>Team resilience</i> "...the ability to manage disturbances of the normal workflow and to recover a dynamically stable state that allows the organization's goals of production and safety to be achieved."	Seven items measuring team resilience, based on Mallak's (1998) principles for implementing resilience in organizations E.g. My team makes sure to have resources (e.g., information, emotional support, practical assistance and financial resources) to overcome crisis and difficult times	710 employees within 303 work units from 43 companies including education, manufacturing, and finance (Study 2)	Internal consistency: Cronbach's alpha is .83 Validity: HERO model validated using 14 CEOs with 90% inter-rater agreement. Convergent validity and discriminant validity also reported.	SEM of aggregated work unit data showed employee health (a latent variable comprising team efficacy, resilience and engagement) mediating the relationship between healthy organisational resources and supervisor-rated healthy organisational outcomes.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Shakespeare-Finch & Daley (2016)	<i>Individual resilience</i> No definition	Brief Resilience Scale (BRS) Assesses the ability to bounce back or recover from stress.	740 Australian emergency services ambulance officers	Cronbach's alpha 0.88	Workplace belongingness was significantly associated with reduced distress levels and enhanced resilience levels
Sood, Prasad, Schroeder & Varkey (2011)	<i>Individual resilience</i> Resilience refers to the ability of an individual to withstand adversity.	Connor-Davidson resilience scale	32 department of medicine physicians	Not reported	Resilience increased after participants completed a Stress Management and Resiliency Training (SMART) program, measured after 8 weeks compared to wait-list control. Intervention improved stress, anxiety, and quality of life.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Sharma & Sharma (2016)	<i>Team resilience</i> “...the ability of the teams/ groups to bounce back and sustain in the facade of adverse conditions.”	50 item team resilience scale with 10 factors adapted from Morgan et al.’s (2013) framework for team resilience in elite sport E.g. Mistakes are openly discussed in the team in order to learn from them	152 IT executives including team leaders and project managers	Internal consistency: Cronbach’s alpha for total scale is .84 Validity: Model demonstrates convergent and discriminate validity	Cross-sectional design. Hierarchical CFA of team resilience items indicated best-fitting model as 10 first-order factors, loading on 4 second-order factors, loading on 1 overarching team resilience factor.
Sherlock-Storey, Moss & Timson (2013)	<i>Individual resilience</i> “When beset by problems and adversity sustaining and bouncing back and even beyond to attain success.”	PsychCap questionnaire measuring Hope, Optimism, Resilience, and Self-Efficacy	12 middle managers from UK public sector	Not reported	Participants reported increased resilience levels and confidence in dealing with organisational change following a coaching programme.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Stephens, Heaphy, Carmeli, Spreitzer & Dutton (2013).	<i>Team resilience</i> “...the ability of individuals, groups, and organizations to absorb the stress that arises from these challenges and to not only recover functioning back to a “normal” level but also learn and grow from the adversity to emerge stronger than before.”	Three-item measure designed to assess a team’s capacity to bounce back from a setback (Study 2) E.g. This top management team knows how to cope with challenges	82 top management teams from Israeli firms	Internal consistency: Cronbach’s alpha for total scale is .92	Multiple regression analysis of team-level data showed that ‘emotional carrying capacity’ mediated the relationship between trust and team resilience.
Stevens et al. (2010)	<i>Individual resilience</i> “...the capacity to adapt and respond under conditions of stress or threat”	Abbreviated 2-item version of Connor-Davidson Resilience Scale	663 Australian ambulance officers	Not provided	Ambulance drivers with high personal resilience scores reported higher response readiness than did those with low/moderate personal resilience scores

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
van der Kleij, Molenaar & Schraagen (2011)	<i>Team resilience</i> “...the ability of teams to respond to sudden, unanticipated demands for performance quickly and with minimum decrement of performance.”	Five-item team resilience measure based on Woods’ (2006) definition of resilience to recognise, adapt to, and handle unanticipated perturbations. E.g. As a team we were very much capable of anticipating surprising task disturbances.	105 students randomly assigned to 35 three-person teams.	Internal consistency: Cronbach’s alpha for total scale is .85.	Results of one-way ANOVAs showed that participants receiving transformational training scored higher on recovery and adaptation but not on performance or self-rated resilience than those in the other groups.
Tian et al. (2015)	<i>Individual resilience</i> “Resilience, defined as the process of adapting well in the face of adversity, trauma, tragedy, and even significant sources of threat”	10 item Connor-Davidson Resilience Scale	575 telephone operators in a Chinese call centre	Internal consistency 0.89	Higher levels of resilience were associated with a substantially lower risk of job burnout, which was partially mediated by psychological empowerment

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Waite and Richardson (2003)	<i>Individual resilience</i> “A force within everyone that drives them to seek self-actualisation, altruism, and be in harmony with a spiritual source of strength.”	20 items drawn from the Spirit Score Scale and adapted to reflect resilience dimensions.	150 participants (73 in experimental group, and 77 in control)	Cronbach’s alpha ranged from 0.90-0.94	Intervention resulted in improved interpersonal relations.
West, Patera & Carsten (2009)	<i>Team resilience</i> “...team resilience serves to provide teams with the capacity to bounce back from failure, setbacks, conflicts, or any other threat to well-being that a team may experience.”	Six items adapted from the PsyCap questionnaire, using the referent-shift approach to adapt individual capacities to team capacities (Luthans et al. 2007). E.g. Our team usually manages difficulties one way or another when working.	308 university students randomly assigned to 101 teams	Internal consistency: Cronbach’s alpha is .76	Repeated measures design. Participants completed identical project tasks on 4 occasions, with predictors (POBs) assessed before, and outcomes (cohesion, cooperation, coordination, team satisfaction, conflict) after, task completion at T1 and T4. Hierarchical regression analysis of aggregated team data at T4 showed that after controlling for T1 levels of the DV, team resilience predicted cohesion and cooperation at T4.

Table 1

Studies Examining Individual and Team Resilience in the Workplace

Author	Definition of Resilience (Individual/Team)	Measure of Resilience	Population	Reliability/Validity	Outcomes
Winwood, Colon & McEwen (2013)	<i>Individual resilience</i> [Resilience is] the process of negotiating, managing, and adapting to significant sources of stress or trauma. Assets and resources within the individual, their life and environment facilitate the capacity for adaptation and “bouncing back” in the face of adversity.	25-item Resilience at Work (R@W) scale. E.g. I am careful to ensure that my work does not dominate my personal life	Study 1 – 345 Study 2 – 195 working professionals	Cronbach’s alpha for the whole scale is 0.84, with subscales ranging from 0.60 - 0.89 Validity supported by negative correlation with maladaptive outcomes of work pressure such as chronic fatigue, poor sleep, physical and emotional health problems.	Positive high correlations reported between R@W score and recovery, health and engagement
Youseff & Luthans (2007)	<i>Individual resilience</i> “...the developable capacity to rebound or bounce back from adversity, conflict, and failure or even positive events, progress, and increased responsibility.”	Block and Kremen’s (1996) 14-item, 4-point Likert-type Ego-Resiliency Scale. E.g. “I enjoy dealing with new and unusual situations”	Study 1 – 1032 participants Study 2 – 232 participants	Cronbach’s alpha 0.78 in study 1 and 0.77 in study 2.	One study found resilience relates to job satisfaction, work happiness, organisational commitment (but not performance)

Appendix C – Behaviour Change Wheel Modifications

Behaviour Change Wheel Steps	Adaptation to Suit Resilience Intervention
1. Define the problem in behavioural terms	1. Define the organisational challenges that can be addressed by building resilience
2. Select the target behaviour	2. Select several resilient behaviours to focus on using the results of the Resilience at Work Team Scale
3. Specify the target behaviour	3. Specific the target behaviours, but also consider behaviours that are strengths to build on
4. Identifying what needs to change using the COM-B model	4. Identify what actions can change behaviour using the COM-B model
5. Selection of relevant intervention functions from the list of education; persuasion; incentivisation; coercion; training; restriction; environmental restructuring; modelling and enablement.	5. Selection of relevant organisational supports within the intervention functions categories (education/training; persuasion; incentivisation; coercion; restriction; environmental restructuring; modelling and enablement). E.g. incentivisation may involve reward and recognition programs
6. Selection of relevant policy categories to support the delivery of the identified intervention functions from the list of communication/marketing; legislation; service provision; regulation' fiscal measures; guidelines; and environmental/social planning.	6. Create an action plan, considering actions to change behaviours, organisation systems to support behaviour change, and additional factors that can enable the changes.
7. Selection of Behaviour Change Techniques from the taxonomy	<i>Identified as too complex and irrelevant for organisational use</i>
8. Selection of modes of delivery	<i>Identified as too structured for organisational use</i>



Team Guide

Building Team Resilience

Using the Resilience

At Work[®] Team Scale



Kathryn McEwen
Emily Lawrie

This manual is copyright ©

Working With Resilience.

No part of this document may be reproduced by
any means, including scanning and photocopying
without express permission of Working With Resilience

Section 1: Introduction

Why Resilience?

Workplace turbulence has increased the focus on resilience. Increasingly, teams need to adapt quickly and operate in uncertainty, while still managing high job demands. They are seeking ways to sustain their effectiveness in this environment without comprising physical and psychological health.

Workbook Aims and Outcomes

Here we offer a comprehensive framework to build resilience within teams. We combine the *Resilience at Work® (R@W) Team Scale* and elements of the *Behaviour Change Wheel*, a proven methodology for creating behaviour change.

Completing the workbook steps assists you in developing a shared plan to build resilience in your team(s). You will:

- Learn what resilience is and how you can create a team climate that fosters resilience
- Define the team challenges that you have that you believe require employee resilience
- Determine the desired individual and team behaviours that will help you meet these challenges
- Assess your team's current performance on the 7 elements of team resilience using the R@W Team Scale
- Identify and prioritise the most effective strategies to build on strengths and address gaps in achieving team resilience
- Write your plan.

While the process may seem detailed, the aim is to focus your strategies to maximise success with the minimum effort and cost. Often, we take a scatter-gun approach and invest a lot of time and money on interventions without being clear on the value of the approach taken.

The R@W® Approach

How We Define Resilience at Work

We adapt a broader definition of resilience beyond 'bounce back' that comprises the capacity to manage the everyday pressures but also the ability to positively adapt to changes and position and be proactive around future challenges.

We define it as:

The collective capability of the team to manage the everyday stress of work and remain healthy, to adapt to, and learn from unexpected setbacks, and to prepare for future challenges proactively.

Within this definition we would expect our teams to be robust enough to manage their role effectively, yet agile enough to both respond to, and be the leaders in, change. The actions that enable this are outlined in the R@W Toolkit image below.

RESILIENCE AT WORK (R@W) TOOLKIT



Taking a Systemic Approach Using the R@W® Toolkit

We know that sustainable organisational change is best created through taking a systemic approach – that is understanding the interrelationships between the actions of employees, teams and leaders and the organisational structures and processes that they work within.

The R@W Toolkit takes such an approach through offering a complementary suite of assessments that recognise how employee, leader and team actions impact on each other. It identifies the actions required at each level to create resilience. The three measures are described below.

R@W Individual: This is a measure based on the Sustain 7 Model that assesses individual employee resilience. It comprises 7 components proven to create personal resilience at work.



R@W Team: This measure complements and builds on the R@W Individual by assessing the behaviours that create resilience in groups of people who work together. It recognises that we each need to take accountability for our personal resilience, but we need alignment in what we do to build collective resilience. Often it is misalignment that works against performance and wellbeing within groups.

The R@W Team incorporates aspects traditionally known as essential for teamwork but also includes elements that are emerging as important team behaviours within challenging jobs such as resource optimisation and adaptability.

The measure has been designed to focus on actions that can be implemented by the group itself. While group-level actions can be inhibited by external demands, both within and outside of the organisation, the premise is that teams can still create a sub-culture that contributes to resilience.



R@W Leader: This measure assesses the leader behaviours that support and foster resilience in employees and teams. Managers and team leaders that promote and support resilience tend to engage in several behaviours. Typically, they assist team members to:

- Build capacity and optimise the resources the team have
- Manage the workload and any operational challenges
- Link into support and networks available
- Anticipate, position for, and adapt to change – rather than wait for it to happen
- Ensure work practices are sustainable from a physical and psychological wellbeing perspective.

The R@W approach assumes that within a team we each need to take responsibility for our own resilience but that we also need to work with colleagues to create working relationships and structures that are conducive to sustainable performance within our work groups. It also assumes that the actions taken by the leader will promote, or prohibit, what people can do individually and together.

The Behaviour Change Wheel

Building resilience at work is all about changing behaviours. The approach we use here integrates elements of the Behaviour Change Wheel (BCW)¹. This was developed by Susan Michie and colleagues and is a powerful tool for designing and evaluating behavior change interventions. It has been used extensively in health and community programs and has been adapted here to suit organisational use.

Many interventions are unsuccessful as they are not systematic or have no theoretical basis. Some also offer a set menu that fails to take work context into account.

1. Michie, S., van Stralen, M. M., & West, R. (2011). The behaviour change wheel: a new method for characterising and designing behaviour change interventions. *Implementation science*, 6(1), 42.

The Behaviour Change Wheel synthesises 19 theories of behaviour change into a simple framework that links behaviour with intervention functions. For an intervention to be successful we must consider what behaviours need to change, how realistic is it in the current work context, and *how* it will be most effectively achieved.

Integrating the Behaviour Change Wheel and the R@W Toolkit involves the following steps:

1. Understanding the behaviour change we need

- What are the challenges our team face?
- What are the desired employee behaviours to meet these challenges?
- Which of the desired behaviours exist that we can build on (that is our strengths)?
- What behaviours need to change and which of these will have most impact on managing the challenges we have?

2. Identifying the intervention options available

Once clear around what behaviours need to change we can then ask:

- What are the best ways to change the behaviours?
- What do we need to do as a team to successfully make changes?

Section 2: Creating Sustained Behavior Change Within Teams

Step 1: Defining Your Challenges

Resilience is a word often used as the solution to a variety of workplace problems. Typically, it is seen as being helpful for employee challenges such as:

- Adapting to change within or without the organisation
- Working during prolonged periods of uncertainty
- Re-building following organisational down-sizing or restructure
- Being able to meet high or unrealistic community or customer expectations
- Staying productive despite increasing demands to do more with less, and
- Work that is emotionally demanding such as irate customers or client groups with complex needs.

Before you develop your resilience plan, it is important to be clear about the issues you face and to what extent employee resilience is the answer. The clearer you are around your challenges and the outcomes you are looking for, the more effective your strategy will be.

Activity 1: Listing the Challenges

In worksheet 1 below, list the *top* 3-5 challenges faced by your team that demand either increased resilience or maintenance of current levels of resilience in the face of future demands.

Be as specific as you can, for example rather than stating 'change' or 'stress' specify the exact nature of the change or source of stress. Some examples of challenges are listed below for guidance.

Worksheet 1: Example

Challenge 1	Merger of X and Y departments
Challenge 2	Increased competition within our industry sector from XYZ
Challenge 3	High workloads from the new XYZ systems being implemented in addition to usual workloads
Challenge 4	Complex clients with challenging behaviours
Challenge 5	Re-building of the team following staff losses

Worksheet 1: Identify Your Key 3-5 Team Challenges

Challenge 1	
Challenge 2	
Challenge 3	
Challenge 4	
Challenge 5	

Activity 2: Determining the Vision: Desirable Behaviours

Next, reflect on your vision of what it would look like if people were effectively managing the challenges identified above – that is the **desirable** outcomes. Record your thoughts in worksheet 2. This is an initial reflection only as these will be explored more fully later. Be broad and aspirational in your thinking - listing what you would ideally like rather than listing the removal of current deficits. For example list 'we look at how to do things better as part of our everyday work' rather than 'we need to be less change resistant'. An example is provided.

Worksheet 2: Example

Describe Challenge	Desired Outcomes
<p>Merger of X and Y departments</p>	<p>We identify with being part of the new department and understand our contribution to its goals and purpose</p> <p>New relationships are built despite past inter-department rivalries</p> <p>Those who were in Dept. X have adapted to the different style of their new manager (that is the one from Dept.Y)</p>
<p>Increased competition within our industry sector from XYZ</p>	<p>We are in-tune with developments in the industry and are well-networked with key stakeholders</p> <p>There is an appetite for innovation as well as the talent to stay competitive</p> <p>We are motivated to do things differently and up-skill to stay relevant</p>
<p>High workloads from the new XYZ systems being implemented in addition to usual workloads</p>	<p>We have clear priorities during the transition period and have supports and strategies to manage additional pressure</p>
<p>Complex clients with challenging behaviours</p>	<p>We have ways to sustain the emotional demands of the work as well as the intensity of workload</p>
<p>Re-building of team following staff losses</p>	<p>People are re-energised after the prolonged period of uncertainty about their jobs</p> <p>We are engaged in our new responsibilities and we have developed ways to provide services with less staff</p> <p>The new work units are operating collaboratively and effectively</p> <p>We are managing the loss of the corporate knowledge of those who departed</p>

Worksheet 2: Desirable Outcomes

Describe Challenge	Desired Outcomes
1	
2	
3	
4	
5	

Step 2: Assessing Priorities Using the R@W® Team

For the next step, we will use the R@W Team to more clearly identify behaviors that best relate to your team's challenges.

Activity 3: Determining Where to Focus Attention

When deciding what to target first, it is worth considering which behaviours will have most impact on generating positive change, as well as which are the most likely to change.

To do this your team needs to take the R@W Team Scale so that you can complete Worksheet 3. If you are working in a large division it will be necessary to survey a team that is representative of the others, rather than the whole division as the R@W Team Scale is designed around the team unit – that is a group of people with inter-related tasks.

The steps are as follows:

- 1: For each of the R@W Team behaviours listed, rate (in column 3) how important these are in meeting your identified challenges. Rate from 0-6, where 0 is of no importance and 6 is extremely important. The easiest way to do this is to identify the most important and least important ones first and use these as a reference point for the others.
- 2: In the fourth column rate the occurrence of these behaviours by adding in the scores on your R@W Team report.
- 3: For behaviours rated from 0-3 in column 4 **only**, rate the likelihood of change in column 5 (with 0 being no capacity to change and 6 being easy to change). This step is important as a lot of energy can be directed towards making changes that are unlikely to occur. The aim is to identify areas where effort spent will reap benefits. A factor in this rating could involve elements that are outside of the team's influence that inhibit shifts in the team's approaches.

Worksheet 3: Defining Team Behaviours

Team Behaviours	R@W Team Component	Importance (Impact on challenge)	Current status (Rating on R@W Team)	Likelihood of change
Maintaining perspective and being proactive around issues	Robust			
Creating shared purpose and values	Robust			
Having shared goals and workload	Robust			
Having the talent to be effective	Robust			
Being adaptable to change	Robust			
Effectively monitoring, prioritising and managing team workload	Resourceful			
Optimising resources and team member strengths to achieve outcomes	Resourceful			
Focusing on continuous improvement	Resourceful			
Being optimistic and focusing on possibility not negativity	Perseverance			
Having effective problem-solving and decision-making processes	Perseverance			
Ensuring focused effort and persistence despite setbacks	Perseverance			
Creating a culture that supports self-care and good stress management practices	Self-care			

Team Behaviours	R@W Team Component	Importance (Impact on challenge)	Current status (Rating on R@W Team)	Likelihood of change
Having awareness and providing early response to member signs of overload	Self-care			
Encouraging life-work balance	Self-care			
Seeking out and acting on feedback relating to team performance	Capability			
Looking for and building on what works well	Capability			
Accessing the support and advice needed	Capability			
Accommodating personal lives where possible	Connected			
Encouraging belonging within the team	Connected			
Co-operating and supporting each other to get the job done	Connected			
Celebrating achievements and sharing success	Alignment			
Seeking out and acknowledging progress	Alignment			
Developing team member skill and knowledge	Alignment			
Coaching and debriefing with each other	Alignment			
Resolving interpersonal conflicts promptly	Alignment			

Activity 4: Building on Strengths

While the focus so far has been on what needs to change, it would be a mistake to overlook existing strengths. It is likely that you have already developed a lot of useful strategies to manage the team's challenges. It is therefore important that you identify and value what you are already doing well. This part of the plan then becomes consciously acknowledging what you are doing well and ensuring it is preserved. Sometimes, as pressure and change increase, the solid aspects of how we work become lost.

There may also be opportunity to better leverage from strengths. It is always easier to build on what is already working rather than change to an alternate approach although, in practice, we generally need to explore both.

Your strengths will be easily identifiable from Worksheet 3. They are the actions rated as occurring frequently within the team (ratings of 4-6 in column 4), but also of importance within the current work context (rated high in column 3). Unfortunately, what the team thinks is useful may not always align with what is needed to perform and stay relevant when the operating landscape is changing

Worksheet 4 provides an opportunity to develop a plan for to leverage your strengths. Consider:

- What team strengths you currently have that you need to preserve
- What else could you do as a team to use these strengths.

Be sure to focus on areas that are within the scope of influence of the team. You may have lots of ideas but if these cannot be acted upon they can be more de-motivating than motivating. Consider too if there are organisational systems or processes that you can link your actions to. Some ideas on this are listed on Table 2 in the Appendix.

An example is provided. More ideas are listed in the book *Building Team Resilience*.

Worksheet 4: Example

Strength	Actions to build/leverage
Optimising resources and team member strengths to achieve outcomes	Meet to discuss personal strengths and ways to use these more Organise a weekly re-group to ensure staff are sharing work priorities
Having the talent to be effective	Identify areas for cross-skilling and agree how to do this
Coaching and debriefing with each other	Continue to make space for debriefing with each other after difficult encounters - even when busy
Encouraging life-work balance	Share out-of-work priorities and how team members can support each other in holding boundaries around these (e.g. getting away from work on time)
Celebrating achievements and sharing success	Implement monthly shared lunch with informal exchange of good news
Creating a culture that supports self-care and good stress management practices	Make sure breaks and out-of-hours access arrangements are maintained as workload increases Implement occasional walk and talk meetings

Worksheet 4: Identifying Strengths

Strength	Actions to build/leverage

Activity 5: Addressing Gaps

Having explored team strengths, you can now identify, based on your responses in Worksheet 3, the team behaviours that:

- Are important to your challenges
- Occur less frequently within the team (as per R@W Team report rating in column 4)
- Are more likely to be changed.

List below 3-5 areas that you see as a priority to work on. Less is often more, so selecting fewer behaviours can be more effective. You may find, in any case, that some interrelate. For example, if you have chosen continuous improvement as an area that is lacking, you may find problem solving processes and mechanisms to seek performance feedback both need attention. If there is a sense of entitlement rather than alignment with purpose and values, you may discover that workload is not shared and there is limited mutual support.

Worksheet 5: Identifying Priority Areas

Target Behaviours
1.
2.
3.
4.
5.

Step 3: Taking Responsibility for Individual Resilience

Teams are made up of individuals, each of whom lends to the overall team dynamic. If we take a systems approach this means that each team member needs to ensure they invest in their own resilience, as well as that of the team.

To assist with this, individuals can complete the R@W Individual Scale and the accompanying workbook *Building Your Resilience Using the R@W Scale*.

The actions required to build personal resilience overlap with those needed in the team but are different. The individual actions centre around how a person manages the work pressures, is adaptable and is matched to the role they are employed in. Team resilience is created when its members are aligned in *collectively* managing pressure, adapting to changes and positioning for future challenges. Without alignment both personal and team resilience are affected.

Table 1 in the Appendix provides a matrix mapping the components of the R@W Scale Individual with the R@W Team.

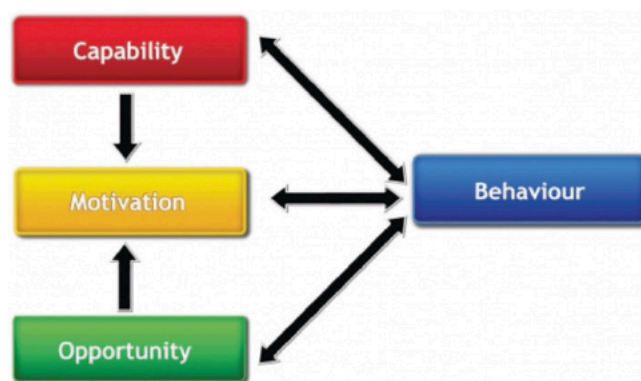
Step 4: Identifying the Support Required for Change

Now that you have specified the target behaviours in detail, the next step is to identify *what* needs to change in the workplace to achieve the desired changes. Devoting sufficient time and effort to fully understand the work context is a critical and often overlooked step.

The BCW uses a model called COM-B which stands for Capability Opportunity Motivation – Behaviour. The model suggests we are more likely to undertake action if we have the capability, motivation, and opportunity to do so.

This requires you to ask yourselves, as a team:

- What skills and knowledge do we need so we are capable of achieving our desired change?
- How can we motivate each other to engage in our desired behaviours?
- What opportunities can we create to make it easier, such as time and support?



Activity 6: Applying the CMO-B Model to Identify Actions

Apply the CMO-B model to each of the 3-5 target behaviours you have identified in Worksheet 5. For each behaviour list ideas to build capability, create opportunity or instill motivation.

Once again an example is provided to guide you.

Worksheet 6: Example

Target Behaviour	Build Capability (Skills/Knowledge)	Instill Motivation	Create Opportunity
Negativity towards changed XYZ process	<ul style="list-style-type: none"> Provide structured time to air concerns and agree on actions Ensure staff have the skills or capability needed 	<ul style="list-style-type: none"> Talk about the 'why; behind the changes and the benefits 	<ul style="list-style-type: none"> Provide access to view areas where processes are working well Minimise airtime spent on complaining Reframe negativity Provide time for implementation on top of usual workload
Lack of engagement in new organisational direction	<ul style="list-style-type: none"> Link new requirements to personal development opportunities 	<ul style="list-style-type: none"> Connect job tasks to overall direction and purpose Link changes to client needs 	<ul style="list-style-type: none"> Provide opportunities to hear leaders talk about the vision
Collaboration around workload	<ul style="list-style-type: none"> Develop skills in problem solving processes Resolve existing conflict Buddy up staff to cross-skill or share knowledge Address poor behaviours 	<ul style="list-style-type: none"> Regularly track and share progress towards outcomes Develop a team charter agreeing on expectations of each other 	<ul style="list-style-type: none"> Implement problem solving meetings around key challenges Identify projects that require collaboration

Worksheet 6: Identifying What Actions Can Change Behaviour

Target Behaviour	Build Capability (Skills/Knowledge)	Instill Motivation	Create Opportunity

Section 3: Putting it all together

Appendix E – Tables Contained in the Literature Review

Table 2

Measures of Individual Resilience

Measure	Number of Studies
The Romanian Scale of Resilience to Occupational Stress	1
Connor-Davidson Resilience Scale	4
Cognitive Hardiness Scale	1
The Resilience Scale	2
Workplace Resilience Instrument	1
Workplace Resilience Inventory	1
Resilience at Work Scale	2
Brief Resilience Scale	1
Ego-Resiliency Scale	1
Spirit Score Scale	1
PsychCap Questionnaire	1

Table 3

Seven Factors of Resilience at Work (R@W) Scale

Factor	Description
Finding Your Calling	Knowing and holding onto personal values, deploying strengths, and having a good level of emotional awareness and regulation
Living Authentically	Seeking work that has purpose, gives a sense of belonging, and fits well with one's core values and beliefs
Maintaining Perspective	Having the capacity to reframe setbacks, maintain a solution-focus and manage negativity
Managing Stress	Employing work and life routines that help manage everyday stressors, maintain work-life balance and ensure time for relaxation
Interacting Collaboratively	Seeking feedback, advice and support, and providing support to others
Staying Healthy	Maintaining a good level of physical fitness, a healthy diet and adequate sleep
Building Networks	Developing and maintaining personal support networks

Table 4

Four factors of the Workplace Resilience Instrument

Factor	Description
Active Problem-Solving	Understanding a need to do something positive, rather than merely talking about the problem or hoping it will disappear
Team Efficacy	Resilient individuals operate well in a team, by discussing team members' roles and goals are made known with everyone on the team
Confident Sense-Making	Extracting order out of chaos, and filtering out unnecessary information to make decisions
Bricolage	Creatively developing solutions with the resources that you have available

Table 5

Eight Factors of Workplace Resilience Inventory (WRI)

Factor	Description
Initial Responses	Initial reactions towards adverse circumstances including interpretation of event
Affective Personal Characteristics	Characteristics that provide well-being and self-esteem to avoid overreaction or succumbing to extreme emotions
Behavioural Personal Characteristics	Characteristics that provide a sense of personal control and self-efficacy, as well as self-discipline to achieve goals and dealing with challenges
Cognitive Personal Characteristics	Characteristics that provide a sense of meaning, including being open minded and ascribing meaning to experiences
Opportunities, Supports, And Resources	Sources of social support from family, significant others, community, and workplace relationships
Affective Self-Regulatory Processes	Mechanisms related to controlling and regulating emotions
Behavioural Self-Regulatory Processes	Mechanisms related to controlling ineffective behaviours
Cognitive Self-Regulatory Processes	Mechanisms related to understanding and controlling ineffective thoughts and thinking patterns

Table 6

Four Factors of the Team Resilience Scale

Factor	Description
Group Structure	Including task design, task composition and group norms
Mastery Approaches	Shared attitudes and behaviours of the team that promote an emphasis on team improvement, including team learning and flexibility
Social capital	Features of social life, networks, norms, and trust which enable participants to act together more effectively and pursue shared objectives.
Collective efficacy	The groups' shared belief in its ability to organise and execute the actions required to reach certain levels of achievement

Table 7

Summary of Recommendations to Address the Key Issues within the Literature on Resilience in the Workplace

Recommendations for practice	
Conceptualisation	<p>1. The definition of resilience should be specific to the workplace, unless measuring resilience in response to trauma</p> <p>2. Definitions of team resilience should ensure they are directed at collective resilience in the workplace to ensure a distinction between individual resilience</p>
Measurement	<p>3. To gain greater insight into areas requiring development, multi-dimensional measures of resilience should be used that have an adequate number of items to inform development (>20)</p> <p>4. Measures used to assess resilience in the workplace should have items specific to work challenges that employees face</p> <p>5. When attempting to capture employees' current levels of resilience, both individual and team resilience should be measured in cases where individuals work in teams</p>
Further exploration	<p>6. Greater investigation is required to understand the organisational benefits of increasing resilience, particularly at the team level. Outcomes such as absenteeism, sick leave, job performance, and productivity should be explored.</p>

7. Team and individual resilience should be measured in the same study to examine convergence and links to organisational outcomes

8. Future research should examine the impact that leaders and managers have on the resilience capacity of individuals and teams

9. The long-term benefits of resilience training should be assessed to determine what factors affect the transfer of resilience training into the workplace and what factors affect maintenance (e.g. culture / support from leaders)

Appendix F – Tables Contained in the Research Report

Table 8

Areas to Invest in to Build Individual Resilience

Area of Resilience	Description
Finding Your Calling	Knowing and holding onto personal values, deploying strengths, and having a good level of emotional awareness and regulation
Living Authentically	Seeking work that has purpose, gives a sense of belonging, and fits well with one's core values and beliefs
Maintaining Perspective	Having the capacity to reframe setbacks, maintain a solution-focus and manage negativity
Managing Stress	Employing work and life routines that help manage everyday stressors, maintain work-life balance and ensure time for relaxation
Interacting Collaboratively	Seeking feedback, advice and support, and providing support to others
Staying Healthy	Maintaining a good level of physical fitness, a healthy diet and adequate sleep
Building Networks	Developing and maintaining personal support networks

Table 9

Areas to Invest in to Build Team Resilience

Area of Resilience	Description
Robust	Having shared goals and values and the skills needed to do the job
Resourceful	Developing effective team processes that enable a clear focus on priorities and harnessing team member strengths
Perseverance	Staying optimistic and having a solution focus
Self-Care	Promoting and deploying good stress management routines and being alert to signs of overload in team members, and supporting work-life balance
Capability	Continually building capacity through accessing networks and support, seeking feedback and building on what works well
Connectedness	Caring for colleagues as people and being co-operative and supportive with each other
Alignment	Aligning and developing talents to create the desired outcomes, sharing and celebrating success

Table 10. The Workshop Focus for Each Resilience-Based Coaching Session

<p>Session 1 – individual resilience (1.5 hours)</p> <ul style="list-style-type: none">• Introduction to the concept of individual resilience – definitions provided and leaders asked to reflect on when resilience is required in their work• Discussion of the Resilience at Work (R@W) Sustain 7 Model• Return of leaders’ baseline scores and discussion around interpretation of scores• Discussion of concerns raised about maintaining individual resilience (e.g. managing workload) and actions discussed to improve resilience <p>Homework:</p> <ul style="list-style-type: none">• Individual reflection on the results of the R@W scale. Recommended reading <i>Building Your Resilience</i>, and completion of <i>Building Your Resilience: Workbook</i> (developed by Kathryn McEwen)• Develop 3-4 actions to increase personal resilience• Complete activity 1 and 2 of the intervention workbook addressing what challenges to address in the organisation through resilience.
<p>Session 2 – team resilience (1.5 hours)</p> <ul style="list-style-type: none">• Discussion of workplaces challenges impacting the team and organisation as a whole• Overview of team resilience model• Return of team results and discussion around interpreting the results e.g. large range of responses, high and low scores. <p>Homework</p> <ul style="list-style-type: none">• Provide results to teams and create discussion to create 2-3 actions for each team to work on.• Recommended reading <i>Building Team Resilience</i> and the <i>R@W Leader Workbook</i> (developed by Kathryn McEwen)• Identify priority areas according to activity 3 in the intervention workbook.
<p>Session 3 – leader resilience (1.5 hours)</p> <ul style="list-style-type: none">• Discussion about what the leaders have been doing between the second and third session, and experience of sharing R@W team reports with teams.• Discussion about team priorities determined using the workbook.

-
- Return of leaders' R@W leader reports, which show how well they invest in the resilience of the team, as perceived by themselves and others. Differences between the ways the leaders' view themselves vs. their team's perception was discussed.
 - Discussion around organisational structures and processes that require change to assist the team's resilience and ability to cope with their workload
 - Setting future goals to extend beyond the coaching program, e.g. improve communication with team around building resilience, choosing focus areas and identifying small shifts in the right direction.
-

Appendix G – Figures Contained in the Research Report

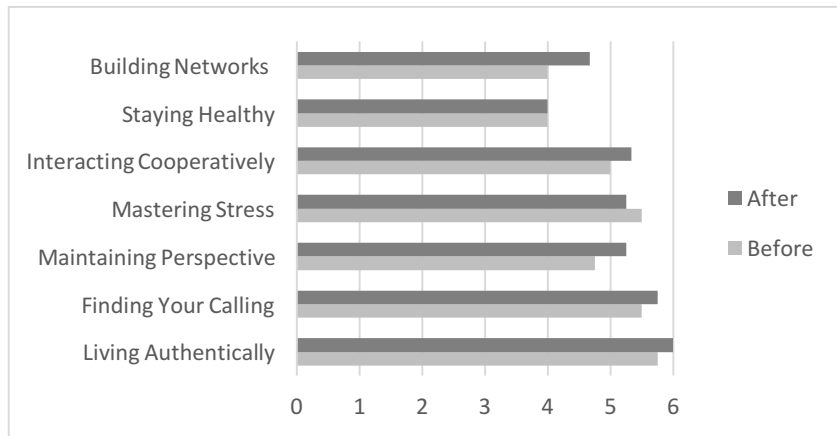


Figure 1. Individual Resilience Levels Pre- and Post- Intervention (Operations Manager)

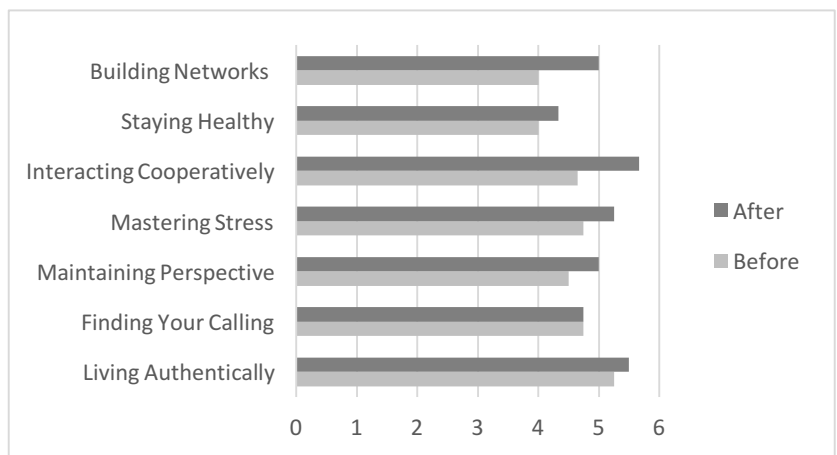


Figure 2. Individual Resilience Levels Pre- and Post- Intervention (Service Manager)

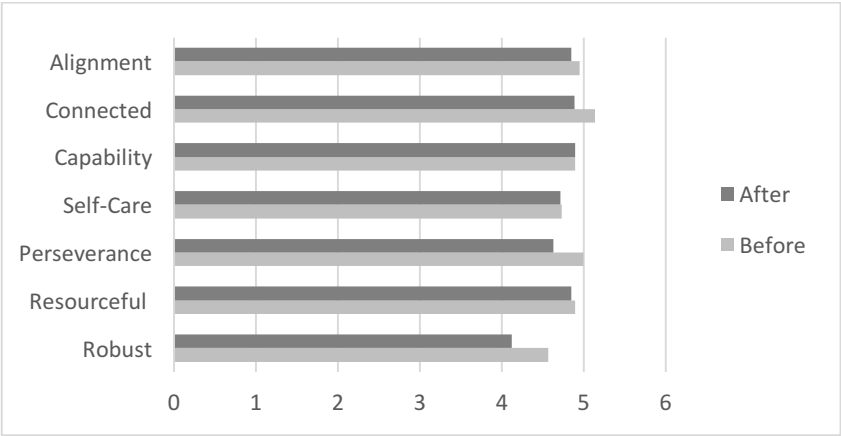


Figure 3. Organisational Resilience Levels Pre- and Post- Intervention

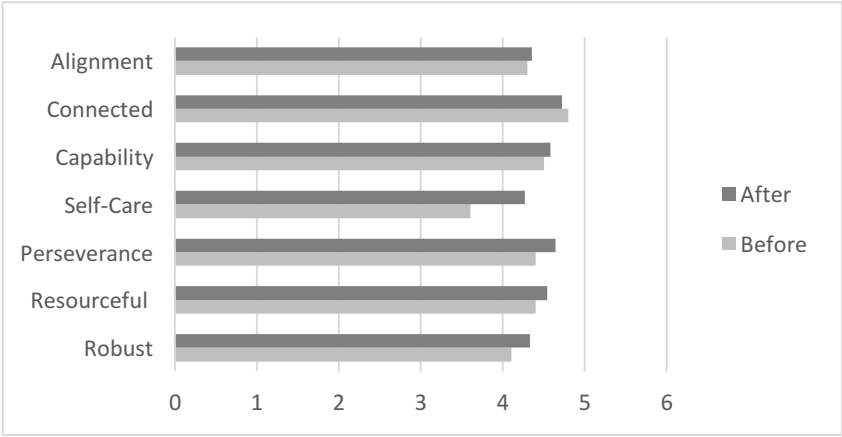


Figure 4. Service Manager's Team Resilience Levels Pre- and Post- Intervention

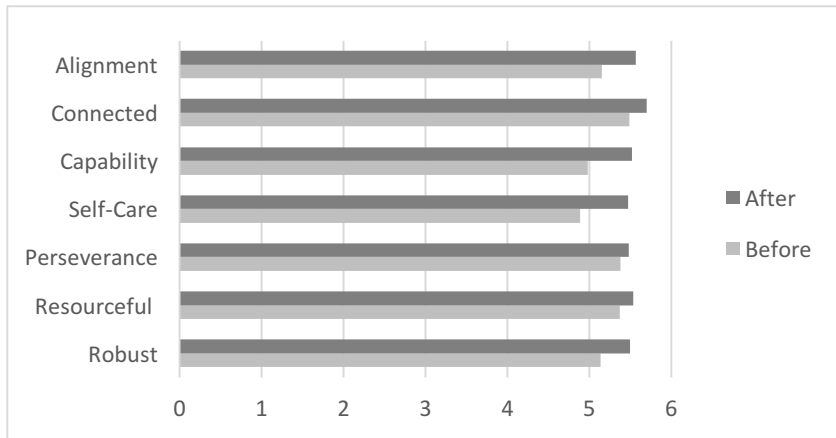


Figure 5. Operation's Manager's Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct-Reports.

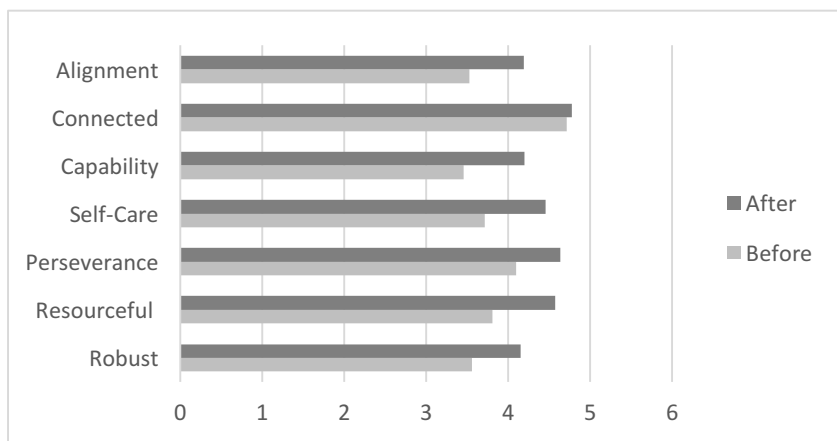


Figure 6. Service Manager's Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct-Reports.

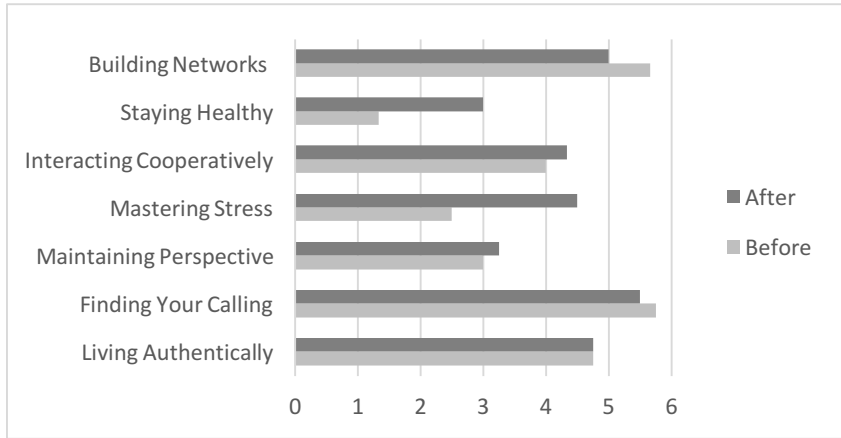


Figure 7. Individual Resilience Levels Pre- and Post- Intervention (Manager 1)

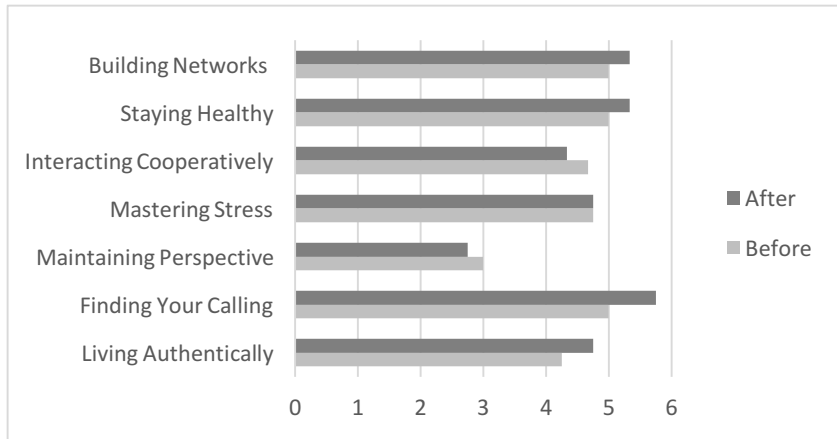


Figure 8. Individual Resilience Levels Pre- and Post- Intervention (Manager 2)

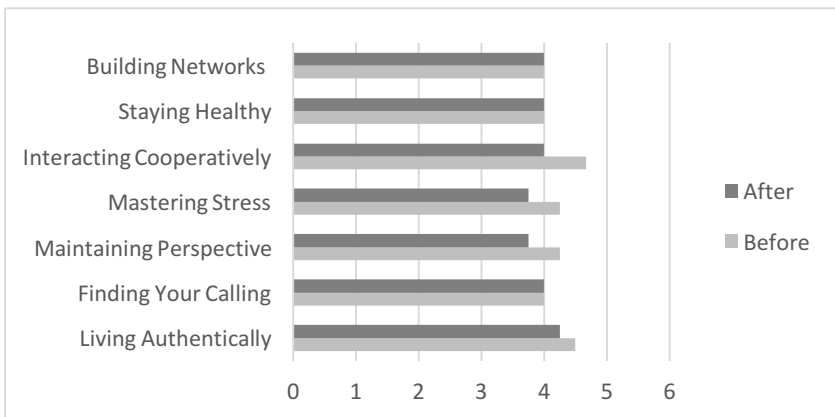


Figure 9. Individual Resilience Levels Pre- and Post- Intervention (Manager 1)

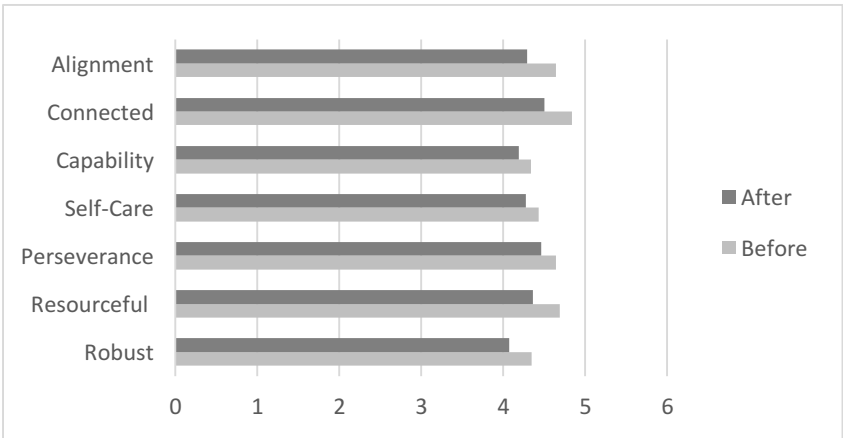


Figure 10. Team Resilience Levels Pre- and Post- Intervention (Manager 1)

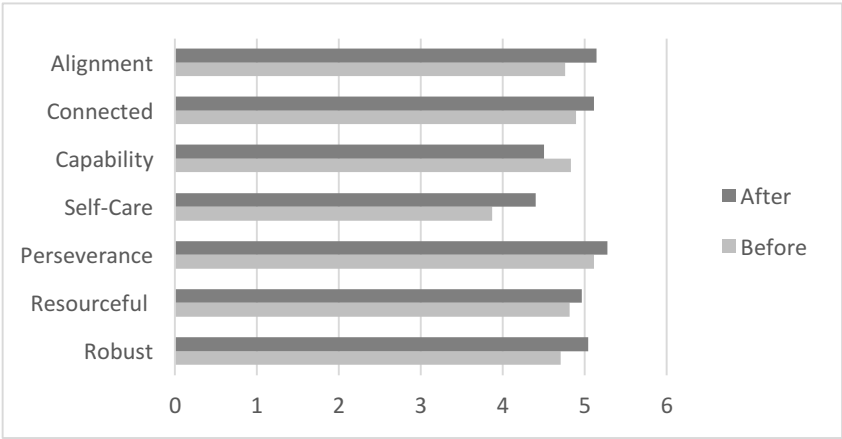


Figure 11. Team Resilience Levels Pre- and Post- Intervention (Manager 2).

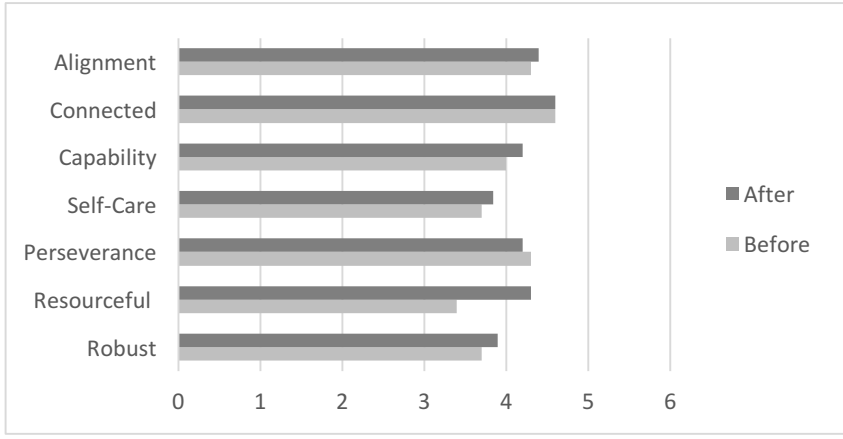


Figure 12. Team Resilience Levels Pre- and Post- Intervention (Manager 3).

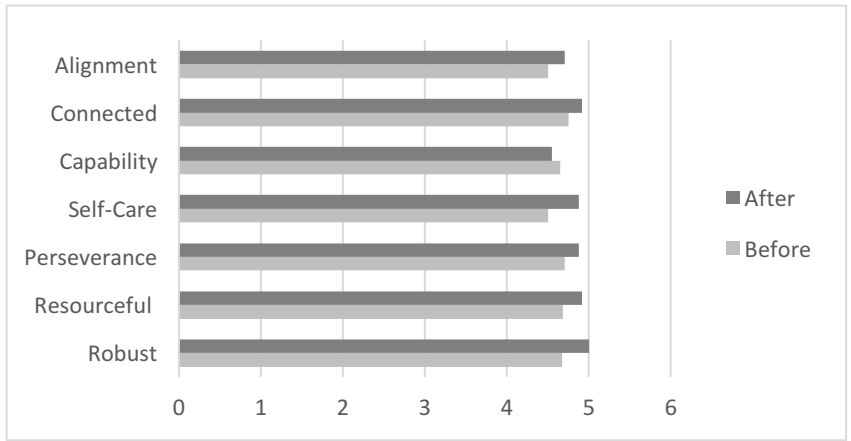


Figure 13. Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct-Reports

(Manager 1).

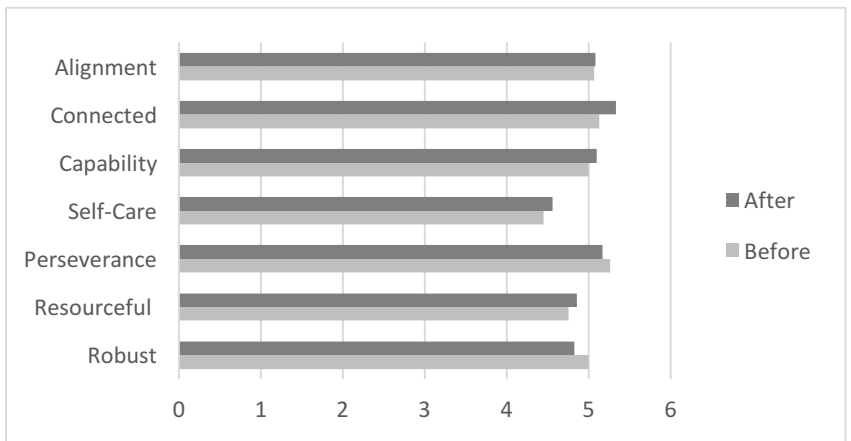


Figure 14. Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct-Reports

(Manager 2).

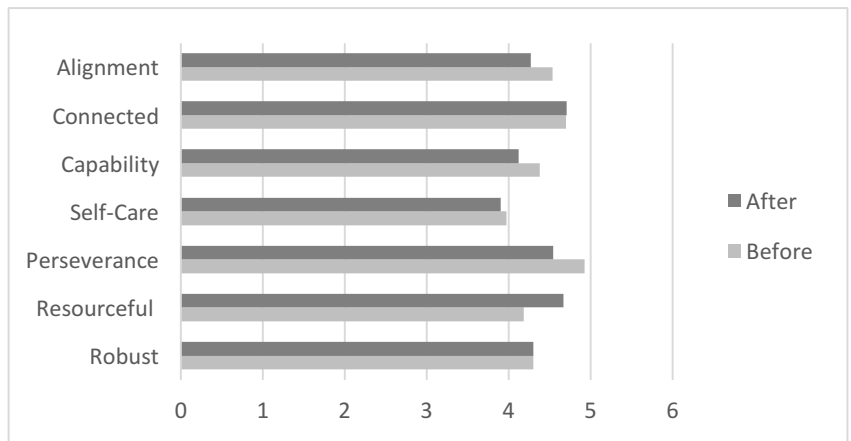


Figure 15. Leader Resilience Levels Pre- and Post- Intervention, as Rated by Direct-Reports

(Manager 3).