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Review

Resilience to emotional distress in response to failure, error or mistakes: A systematic review

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HIGHLIGHTS

- Psychological factors can buffer the impact of failure on emotional distress.
- Key resilience factors are self-esteem, attributional style and low perfectionism.
- Academic self-worth and trait emotion suppression do not confer resilience.

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ABSTRACT

Perceptions of failure have been implicated in a range of psychological disorders, and even a single experience of failure can heighten anxiety and depression. However, not all individuals experience significant emotional distress following failure, indicating the presence of resilience. The current systematic review synthesised studies investigating resilience factors to emotional distress resulting from the experience of failure. For the definition of resilience we used the Bi-Dimensional Framework for resilience research (BDF) which suggests that resilience factors are those which buffer the impact of risk factors, and outlines criteria a variable should meet in order to be considered as conferring resilience. Studies were identified through electronic searches of PsycINFO, MEDLINE, EMBASE and Web of Knowledge. Forty-six relevant studies reported in 38 papers met the inclusion criteria. These provided evidence of the presence of factors which confer resilience to emotional distress in response to failure. The strongest support was found for the factors of higher self-esteem, more positive attributional style, and lower socially-prescribed perfectionism. Weaker evidence was found for the factors of lower trait reappraisal, lower self-oriented perfectionism and higher emotional intelligence. The majority of studies used experimental or longitudinal designs. These results identify specific factors which should be targeted by resilience-building interventions.

Resilience; failure; stress; self-esteem; attributional style; perfectionism

Contents

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1. Introduction

1.1. Impact of failure experiences

A large body of research suggests that experiencing failure has marked emotional and psychological consequences across a range of individuals and settings. Longitudinal studies indicate that academic failure in adolescents increases risk for clinical depression in adulthood (McCarty et al., 2008; Reinherz, Giaconia, Hauf, Wasserman, & Silverman, 1999), and in those who are depressed, perceived failure has been associated with suicide attempts (Bulik, Carpenter, Kupfer, & Frank, 1990). Even a single experience of failure in non-clinical groups can have significant emotional sequelae. In athletes, match failure has been linked with elevated feelings of depression, humiliation and guilt (Jones & Sheffield, 2007; Wilson & Kerr, 1999), and in healthcare professionals, involvement in medical errors or patient safety failures is reported to result in feelings of shame, depression and anxiety, which can then increase the risk of further errors (Sirriyeh, Lawton, Gardner, & Armitage, 2010; West, Tan, Habermann, Sloan, & Shanafelt, 2009). The reliable impact of failure experiences on mood makes false failure feedback tasks suitable for use as negative mood inductions in experimental settings (Nummenmaa & Niemi, 2004). Studies employing these tasks have found that manipulated failure feedback consistently increases feelings of sadness, defeat and frustration (Johnson, Gooding, Wood, Taylor, & Tarrier, 2011a; Johnson, Tarrier, & Gooding, 2008b; Nummenmaa & Niemi, 2004) and may have a detrimental impact upon cognitive functioning such as reducing the accuracy of memory recall (Johnson et al., 2008b).

However, not all individuals experience significant emotional distress in response to failure, and several psychological models highlight the role of psychological responses to failure in the development of failure-related distress and emotional disorder. For example, cognitive models of suicide have emphasised the role of situation appraisals, suggesting that suicidal thoughts occur when individuals appraise their circumstances in terms of failure (termed 'defeat') and entrapment (Johnson, Gooding, & Tarrier, 2008a; Williams, 1997). Yet such models have been criticised for their acceptance of an overly negative, disorder-based approach to understanding mental health (Johnson & Wood, 2015). By focusing on the development of mental health problems rather than mental wellbeing, it has been suggested that such approaches fail to identify and capitalise on natural coping mechanisms (Johnson & Wood, 2015). As such, they may be missing potential points for psychological interventions to target and develop.

1.2. Resilience-based approaches

An alternative to these models are resilience-based approaches (Bonanno, 2004; Masten, 2001; Masten & Powell, 2003). These aim to understand the factors that enable individuals to withstand stressors and avoid psychological distress rather than focusing on the mechanisms that lead to distress and disorder. Resilience-based approaches have the potential to highlight skills and tendencies that individuals can develop to maintain psychological health, leading to a more positively oriented approach to wellbeing. However, this body of literature has suffered from two main limitations.

First, there has been a lack of clarity concerning the criteria for identifying a 'resilient' outcome. The common definition of resilience as factors which *reduce negative outcomes in the face of adversity* would suggest that resilience variables are those which moderate or attenuate the association between risk factors and negative outcomes. In contrast, many studies of resilience have used a correlational approach. These studies have assumed that resilience variables are those which are 'positive', and have investigated whether high levels of a proposed resilience variable (e.g., high perceived social support) is directly associated with lower levels of a negative outcome (e.g., suicidal thoughts). However, as has been highlighted elsewhere (Johnson & Wood, 2015; Johnson, Wood, Gooding, Taylor, & Tarrier, 2011b), every negative variable exists on a continuum with its positive inverse. Returning to the above example, using this approach, it could just as easily be suggested that low perceived social support is a risk factor for suicidal thoughts.

Second, this research failed to lead the field towards more nuanced understandings of resilience. A common approach has been to propose a concept of resilience, develop a questionnaire to measure this, and to investigate the association of this variable in relation to various outcome variables in different populations. This approach does not enable the proposed resilience variable itself to evolve in order to accommodate new research findings. Indeed, despite fifty years of resilience research, key questions regarding the nature of resilience remain, which may be linked to the limitations of this approach. These concern i) whether factors which confer resilience vary depending on the outcome under consideration (i.e., whether resilience to general mental wellbeing is similar to resilience to negative behavioural outcomes such as suicidality), and