#### Building-up Resilience and Being Effective Leaders in the Workplace: A Systematic

### **Review and Synthesis Model**

Yu, Mengye; Wen, Jie; Smith, Simon; Stokes, Peter

### Abstract

**Purpose**: Psychological resilience, defined here as the capacity to bounce back from adversity and failure, has been studied in various leadership contexts. However, the literature demonstrates less consensus concerning how psychological resilience manifests in, and interacts within, the leadership role and, equally, the focus on resilience development is underdeveloped. This paper addresses these issues by focusing on the interactions between psychological resilience and leadership and presents practical development strategies.

**Design/methodology/approach**: A systematic review employing 47 empirical studies followed a thematic synthesis within an associated model encapsulated as: *Building-up Resilience and Being Effective*.

**Findings**: First, resilience is identified as and aspect that is essential and can benefit individuals and organizations' work outcomes across leadership contexts, including work performance, job engagement, well-being, and enhanced leadership capability. Secondly, leaders may build up their resilience by obtaining *coping skills* and *improved attitudes* toward challenges. The idea of *resilient attitudes*, which are presented as paradoxical perspectives toward challenges, may help leaders adapt to challenges and adversities, and lead to beneficial outcomes.

**Originality**: Fundamentally, the synthesized model applied may encourage further studies to focus on how to build up resilience and practically apply it in workplaces across leadership contexts. In particular, this study found that adopting paradoxical perspectives and ambidextrous leadership approaches toward adversities is an original resilience development strategy, which serves to contribute to the gap in the literature.

Keywords: Leadership, psychological resilience, work outcome, resilience development

### Introduction

Along with increasing uncertainty and intensifying worldwide competition, organizational leaders play an essential role in surviving in an increasingly challenging environment (Crossan *et al.*, 2017). Such environments can lead to high levels of stress and psychological disorders, e.g. managerial burnout, anxiety, or depression (Roche *et al.*, 2014). Thus, organizational leaders need to be equipped with the capacity to deal with increasingly complex and dynamic work requirements. Extant studies have found that psychological resilience, defined here as the capacity to bounce back from adversity and failure (Luthans, 2002), may help individuals cope with work complexity and improve employees' and organizational outcomes (Sommer *et al.*, 2016, Bargavi *et al.*, 2017, Koen *et al.*, 2013).

Indeed, the behaviour of, for example, authentic leaders may positively impact their subordinates' psychological resilience and consequently benefit employees' outcomes (Anwar *et al.*, 2019). Through transparent communication under an authentic leadership context, employees' resilience may mediate the relationship between leadership practices (e.g. awareness of challenges) and organizational creativity (Anwar *et al.*, 2019). Such above-mentioned studies identify that psychological resilience may significantly impact leadership, which is crucial for contemporary leaders and organizations to deal with challenges, whether day-to-day, strategic, or internal/ external to the organization.

However, the effects of resilience engendered directly through leadership approaches are often divergent and varied, e.g. improving organizational creativity (Anwar *et al.*, 2019), employees' job engagement (Gupta and Sharma, 2018), or team effectiveness (Dimas *et al.*, 2018). Findings drawn from extant studies may lead to a misunderstanding of resilience, such as, resilience was helpful in some particular contexts (e.g. transformational leadership, authentic leadership), but not work in other circumstances; such as workplaces not exhibiting clear leadership styles. Furthermore, the mechanism through which psychological resilience interacts with leadership is unclear in terms of resilience's function (e.g. mediator or moderator) and leadership styles (e.g. specific leadership style or across leadership contexts). In other words, the literature has not yet offered a consensus overview on how psychological resilience as a leadership trait can positively impact leadership outcomes across leadership contexts or, alternatively, if it is helpful in some specific leadership styles, e.g. authentic leadership, transformational leadership, servant leadership.

Add to this the COVID-19 age, whereby the "disaster of uncertainty" with ambiguity about its nature and trajectory may be destined to have an ever strong psychological impact on leaders and employees that may extend far beyond the end of the pandemic season (Everly *et al.*, 2020). Resilience is expected to be more involved in workplaces to help individuals overcome various adversities or disasters (Arslan *et al.*, 2021, Kahn *et al.*, 2021). Thus, this study aims to advance understanding of how resilience is operationalized with leadership in workplaces and provide practical insights into building up individuals' resilience to confront changes, uncertainty, and other challenges. To address the above, we conduct a systematic literature review to present a landscape of studies focusing on psychological resilience and leadership via following the research question:

1. How is psychological resilience applied in a leadership context within workplaces?

The paper will bring up-to-date the discussions around psychological resilience and leadership, as well as applying the trait of leadership resilience across a wider scope of leadership approaches. A paradoxical lens is subsequently applied and this includes ambidextrous leadership as a theory of focus.

#### **Systematic Literature Review and Analysis Process**

### Psychological Resilience Enhancement and Dealing with Challenges

Positive effects of resilience have been observed in various contexts, such as: child development (Martinez-Torteya et al., 2009); patient care (Koral and Cirak, 2021); and, the military (Pietrzak and Cook, 2013). Martinez-Torteya et al. (2009) suggested that children who had been exposed to domestic violence (DV) (family violence, normally male toward female partner) were more likely to develop emotional and behavioural problems than non-exposed children. The study (Martinez-Torteya et al., 2009) found that the resilience of a sub-group of DV exposed children is higher than the nonexposed group (around half of the investigated sample) did not show behavioural or emotional problems. Furthermore, Koral and Cirak (2021) found that psychological resilience can support patients, such as women with breast cancer, to reduce the ongoing fear of recurrence and, consequently, benefit patients' well-being. Additionally, in the military, exposure to traumatic events is a risk factor that may lead to severe psychological distress (Isaacs et al., 2016). Pietrzak and Cook (2013) found that (1) moderate-level trauma may improve veterans' resilience, and (2) a higher scored resilient group of veterans, compared to the low-level resilient group, equally reported more positive perceptions of the military's effect on their lives and social engagement. Therefore, extant studies have provided plenty of evidence to support the potential for psychological resilience and its developable characteristics, whether either helping children confront family violence or supporting individuals overcome disease and conflict post-trauma. In particular, it is perhaps

important to note that, frequently, these studies underlined that experiencing *moderate* adversities may improve individuals' resilience across a range of the population from children to adults/veterans (Martinez-Torteya *et al.*, 2009; Pietrzak and Cook, 2013).

Psychological resilience has been investigated in various leadership contexts, such as transformational leadership (Dimas et al., 2018), authentic leadership (Anwar et al., 2019), and some other contexts (Tau et al., 2018) and found that leaders' supportive behaviour can enhance employees' resilience and positive outcomes. For example, employee resilience mediates the relationships between organizational commitment and job burnout (Meng et al., 2019), or resilience can be a moderator in displaying a higher overall life satisfaction (Shelton et al., 2019). Thus, these above-studies investigate resilience and report divergent underpinning mechanisms pertaining to how resilience interacts with leadership and how to develop it. Nevertheless, there are additional interesting questions concerning resilience and leadership, such as which factors may influence resilience and how to build up individuals' resilience effectively. Nguyen et al. (2016) found that a proactive personality is an influencing factor of resilience. Furthermore, Elkington and Breen (2015) disclosed that supportive coaching and experiencing challenges might help senior leaders improve their resilience. Due to the divergent investigations and varied results about psychological resilience in workplaces, the systematic literature aims to deepen insights into the operationalizing mechanism of *resilience* within leadership, and reveal influential factors and present practical development strategies.

### Systematic Literature Review Search Strategy

All peer-reviewed empirical articles that include both leader\* (for leader, leaders, and leadership) and resilien\* (resilience, resilient, and resiliency) as keywords or research subjects were included in this review. As psychological resilience and leadership are multi-disciplinary, overlapping subjects such as psychology, management, and social science, the inclusion of this

review is derived from a keyword-based search in three subject-related databases: PsycINFO, ABI/INFORM, and Social Science Database.

All publications included related to studies concerning the psychological resilience of leaders and subordinates within industrial organizations. We focus on peer-reviewed scholarly journal articles in English with the cut-off date of 4<sup>th</sup> July 2021 so as afford reasonable currency to the research. Any books, dissertations, or non-peer-reviewed articles are excluded. The search procedure is presented in Figure 1.

Insert Figure 1 about here

The first step yielded 321 articles with the inclusion criteria. The second step removed 13 editorials, reviews, or commentary articles leaving 308 articles. The third step screened abstracts to remove 219 articles, including duplications, non-empirical studies, non-psychological resilience studies (e.g. environment resilience), or military contexts. The rationale for excluding studies on a military context relates to their nuanced and frequently 'extreme' environments and experiences, as well as military occupations being arguably not directly comparable to most other occupations (Bartone *et al.*, 2013). The fourth step involved full-text checking of the remaining 89 articles and removal of 42 review papers, conceptual discussion, and non-empirical reports. Finally, 47 peer-reviewed empirical articles are chosen that fully meet the systematic literature review requirements for this study (see Table 1).

-----

Insert Table 1 about here

-----

The first identified study focused on the association of psychological resilience and leadership was published in 2004 (Harland *et al.*, 2004). This study initiated the focus on

leadership impacts on others' resilience and found that transformational leadership behaviour can positively influence subordinates' psychological resilience. Following this, more studies were published over time, including six in 2020 and eight in 2021.

### **Review Questions and Data Analysis**

This study aims to discover whether psychological resilience can be an essential leadership capability across leadership contexts and help individuals and organizations deal with challenges, which may result in practical resilience development strategies. To achieve these research objectives, we identify the effects of psychological resilience in different leadership styles and the influencing factors of resilience in extant studies. Therefore, this systematic literature review follows three review questions to guide data analysis: (1) What types of factors can influence or develop leaders' or employees' psychological resilience?; (2) What types of outcomes of resilience are found at workplaces?; and (3) What types of leadership styles are investigated?

Data analysis methods and processes of a systematic literature review, including coding and synthesis, vary considerably depending on the research aims (Gough *et al.*, 2017). We apply a thematic summary that combines primary statistical (quantitative data) and nonstatistical (qualitative data) findings of reviewed studies to present an overview of the key characteristics (Gough *et al.*, 2017). This study employs a Data-Analysis Process in a Systematic Literature Review facilitated with QDAS-NVivo 12 by involving a two-step opencoding and two-step theory-constituting approach (Yu and Smith, 2021) in a systematic literature review (shown in Figure 2).

7

\_\_\_\_\_

Insert Figure 2 about here

Results

The thematic synthesis is derived from the findings of 47 reviewed articles listed in Table 1. The results and related themes are presented according to the review questions outlined in the last section. In the 47 reviewed articles, three types of research methods are identified, which are quantitative (66%, 31 papers), qualitative (23%, 11 papers), and mixed-method (11%, five papers). All the inclusion articles investigated resilience at the workplace as one key research subject: 24 studies focused on leaders' resilience; 18 reviewed studies focused on employees' resilience; and, five focused on organizational resilience.

In all the reviewed studies, 66% of the included articles (31 papers) collected data by a self-reported survey and other quantitative approaches. The investigated industries included industry, healthcare, and public service. In total, 13,120 participants from 22 countries are involved in the 47 reviewed articles, which include leaders (e.g. school leaders, nurse leaders, and company decision-makers) and employees (e.g. nurses, white-collar workers, college students, and sales workers).

### Influence Factors and Building-up Factors of Psychological Resilience

By following the Data-Analysis Process in a Systematic Literature Review, five subthemes emerged from open-coding and constant comparison analysis, including: personal characteristics; interpersonal factors; supportive environment; leadership behaviour; challenging experiences; and, interventions (coaching and training). These five sub-themes were organized into two main themes: 'Influence Factors' and 'Building-up Factors' according to their different effects on resilience (see **Table 2**). The reviewed studies found that Buildingup Factors (interventions and experiences of coping challenges) may significantly improve employees' or leaders' resilience, which suggests that resilience can be developmental. By contrast, personal factors, interpersonal factors, and supportive environments may influence individuals' or organizational resilience without explicating whether these factors may strengthen resilience.

Insert Table 2 about here

The first sub-theme, *personal factors*, refers to: proactive personality; optimism; the dark-side of personality; promotion focus; leadership traits; differentiation of self; and, individual factors. Secondly, *interpersonal factors* include: alignment; emotional tie; insider identity; and positive affection; all of these demonstrating the interpersonal relationship or emotional connection. The third sub-theme, *supportive environment factors*, contains: supportive networks; work environment; job-related factors; co-worker support; and, perceived organizational support (POS). Similarly, five types of leadership behaviours are perceived as supportive work environment factors, namely: transformational leadership; contingent rewards leadership; empowering leadership; supportive leader; and, authentic leadership.

The fourth sub-theme, *coping challenges*, is categorized as a building-up factor as these experiences, e.g. adversity, resistance, job loss, obstacles, and performance pressure, are effective in developing an individual's resilience. Similarly, leadership coaching and training and some other interventions, such as leadership hub intervention, mindfulness, and spiritual practice, are categorized as building-up factors as they have shown to be effective in developing resilience.

# **Contributions and Outcomes of Resilience**

Analyzing the contribution of resilience also follows the two-step coding process, including open-coding and constant comparison. The first step-initial-coding directly identifies all reported outcomes from reviewed studies which result in an outcome list of resilience. In total, 20 kinds of concepts are identified as individual or organizational outcomes. Through secondary-coding with constant comparison, the 200 types of outcomes result in four emergent sub-themes: (1) Performance, (2) Leadership capacity improvement, (3) Job satisfaction & engagement, and (4) Well-being and mental health (see **Table 3**). This category is aligned with the most common leadership outcome criteria, e.g. behavioural measures (job performance), attitudinal measures (job satisfaction), and relational perception (Hoch *et al.*, 2018, Bedi *et al.*, 2016).

\_\_\_\_\_

Insert Table 3 about here

# Psychological Resilience Operationalizes within Various Leadership Styles

In the 47 reviewed articles, 20 studied resilience interacting with leadership generally, while the other 23 investigated 14 types of leadership, such as transformational leadership, empowering leadership, authentic leadership, and leader-member exchange (see **Table 4**).

\_\_\_\_\_

Insert Table 4 about here

-----

First, six studies investigated how transformational leadership influences leader or subordinate resilience, job engagement, or productivity (article 1, 4, 11, 19, 23, 34, 38, and 40). Secondly, empowering leadership, demonstrated as sharing power and coaching employees, is

linked to improvement in leaders' and employees' resilience and performance (Tau *et al.*, 2018) (Article 24). Authentic Leadership (Howard and Irving, 2014) and Leader-Member Exchange (LMX) (Meng *et al.*, 2019) is argued to potentially positively influence subordinates' resilience and productivity by demonstrating their transparency, self-awareness, and lessening employees' burnout. Another study by (Teo *et al.*, 2017) investigated the association between leadership behaviour, employee engagement (EE), and organizational performance. These studies found that both LMX and employee resilience can influence organizational performance mediating by EE (Gupta and Sharma, 2018) and lessen employees' burnout (Meng *et al.*, 2019).

To summarize, the reviewed studies investigated psychological resilience operationalized in 15 types of leadership and reported benefits of resilience through the various roles, e.g. mediator (Zhu *et al.*, 2019), moderator (Cooke *et al.*, 2019), or predictor (Pillay, 2020) within outcomes. Furthermore, four leadership styles, including transformational leadership, empowering leadership, authentic leadership, and LMX, are argued to create supportive work environments, which may enhance employees' resilience.

# **Findings and Discussion**

By constantly comparing the emergent themes and sub-themes, psychological resilience in workplaces (resilience of leaders, employees, or organizations) is identified as the central theme. All the reviewed articles took resilience at the workplace as one key subject and examined its associations with either influence factors, build-up factors, or outcomes (i.e. performance, well-being, job satisfaction, or improved capability). This refers to Grounded Theory's (Glaser, 1992) definition of the central theme, which has the most frequent relationships with other themes, e.g. outcomes and influence factors here (Glaser and Holton, 2004). Thus, the theme of psychological resilience in workplaces is identified as the core theme, which is affected by *Influence* and *Build-up factors* and consequently benefits outcomes, which may be demonstrated as improved work performance, job satisfaction,' well-being, or enhanced leadership capabilities. Therefore, the identified central theme and related theoretical themes constitute the emergent theoretical model Building-up Resilience and Being Effective (refer to **Figure 3**).

Insert Figure 3 about here

\_\_\_\_\_

Fundamentally, this Building-up Resilience and Being Effective Model originally offers a collective knowledge about how psychological resilience is operationalized in leadership by systematic review and synthesis findings of 47 reviewed articles. This model integrates three key findings: (1) Psychological resilience is an essential capability across leadership styles; (2) Psychological resilience can be influenced and developed by personal factors, supportive environment, challenging experience, training, etc.; and, (3) Psychological resilience at workplaces can directly or indirectly improve work performance, leadership capacity, job satisfaction and engagement, well-being, and job satisfaction. From one side, the current study deepens the understanding of resilience in the workplace. The synthesized result highlights resilience's essential role by being reported broader outcomes in diverse leadership contexts. On the other side, the current study presents insights into developing resilience through supportive work environments and challenging experiences.

# Psychological Resilience—Essential Leadership Capability

By synthesizing the effects of resilience in 15 leadership styles, the current study proposes that psychological resilience is essential in leadership across contexts. No matter the

work context, psychological resilience can enhance leaders' ability, which will improve leaders' or employees' performance, well-being, and mental health. This finding is yielded from the various and diversified results reported in reviewed articles. For example, eight reviewed articles have found that transformational leadership may influence leaders' or subordinates' resilience, job engagement, or productivity. The study by Harland et al. (2004) analyzed the relationship between psychological resilience and five transformational leadership dimensions by collecting data from 150 MBA students in the USA, which found a significant association between leaders' charismatic and inspirational behaviours and subordinates' resilience and well-being. In addition, other studies have investigated psychological resilience is operationalized within different contexts, including charismatic leadership (Teo et al., 2017), authentic leadership (Zehir and Narcıkara, 2016), empowering leadership (Tau et al., 2018), contingent leadership (Camps and Torres, 2011), hubristic leadership (Claxton et al., 2015), humble leadership (Zhu et al., 2019), leader-member exchange (Teo et al., 2017), paradoxical leadership (Franken et al., 2019; Smith and Butler, 2020), servant leadership (Nguyen et al., 2016), and supportive leadership (Cooke et al., 2019). Even though these studies investigated resilience in diverse leadership contexts and reported varied function roles, e.g. mediation (Franken et al., 2019) or moderation (Cooke et al., 2019), most reviewed studies have supported that leaders' behaviours can improve individuals' (leaders and employees) resilience through supportive environments. In turn, improved resilience will positively impact work outcomes, including well-being, work engagement, and performance. Therefore, the finding of the current review emphasizes that as an essential quality, resilience will advance work outcomes across any leadership style and context. This finding may encourage organizations or society to promote psychological resilience, including developing resilient attitudes via adopting a paradoxical perspective, to deal with adversities and uncertainties.

### Adopting Paradoxical Perspective and Building-up Resilience

The current study gains some insights into developing psychological resilience by using paradoxical perspectives. The paradoxical lens is a perspective that considers the both-and perspective of the contradictory sides in paradoxes (Schad *et al.*, 2016). Scholars have applied a paradoxical lens to perceive organizational challenges, which interprets challenges from both positive and negative perspectives (Smith and Lewis, 2011). Therefore, a paradoxical perspective can be applied in resilience development as challenging experiences may cause stress and problems and meanwhile may associate with gained coping skills or opportunities. In the reviewed articles, seven studies have found the positive effects of experiencing negative cases: e.g. obstacles (Howard and Irving, 2014); job loss (O'Connor and Batcheller, 2015); adversity (Elkington and Breen, 2015); performance pressure (Cooke *et al.*, 2019, Sanfuentes *et al.*, 2021); and, other work resistance (Tian and Bush, 2020).

Other studies have reported that adversity, such as depression or anxiety, are not only associated with job loss and negative emotions, but also shown positive effects on well-being and enhanced coping skills (Seery *et al.*, 2010, Mancini, 2019). A recent reviewed article investigated the role of adversity in developing black women leaders in USA higher education and found that leaders' adverse life experiences may be transformed into resilience and promote their later leadership development (Chance, 2021). Adversities were fuel for these female leaders' to overcome adverse crucible experiences, thus developing the necessary leadership skills. Additionally, other studies also demonstrated how to learn knowledge and skills from failed projects (Köhler, 2018) or other failure cases (Krieger, 2021, Catalano *et al.*, 2019) and improve capabilities for future tasks. All these studies display that adversity may also demonstrate adversity's positive effects: learning skills failure experience. The

experiences of dealing with challenges may help individuals obtain coping skills and prepare the mindset to respond to adversities. These studies demonstrated the function of paradoxical perspectives, especially in challenging situations.

More importantly, paradoxical perspectives may help leaders and employees to increase their awareness of challenges and focus on both the negative and potential positive aspects. The current study found that supportive leadership behaviours, such as transformational, authentic, empowering, and supportive work environments, may encourage employees to be more adaptive and able to endure work challenges. Adaptive to challenges and persistence under pressure may be recognized as resilient attitudes, and this is aligned with the commonly accepted resilience criteria (Windle et al., 2011, Campbell-Sills and Stein, 2007). Through paradoxical perspectives, individuals may transform their perception of challenges from being afraid of failures to adapting to challenges, which will help them be resilient and endure the work pressure. In other words, the adoption of a paradoxical lens to challenges may be identified as a resilient attitude. Adopting a paradoxical perspective may help leaders and employees increase their awareness of challenges, focus on both the negative and potential positive aspects, and consequently improve their resilient attitudes. These findings can be utilized broadly in practices such as leadership development programmes, talent management, and other human resource activities. In addition, this may align with the recommendation of building up resilience from the American Psychological Association (2020) and be utilized in daily leadership practice beyond workplaces, such as within a family setting and personal relationships.

Thus, promoting paradoxical perspective and resilient attitudes may help individuals and organizations to prosper during challenging times. Attitudes have been acknowledged as a determinant of observed behaviour broadly since the 1970s (Fazio *et al.*, 1983). Individuals

with a resilient attitude tend to develop positive coping strategies to move across, demonstrate better capacities to buffer the negative impact of challenges, and subsequently show a flourishing state despite adversities (Gerino *et al.*, 2017). By adapting to changing circumstances with resilient attitudes, individuals can be empowered to take active steps through difficult circumstances and thus bounce back to normal or better well-being (Luthans *et al.*, 2007). By adapting to changing circumstances with resilient attitudes, leaders can be empowered to take active steps through difficult circumstances. When responding calmly to an extreme challenge, leaders can maintain their emotional stability, behave resiliently, and thus be able to confront challenges.

Moving forward, and following this discussion of paradoxical perspectives, 'ambidextrous leadership' could help to assist in coping with the complexities of paradox within psychological resilience in leadership. Ambidextrous leadership is related to Organizational Ambidexterity and is a theory pertaining to paradox (Smith and Butler, 2021). An ambidextrous leader can be broadly defined as someone with an ability for embracing and mitigating challenges within and around 'opposing and complementary poles' in a flexible way (Kafetzopoulos, 2022). To further explain these ambidextrous theories in simplistic terms, they addresses and tackles two polar opposites, namely *exploitation* and *exploration* (Birkinshaw and Gupta, 2013; O'Reilly and Tushman, 2013). In broad terms, the former emphasises efficiency, reducing costs and keeping within 'the known', and the latter is in line with innovation, experimentation, flexibility and expanding into 'the unknown' (Smith, 2016). For resilience and ambidextrous leadership, the emphasis here is not on those specific organisational practices, but is more about having the ability to offer radically different leadership approaches to suit the situation needed. As an example, to manage crises and effectively develop psychological resilience within leaders, there is a need to balance multiple stakeholders, e.g. the needs of the business and/versus the needs of its people. During a crisis (e.g. COVID-19), a single approach to leadership could prove ineffective for one of the key stakeholders (depending on the style adopted). Thus, ambidextrous leadership could offer a different way of thinking, could highlight a need for agility in leadership skills, and could be considered as a potential framework for developing psychological resilience in leaders. This could be one pathway for future research.

To summarise, the current review deepens understanding of resilience development in two aspects by perceiving challenges through the paradoxical lens. First, adverse experiences may help leaders improve coping skills and subsequently enhance leadership capabilities. Secondly, paradoxical perspectives in terms of challenges can be considered as resilient positions/outlooks, which may help leaders and employees adapt to challenges and endure pressures. These findings may encourage innovative practical applications of a paradoxical lens during such adversities, respond with resilient attitudes, and gain coping skills from related experiences.

# Limitations

Even though this study provides a deeper understanding of the essential function of psychological resilience in leadership, the findings are limited to the workplace contexts investigated, e.g. exploring small sample sizes (13,120) or country contexts (22). Future research could expand the rhetoric around interactions between psychological resilience and leadership. Furthermore, the underlining mechanism between the paradoxical perspective and resilient attitudes is still largely unclear. Thus, more research is needed to disclose the interaction of paradoxical perceptions and leadership resilience. Further research can

investigate how resilient attitudes demonstrate in actions in dealing with challenges and adversities.

### Conclusion

This systematic literature review synthesizes 47 extant studies and provides collective knowledge about existing studies on resilience in leadership at workplaces by the emergent Building-up Resilience and Being Effective Model. First and foremost, a key contribution is the current study brought a diversity of research studies together to discuss their complexities.

Importantly, this study found that resilience is an essential leadership trait and can benefit individuals and organizations' work outcomes across leadership contexts, and it is not only helpful in some particular contexts, which goes beyond the limited scope offered in the literature. Secondly, and perhaps somewhat affirming what may have been expected, leaders may build up their resilience by obtaining coping skills and improved attitudes toward challenges. Interestingly, we further an argument that leaders may enhance their resilience through embracing a paradoxical perspective towards challenges (resilient attitude), e.g. being adaptive to adversities, and the attitude of learning from failures. These enhanced resilient attitudes could help leaders deeper understand and examine their reality and persist under high pressures and develop an innate ability to utilise resources more effectively to help them survive and thrive in challenging circumstances, instead of becoming overwhelmed by the burden of complexity or giving up. This will offer a practical contribution to resilience development and encourage individuals and organizations to promote resilient attitudes toward adversities.

To conclude, this study first supplies a collective picture of how resilience operationalizes within leadership at the workplace through thematic synthesizing the extant studies. The findings highlight that resilience is an essential leadership capability across leadership styles and provides insight into its build-up and influence mechanism through paradoxical perspectives and ambidextrous leadership approaches. The findings may encourage individual leaders and organizations to develop resilience in workplaces, particularly in dynamic and flexible circumstances.

# References

- American Psychological Association. (2020), 'Building your resilience', available at: https://www.apa.org/topics/resilience (accessed 09 May 2022).
- Anwar, A., Abid, G. and Waqas, A. (2019), 'Authentic leadership and creativity: moderated meditation model of resilience and hope in the health sector', *European Journal of Investigation in Health, Psychology and Education*, Vol. 10 No. 1, pp.18-29.
- Arslan, H.N., Karabekiroglu, A., Terzi, O. and Dundar, C. (2021), 'The effects of the COVID-19 outbreak on physicians' psychological resilience levels', *Postgraduate medicine*, Vol. 133 No. 2, pp.223-30.
- Bande, B., Fernández-Ferrín, P., Varela, J.A. and Jaramillo, F. (2015), 'Emotions and salesperson propensity to leave: the effects of emotional intelligence and resilience', *Industrial Marketing Management*, Vol. 44, pp.142-53.
- Bargavi, N., Samuel, A.A. and Paul, P.J.D. (2017), 'Resilience of millennial leaders in the Indian I.T. industry', *Journal of the Indian Academy of Applied Psychology*, Vol. 43 No. 2, pp.211-21.
- Bartone, P.T., Kelly, D.R. and Matthews, M.D. (2013), 'Psychological Hardiness Predicts Adaptability in Military Leaders: A prospective study', *International Journal of Selection and Assessment*, Vol. 21 No. 2, pp.200-10.
- Bedi, A., Alpaslan, C.M. and Green, S. (2016), 'A meta-analytic review of ethical leadership qutcomes and moderators', *Journal of Business Ethics*, Vol. 139 No. 3, pp.517-36.
- Birkinshaw, J. and Gupta, K. (2013), 'Clarifying the distinctive contribution of ambidexterity to the field of organization studies', *Academy of Management Perspectives*, Vol. 27, pp.287-298.

- Brendel, W., Hankerson, S., Byun, S. and Cunningham, B. (2016), 'Cultivating leadership
  Dharma: Measuring the impact of regular mindfulness practice on creativity, resilience,
  tolerance for ambiguity, anxiety and stress', *Journal of Management Development*, Vol.
  35 No. 8, pp.1056-78.
- Campbell-Sills, L. and Stein, M.B. (2007), 'Psychometric analysis and refinement of the connor-davidson resilience scale (CD-RISC): Validation of a 10-item measure of resilience', *Journal of Traumatic Stress*, Vol. 20 No. 6, pp.1019-28.
- Camps, J. and Torres, F. (2011), 'Contingent reward leader behaviour: Where does it come from?', *Systems Research and Behavioral Science*, Vol. 28 No. 3, pp.212-30.
- Caniëls, M.C.J. and Hatak, I. (2019), 'Employee resilience: considering both the social side and the economic side of leader-follower exchanges in conjunction with the dark side of followers' personality', *International Journal of Human Resource Management*, pp.1-32.
- Catalano, A.S., Lyons-White, J., Mills, M.M. and Knight, A.T. (2019), 'Learning from published project failures in conservation', *Biological Conservation*, Vol. 238, p.108223.
- Chance, N.L. (2021), 'A phenomenological inquiry into the influence of crucible experiences on the leadership development of Black women in higher education senior leadership: EMAL', *Educational Management Administration & Leadership*, Vol. 49 No. 4, pp.601-23.
- Claxton, G., Owen, D. and Sadler-Smith, E. (2015), 'Hubris in leadership: A peril of unbridled intuition?', *Leadership*, Vol. 11 No. 1, pp.57-78.

- Cooke, F.L., Wang, J. and Bartram, T. (2019), 'Can a Supportive Workplace Impact Employee Resilience in a High Pressure Performance Environment? An Investigation of the Chinese Banking Industry', *Applied Psychology*, Vol. 68 No. 4, pp.695-718.
- Çop, S., Olorunsola, V.O. and Uju Violet, A. (2021), 'Achieving environmental sustainability through green transformational leadership policy: Can green team resilience help?', *Business Strategy and the Environment*, Vol. 30 No. 1, pp.671-82.
- Crossan, M.M., Byrne, A., Seijts, G.H., Reno, M., Monzani, L. and Gandz, J. (2017), 'Toward a Framework of Leader Character in Organizations', *Journal of Management Studies*, Vol. 54 No. 7, pp.986-1018.
- Crosweller, M. and Tschakert, P. (2021), 'Disaster management leadership and policy making: a critical examination of communitarian and individualistic understandings of resilience and vulnerability', *Climate Policy*, Vol. 21 No. 2, pp.203-21.
- Dimas, I.D., Rebelo, T., Lourenço, P.R. and Pessoa, C.I.P. (2018), 'Bouncing back from setbacks: On the mediating role of team resilience in the relationship between transformational leadership and team effectiveness', *The Journal of Psychology*, Vol. 152 No. 6, pp.358-72.
- Djourova Nia, P., Rodríguez, M.I., Tordera Santamatilde, N. and Abate, G. (2020), 'Selfefficacy and resilience: mediating mechanisms in the relationship between the transformational leadership dimensions and well-being', *Journal of Leadership & Organizational Studies*, Vol. 27 No. 3, pp.256-70.
- Elkington, R. and Breen, J.M. (2015), 'How Senior Leaders Develop Resilience in Adversity:
  A Qualitative Study', *Journal of Leadership, Accountability and Ethics Journal Article*, Vol. 12 No. 4, p.93.

- Everly, G.S., Wu, A.W., Crumpsty-Fowler, C.J., Dang, D. and Potash, J.B. (2020), 'Leadership principles to decrease psychological casualties in COVID-19 and other disasters of uncertainty', *Disaster medicine and public health preparedness*, pp.1-3.
- Everly Jr, G.S., Smith, K.J. and Lobo, R. (2013), 'Resilient leadership and the organizational culture of resilience: Construct validation', *International Journal of Emergency Mental Health*, Vol. 15 No. 2, pp.123-8.
- Fazio, R.H., Powell, M.C. and Herr, P.M. (1983), 'Toward a process model of the attitudebehavior relation: Accessing one's attitude upon mere observation of the attitude object', *Journal of Personality and Social Psychology*, Vol. 44 No. 4, pp.723-35.
- Forster, C. and Duchek, S. (2017), 'What makes leaders resilient? An exploratory interview study', German Journal of Human Resource Management - Zeitschrift fur Peronalforschung, Vol. 31 No. 4, pp.281-306.
- Franken, E., Plimmer, G. and Malinen, S. (2019), 'Paradoxical leadership in public sector organisations: Its role in fostering employee resilience', *Australian Journal of Public Administration*, Vol. 79 No. 1, pp.93-110.
- Gerino, E., Rollè, L., Sechi, C. and Brustia, P. (2017), 'Loneliness, resilience, mental health, and quality of life in old age: A structural equation model', *Frontiers in Psychology*, Vol. 8.
- Glaser, B.G. 1992, Basics of Grounded Theory Analysis, Sociology Press.
- Glaser, B.G. and Holton, J. (2004), 'Remodeling grounded theory', Forum, Qualitative Social Research, Vol. 5 No. 2.
- Gough, D., Oliver, S. and Thomas, J. (2017), *An introduction to systematic reviews*, 2nd edn, SAGE, Los Angeles.

- Grant, A.M., Studholme, I., Verma, R., Kirkwood, L., Paton, B. and O'Connor, S. (2017), 'The impact of leadership coaching in an Australian healthcare setting', *Journal of Health Organization and Management*, Vol. 31 No. 2, pp.237-52.
- Gupta, N. and Sharma, V. (2018), 'Relationship between leader member exchange (LMX), high-involvement HRP and employee resilience on extra-role performance: Mediating role of employee engagement', *Journal of Indian Business Research*, Vol. 10 No. 2, pp.126-50.
- Harland, L., Harrison, W., Jones, J.R. and Reiter-Palmon, R. (2004), 'Leadership Behaviors and Subordinate Resilience', *Journal of Leadership & Organizational Studies*, Vol. 11 No. 2, pp.2-14.
- Hoch, J.E., Bommer, W.H., Dulebohn, J.H. and Wu, D. (2018), 'Do Ethical, Authentic, and Servant Leadership Explain Variance Above and Beyond Transformational Leadership? A Meta-Analysis', *Journal of Management*, Vol. 44 No. 2, pp.501-29.
- Howard, C. and Irving, J. (2014), 'The impact of obstacles defined by developmental antecedents on resilience in leadership formation', *Management Research Review*, Vol. 37 No. 5, pp.466-78.
- Howard, C.S. and Irving, J.A. (2021), 'A cross-cultural study of the role of obstacles on resilience in leadership formation: MRN', *Management Research Review*, Vol. 44 No. 4, pp.533-46.
- Hudgins, T.A. (2016), 'Resilience, job satisfaction and anticipated turnover in nurse leaders', Journal of Nursing Management, Vol. 24 No. 1, pp.E62-E9.
- Isaacs, K., Mota, N.P., Tsai, J., Harpaz-Rotem, I., Cook, J.M., Kirwin, P.D., Krystal, J.H., Southwick, S.M. and Pietrzak, R.H. (2016), 'Psychological resilience in U.S. military

veterans: A 2-year, nationally representative prospective cohort study', *Journal of psychiatric research*, Vol. 84, pp.301-9.

- Kahn, E., Sheldon, J.P., Carmichael, A. and Yashar, B.M. (2021), 'Graduate training during the COVID-19 pandemic: North American genetic counseling students' challenges, intolerance of uncertainty, and psychological well-being', *Journal of Genetic Counseling*, Vol. 30 No. 5, pp.1325-35.
- Kodama, C.M. and Dugan, J.P. (2019), 'Understanding the role of collective racial esteem and resilience in the development of Asian American leadership self-efficacy', *Journal of Diversity in Higher Education*, Vol. 13 No. 4, pp.355-367.
- Koen, M.P., du Plessis, E. and Watson, F.G. (2013), 'Exploring Leadership Hubs as an Intervention in Strengthening the Resilience of Health Caregivers', *Journal of Psychology in Africa*, Vol. 23 No. 3, pp.495-9.
- Köhler, H., (2018), 'Learning from a failed project challenges of implementing 'green' technology in a real world setting', *Scottish Geographical Journal*, Vol. 134 No. 3-4, pp.158-71.
- Koral, L. and Cirak, Y. (2021), 'The relationships between fear of cancer recurrence, spiritual well-being and psychological resilience in non-metastatic breast cancer survivors during the COVID-19 outbreak', *Psycho-oncology*, Vol. 30 No. 10, pp.1765-72.
- Kafetzopoulos, D. (2022), 'Ambidextrous leadership: a narrative literature review for theory development and directions for future research', *Baltic Journal of Management*, Vol. 17 No. 2, pp.206-232.
- Krieger, J.L. (2021), 'Trials and terminations: Learning from competitors' R&D failures', *Management Science*, Vol. 67 No. 9.

- Li, J. and Tong, Y. (2021), 'Does narcissistic leadership enhance employee resilience? A moderated mediation model of goal-directed energy and psychological availability', *Leadership & Organization Development Journal*, Vol. 42 No. 5, pp.819-36.
- Lin, T.-T. and Liao, Y. (2020), 'Future temporal focus in resilience research: when leader resilience provides a role model', *Leadership & Organization Development Journal*, Vol. 41 No. 7, pp.897-907.
- Luthans, F. (2002), 'The need for and meaning of positive organizational behavior', *Journal of Organizational Behavior*, Vol. 23 No. 6, pp.695-706.
- Luthans, F., Avolio, B.J., Avey, J.B. and Norman, S.M. (2007), 'Positive psychological capital: Measurement and relationship with performance and satisfaction', *Personnel Psychology*, Vol. 60 No. 3, pp.541-72.
- Mahmud, S. (2017), 'Resilience and Emotional Intelligence: A Focus on Leadership at Project
   Management in Construction Sector of Bangladesh', *International Journal on Leadership*, Vol. 5 No. 2, p.12-21.
- Mancini, A.D. (2019), 'When acute adversity improves psychological health: A socialcontextual framework', *Psychological Review*, Vol. 126 No. 4, pp.486-505.
- Martinez-Torteya, C., Anne Bogat, G., von Eye, A. and Levendosky, A.A. (2009), 'Resilience Among Children Exposed to Domestic Violence: The Role of Risk and Protective Factors', *Child Development*, Vol. 80 No. 2, pp.562-77.
- Masten, A.S. (2001), 'Ordinary magic: resilience processes in development', *The American Psychologist*, Vol. 56 No. 3, pp.227-38.

- Maulding, W.S., Peters, G.B., Roberts, J., Leonard, E. and Sparkman, L. (2012), 'Emotional intelligence and resilience as predictors of leadership in school administrators', *Journal of Leadership Studies*, Vol. 5 No. 4, pp.20-9.
- Meng, H., Luo, Y., Huang, L., Wen, J., Ma, J. and Xi, J. (2019), 'On the relationships of resilience with organizational commitment and burnout: a social exchange perspective', *The International Journal of Human Resource Management*, Vol. 30 No. 15, pp.2231-50.
- Nguyen, Q., Kuntz, J.R.C., Näswall, K. and Malinen, S. (2016), 'Employee resilience and leadership styles: The moderating role of proactive personality and optimism', *New Zealand Journal of Psychology*, Vol. 45 No. 2, pp.13-21.
- O'Connor, M. and Batcheller, J. (2015), 'The resilient nurse leader: Reinvention after experiencing job loss', *Nursing Administration Quarterly*, Vol. 39 No. 2, pp.123-31.
- O'Reilly, C.A.I. and Tushman, M.L. (2013), 'Organizational ambidexterity: Past, present, and future', *Academy of Management Perspectives*, Vol. 27, pp.324-338.
- Pietrzak, R.H. and Cook, J.M. (2013), 'Psychological resilience in older U.S. veterans: results from the national health and resilience in veterans study ', *Depression and Anxiety*, Vol. 30 No. 5, pp.432-43.
- Pillay, D. (2020), 'Positive affect and mindfulness as predictors of resilience amongst women leaders in higher education institutions', *SA Journal of Human Resource Management*, Vol. 18, pp.e1-e10.
- Poole, M.S. and Andrew, H.V.D.V. (1989), 'Using paradox to build management and organization theories', *The Academy of Management Review*, Vol. 14 No. 4, pp.562-78.

- Reed, D.E. and Blaine, B. (2015), 'Resilient women educational leaders in turbulent times: Applying the leader resilience profile® to assess women's leadership strengths', *Planning & Changing*, Vol. 46 No. 3-4, pp.459-468.
- Roche, M., Haar, J.M. and Luthans, F. (2014), 'The role of mindfulness and psychological capital on the well-being of leaders', *Journal of Occupational Health Psychology*, Vol. 19 No. 4, pp.476-89.
- Sanfuentes, M., Valenzuela, F. and Castillo, A. (2021), 'What lies beneath resilience: Analyzing the affective-relational basis of shared leadership in the Chilean miners' catastrophe', *Leadership*, Vol. 17 No. 3, pp.255-77.
- Sardar, H. and Galdames, S. (2018), 'School leaders' resilience: does coaching help in supporting headteachers and deputies?', *Coaching: An International Journal of Theory, Research and Practice*, Vol. 11 No. 1, pp.46-59.
- Schad, J., Lewis, M.W., Raisch, S. and Smith, W.K. (2016), 'Paradox research in management science: Looking back to move forward', *The Academy of Management Annals*, Vol. 10 No. 1, pp.5-64.
- Seery, M.D., Holman, E.A. and Silver, R.C. (2010), 'Whatever does not kill us: Cumulative lifetime adversity, vulnerability, and resilience', *Journal of Personality and Social Psychology*, Vol. 99 No. 6, pp.1025-41.
- Shelton, C.D., Hein, S. and Phipps, K.A. (2019), 'Resilience and spirituality: a mixed methods exploration of executive stress', *International Journal of Organizational Analysis*, Vol. 28 No. 2, pp.399-416.
- Shelton, C.D., Hein, S. and Phipps, K.A. (2021), 'Resilience and spirituality: a mixed methods exploration of executive stress', *International Journal of Organizational Analysis*, Vol. 29 No. 2, pp.399-416.

- Shin, N. and Park, S. (2021), 'Supply chain leadership driven strategic resilience capabilities management: A leader-member exchange perspective', *Journal of Business Research*, Vol. 122, pp.1-13.
- Smith, S.M. (2016), 'Management and organization the 21<sup>st</sup> century global and international context'. In Stokes, P., Moore, N., Smith, S., Rowland, C. and Scott, P. Organizational Management: Approaches and Solutions. London: Kogan Page.
- Smith, S.M. and Butler S. (2021), 'Maintaining the fight for equality through and beyond COVID-19: a focus on the build back better report and ambidextrous leadership', *Strategic HR review*, Vol. 20 No. 1, pp.17-22.
- Smith, W.K. and Lewis, M.W. (2011), 'Toward a theory of paradox: A dynamic equilibrium model of organizing', *The Academy of Management Review*, Vol. 36 No. 2, pp.381-403.
- Sommer, S.A., Howell, J.M. and Hadley, C.N. (2016), 'Keeping positive and building strength: The role of affect and team leadership in developing resilience during an organizational crisis', *Group & Organization Management*, Vol. 41 No. 2, pp.172-202.
- Spiva, L., Davis, S., Case-Wirth, J., Hedenstrom, L., Hogue, V., Box, M., Berrier, E., Jones, C., Thurman, S., Knotts, K. and Ahlers, L. (2020), 'The effectiveness of charge nurse training on leadership style and resiliency', *The Journal of Nursing Administration*, Vol. 50 No. 2, pp.95-103.
- Su, H.C. and Linderman, K. (2016), 'An empirical investigation in sustaining high-quality performance', *Decision Sciences*, Vol. 47 No. 5, pp.787-819.
- Sundermeier, J., Gersch, M. and Freiling, J. (2020), 'Hubristic start-up founders The neglected bright and inevitable dark manifestations of hubristic leadership in new venture creation processes', *Journal of Management Studies*, Vol. 57 No. 5, pp.1037-67.

- Tau, B., Du Plessis, E., Koen, D. and Ellis, S. (2018), 'The relationship between resilience and empowering leader behaviour of nurse managers in the mining healthcare sector', *Curationis*, Vol. 41 No. 1, pp.e1-e10.
- Teo, W.L., Lee, M. and Lim, W.S. (2017), 'The relational activation of resilience model: How leadership activates resilience in an organizational crisis', *Journal of Contingencies and Crisis Management*, Vol. 25 No. 3, pp.136-47.
- Thude, B.R., Juhl, A.G., Stenager, E., von Plessen, C. and Hollnagel, E. (2019), 'Staff acting resiliently at two hospital wards', *Leadership in Health Services*, Vol. 32 No. 3, pp.445-57.
- Tian, Z. and Bush, H.R. (2020), 'Half the sky: interwoven resilience processes of women political leaders in China', *Journal of Applied Communication Research: Communication and Resilience: Advances in Theory and Application*, Vol. 48 No. 1, pp.70-90.
- Wang, Z., Li, C. and Li, X. (2017), 'Resilience, leadership and work engagement: The mediating role of positive affect', *Social Indicators Research*, Vol. 132 No. 2, pp.699-708.
- Windle, G., Bennett, K.M. and Noyes, J. (2011), 'A methodological review of resilience measurement scales', *Health and Quality of Life Outcomes*, Vol. 9 No. 8.
- Yu, M. and Smith, S.M. (2021), 'Grounded Theory: A guide for a new generation of researchers', *International Journal of Doctoral Studies*, Vol. 16, pp.553-568.
- Zehir, C. and Narcıkara, E. (2016), 'Effects of resilience on productivity under authentic leadership', *Procedia Social and Behavioral Sciences*, Vol. 235, pp.250-8.

Zhu, Y., Zhang, S. and Shen, Y. (2019), 'Humble leadership and employee resilience: Exploring the mediating mechanism of work-related promotion focus and perceived insider identity', *Frontiers in Psychology*, Vol. 10.