

Navigating Peaks and Valleys - Fostering Resilience via Entrepreneurial Life Design

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ABSTRACT

This paper explores the integration of resilience within Entrepreneurial Life Design (ELD) in Entrepreneurship Education (EE). It examines the link between resilience and entrepreneurship, focusing on ELD to build resilience in aspiring entrepreneurs. The study introduces the 4D LOOPING Framework to enhance essential resilience resources, comprising the Discover, Design, Deliver, and Discuss phases. These resources include personal attributes like self-efficacy and adaptability, which prepare entrepreneurs to handle setbacks effectively. The paper proposes that ELD frameworks, such as 4D LOOPING, strengthen resilience resources and contribute to more sustainable entrepreneurial success. The research adopts a translational science approach, bridging the gap between theoretical understanding of resilience and its practical implementation in EE. Further research is recommended to explore the empirical impact of ELD frameworks on entrepreneurial resilience.

Keywords: Resilience, Entrepreneurial Life Design; Start-up success; Entrepreneurship education; 4D LOOPING; Dark side of entrepreneurship; Translational science; Mental health; Burnout.

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INTRODUCTION

Entrepreneurship, pursuing innovation and business success through creating new ventures (Shane & Venkataraman, 2000), is inherently linked to navigating the peaks of success and the valleys of failure. These peaks and valleys represent the highs of entrepreneurial achievements, such as securing funding or launching a successful product (Cardon et al., 2011), and the lows of setbacks, such as financial difficulties, market rejection, or internal team conflicts and exits (Lynch & Corbett, 2023; Hartmann et al., 2022; Preller et al., 2023). Due to the ever-faster-moving VUCA world (volatility, uncertainty, complexity and ambiguity), the entrepreneurs' load tends to increase (Kraaijenbrink, 2019; Braganza et al., 2021). Resilience is crucial in recovering from these lows and continuing climbing toward the next peak. Resilience, the positive adaptation in the face of adversity (Sutcliffe & Vogus, 2003), is essential for enduring the entrepreneurial journey's inherent ups and downs (Hartmann et al., 2022; Newman et al., 2018).

However, the reality for many entrepreneurs is that the valleys can be deep and challenging (Lynch &

Corbett, 2023; Hartmann et al., 2022), often leading to significant mental health issues, such as stress and burnout (Munoz et al., 2023). Studies show that a substantial percentage of founders face mental health challenges, with burnout being one of the most common issues. For instance, a survey conducted by the National Institute of Mental Health reported that approximately 72% of entrepreneurs experience mental health concerns, with burnout being particularly prevalent (Freeman et al., 2019). Furthermore, research from the University of California revealed that nearly 49% of start-up founders exhibit burnout, characterised by emotional exhaustion, depersonalisation, and a reduced sense of personal accomplishment (Lewin, 2024). These psychological strains can lead to severe consequences, from poor decision-making to the failure of start-ups (Shepherd & Williams, 2020). In this regard, scholars have emphasised the role of entrepreneurs' psychological resources (Frese & Gielnik, 2014), mainly psychological resilience (Hartman et al., 2022).

Given this context, Entrepreneurship Education (EE) must impart related skills and attitudes and support future entrepreneurs with the mental and emotional challenges of the entrepreneurial journey (Munoz et al., 2023). Strengthening resilience should be an integral part of



entrepreneurial training, enabling individuals to navigate better both the peaks of success and the valleys of setbacks they will inevitably encounter (Hartmann et al., 2022).

The framework of Entrepreneurial Life Design (ELD) is a promising approach to fostering such resilience. ELD aims to foster an entrepreneurial mindset aligned with entrepreneurs' unique resources and needs. It offers an educational approach that helps individuals recognise their personal and professional assets. From there, ELD guides them through a human-centred design process, systematically preparing them for the challenges of their entrepreneurial journey. Providing practical tools equips entrepreneurs to develop a creative and resilient mindset essential for navigating uncertainty and growth (Wolf & Maisch, 2023).

The ELD framework offers a valuable addition to existing EE by holistically focusing on the entrepreneur. While ELD methods can serve as a vehicle for promoting resilience, resilience could be more explicitly integrated as a core component of the framework. In many conceptualisations of the entrepreneurial mindset, such as *EntreComp* (Bacigalupo et al., 2016) and *Get2* (Shaver et al., 2019), resilience is often implied rather than directly addressed. This also applies to ELD, where resilience-related aspects are present but implicit. This paper aims to make the elements related to resilience more explicit.

Therefore, this study addresses the research question: **"How can educators use the ELD framework to foster resilience in EE?"** By analysing existing theories and literature on resilience and ELD, this research investigates where resilience-strengthening elements are embedded within the ELD framework's process. Through this exploration, the study aims to bridge the gap between theoretical insights on resilience and their practical application in EE, ultimately aiming to contribute to developing more resilient founders and the long-term success of their start-up.

Methodologically, we adopt a translational science approach in entrepreneurial research, focusing on transforming scientific discoveries into practical tools, products, or services that address real-world needs. This approach not only creates economic value but also feeds back into and enhances the relevance of scientific research (Woolf, 2008). This approach allows "for moving discoveries made in basic entrepreneurship research to entrepreneurial practice (T1), entrepreneurial communities (T2) and entrepreneurship policy (T3)" (Munoz & Dimov, 2023, p. 1).

THEORETICAL BACKGROUND

Resilience

We define resilience as a dynamic process encompassing positive adaptation despite significant

adversity (Sutcliffe & Vogus, 2003; Luthar, 2000; Hartmann et al., 2019). Within the resilience process, four defining elements always exist (Fisher et al., 2023): First, the triggering adversity; second, one's resources; third, the positive adaptation/development that aids the "system" in (re)gaining a positive outcome (the fourth element) such as well-being (Masten, 2001) and performance (Hartmann et al., 2022). Resilience can apply to any "system", from individuals to teams, organisations, and beyond (Hartmann et al., 2019). In this study, we focus on the individual level, the entrepreneur.

Early research on personal resilience and initial studies on entrepreneurial resilience mainly defined resilience as a capacity/ability or a trait that individuals or entrepreneurs possess to cope better with adversities. In the second wave of resilience research, the focus was put on the process perspective of resilience (e.g., Richardson, 2002; Hartmann et al., 2022), focusing on how resilience develops under specific conditions (Duchek, 2018; McLarnon & Rothstein, 2013; Moenkemeyer et al., 2012; Todt et al., 2018). Following the process perspective of resilience allows us to approach resilience and resilience building holistically. The process perspective incorporates the trait, capacity, and outcome aspects and allows the study of all mechanisms that foster positive adaptation to adversities (Hartmann et al., 2022). In this regard, we define an "entrepreneur's" psychological resilience as the process by which an entrepreneur "builds and uses [his/her] capability endowments to interact with the environment in a way that positively adjusts and maintains functioning before, during, and following adversity" (see Hartmann et al., 2022, p. 1043, which builds on Williams et al., 2017, p. 742). This perspective helps us to embed resilience into EE in general and ELD in particular. In this regard, EE approaches can focus on how these resources (e.g., capabilities) are built or fostered and how these should interact with the environment when facing adversity.

Empirical research demonstrates that resilience is influenced by internal and external resources (Hartmann et al., 2019; Masten, 2001). Internal resources, including personal traits and capabilities like self-efficacy, emotional intelligence, coping strategies, and optimism, are critical for resilience. A meta-analysis by Robertson et al. (2015) found that resilience training programs aimed at enhancing personal resources (such as self-regulation, emotional awareness, and stress management) led to improved mental health and well-being, reinforcing that building internal resources can enhance resilience.

External resources, such as social support, workplace conditions, and leadership support, also significantly foster resilience. Studies have shown that social support systems, whether through family, colleagues, or mentors, significantly bolster resilience (Hartmann et al., 2019; Todt et al., 2018). For example, Masten (2001)

highlighted the role of social support as a robust resilience factor in individuals facing adversity. This is further supported by the Job Demands-Resources (JD-R) model, which suggests that access to adequate resources (including supportive leadership and organisational resources) helps mitigate stress and foster resilience (Bakker & Demerouti, 2007).

The literature review from Hartmann *et al.* (2019) gives a general overview of resilience research in the work setting. In a further literature review on the resilience of entrepreneurs, Hartmann *et al.* (2022) systematically review what is known about entrepreneurs' psychological resilience. In both studies, the authors categorise existing research in resilience and differentiate between antecedents and outcomes of resilience, which we will explore below.

Developments in Entrepreneurship Education

The current state of EE largely follows a human-centred design approach according to the Double Diamond Model (Design Council, 2007), which first emphasises the problem definition before addressing the solution finding. For problem definition and solution finding, many popular entrepreneurial methods and frameworks exist to help entrepreneurs during their journey. For example, the Lean Start-up method (Ries, 2011) and the Business Model Canvas (Osterwalder & Pigneur, 2010).

However, scholars such as Sarasvathy (2009) and the competence model *EntreComp* (Bacigalupo *et al.*, 2016) and *GreenComp* (Bianchi *et al.*, 2022) have highlighted additional aspects relevant to a successful entrepreneurial journey. They mainly refer to the personal resources of the founders, which significantly influence entrepreneurial success. Many educational programs have yet to integrate these elements fully. Therefore, we claim a growing need for new approaches in EE which incorporate these aspects and offer a more holistic understanding of what it takes to succeed as an entrepreneur sustainably. These new educational approaches in EE should go beyond the traditional model of the Double Diamond and further address problem definition and solution finding and the personal and situational nuances that shape entrepreneurial journeys, including resilience (Luthans & Youssef-Morgan, 2017).

Entrepreneurial Life Design

We define ELD as an educational framework that uses the systemic and collaborative process of human-centred design and an entrepreneurial mind- and skillset to empower individuals for transformation and proactively design their meaningful contribution to a sustainable personal and professional future. The approach can be aligned with teams, organisations, and societies (Wolf & Maisch, 2023). Initially, Life Design paradigms emerged as a tool for personal and

professional growth (Savickas, 2012). Later, this personal development perspective merged with the Design Thinking process and mindset (Burnett & Evans, 2016). Therefore, the ELD framework combines the human-centred design process with personal growth interventions. As such, it shows the potential to address the unique challenges individuals face in the entrepreneurial journey (Maisch & Wolf, 2022). Its focus on the resources and needs of individuals undergoing transformation processes positions itself as a promising approach to address these personal and situational nuances. Eventually, it enhances resilience development within EE (Bullough & Renko, 2013).

This paper explores the opportunities and potential of ELD to enhance resilience in the entrepreneurial context. Specifically, it investigates how critical aspects of resilience are already present within ELD and how these elements can be further developed to strengthen entrepreneurs' resilience. By identifying where ELD can best contribute to resilience-building, this paper aims to bridge the gap between the theoretical concept of resilience and its practical application in EE.

FRAMEWORK ELABORATION

We take essential scientific findings of resilience research and elaborate a well-tested and science-based ELD framework named 4D LOOPING (Wolf & Landberg, 2021/2022/2023) into the resilience context. Concerning the translational science process proposed by Munoz & Dimov (2023), the 4D LOOPING framework is a translation output of research integrated into entrepreneurial practice through various workshops. We merge this output with basic resilience research to develop new meanings and relationships supporting the entrepreneurship community and future research by integrating ELD and resilience research.

We combine two research fields to integrate resilience into the ELD framework holistically. First, Hartmann *et al.*'s (2019) categorisation of resilience resources provides an overview of critical factors in fostering resilience outcomes. Second, we utilise the 4D LOOPING model as a practical educational tool within ELD, which is suited explicitly for EE. By intersecting the 4D LOOPING phases with Hartmann *et al.*'s resilience resource categories, we theoretically demonstrate how critical resilience resources are addressed in each phase of the 4D LOOPING process.

Incorporating resilience into ELD, we selected the 4D LOOPING model for its structured and theory-driven approach, which aligns well with entrepreneurs' dynamic needs. This model's practical implementation in entrepreneurship and innovation contexts (Maisch & Wolf, 2022; Todt & Wolf, 2023) has shown its potential for effectively integrating resilience resources, making it a suitable starting point for this analysis.

Ways to Nurture Resilience

One way to foster resilience outcomes such as well-being and performance is by strengthening internal and external resilience resources (Masten, 2001; Robertson et al., 2015); Hartmann et al. (2019) differentiate between five internal and external resources:

1. **Personal resources** (e.g., expertise, self-efficacy, emotional intelligence, ...),
2. **Personal perceptions and attitudes** (e.g., sense of purpose, meaning, calling, commitment, self-direction),
3. **Work resources and demands** (e.g., social support, stressors, learning, leadership, ...),
4. **Personal Emotions** (e.g., positive emotions), and
5. **Personality traits and cultural value orientation** (e.g., conscientiousness, future orientation).

Educational Application: 4D LOOPING

The 4D LOOPING model (Wolf & Landberg, 2023) is a conceptual ELD framework for holistic self-positioning and transformation. It is typically implemented in a collaborative peer-learning environment and consists of four phases: Discover, Design, Deliver, and Discuss (see Fig. 1).

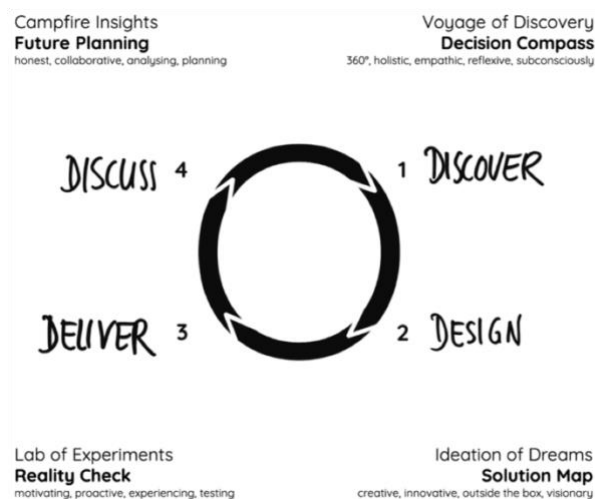


Fig. 1. 4D LOOPING (Wolf & Landberg, 2021)

1. The first phase, "Discover", focuses on self-exploration and empathy, adopting a holistic perspective on self-awareness. A toolkit that includes cognitive, emotional, physical, subconscious, and collaborative aspects of the self helps to complete the self-discovery journey with a well-founded personal compass.

2. In the second phase, "Design", after defining a sharp design challenge, the creative and innovative approach to imagining desirable futures involves developing bold scenarios.
3. The third phase, "Deliver", involves experimentally and prototypically implementing and testing a solution idea.
4. The fourth phase, "Discuss", consists of reflecting on the outcome and one's standpoint, planning the following steps, and identifying suitable team partners for the journey ahead.

In summary, the program helps participants define their self-identity and positioning, directly engaging in a personally relevant and human-centred innovation and transformation process that makes the direct impact tangible. This comprehensive method supports the process and addresses entrepreneurial and psychological resources such as resilience and creativity (Wolf & Landberg, 2023).

In the following, we theoretically explore the potential of nurturing resilience in ELD by applying the 4D LOOPING model. Based on insights from resilience research, we develop propositions on how the four phases of the 4D LOOPING could impact specific resilience resources. By doing that, we highlight possible connections between applying ELD and resilience. This could serve as a starting point to further integrate resilience in ELD. The approach to developing the propositions is to identify the overlap between the above-identified resilience resources (1. Personal resources, 2. Personal perceptions and attitudes, 3. Work resources and demands, 4. Personal emotions, 5. Personality traits and cultural value orientation) and the phases of the 4 D LOOPING (Discover, Design, Deliver, Discuss).

Phase 1 - Discover

A significant part of the "Discover" phase is self-exploration, adopting a holistic perspective, and developing a well-founded personality compass. Doing this could strengthen *personal resilience resources* such as self-efficacy and locus of control. Furthermore, a clear consequence of discovering oneself is a sense of self-direction, which is one crucial resilience resource of *personal perceptions/attitudes*. This proposition is supported by a study from Siu and Shek (2010). This study explores how self-exploration and developing self-awareness in a structured program enhance personal resilience factors such as self-efficacy and locus of control, critical elements of a well-rounded personal development process. By discovering oneself, an individual also learns about *work resources and demands*. For example, individuals discover what in the workplace encourages them to grow and what drains their energy.

Proposition 1: We propose that the phase of "Discover" positively influences several resilience

antecedents, mostly personal resources, personal perceptions, attitudes, work resources and demands.

Phase 2 - Design

The "Design" phase aims to engage in creative and innovative processes, such as bold solutions to individual challenges. It is about being creative and open to new perspectives, leaving boundaries to dive deeper into one's values and desired futures. This process strengthens resilience by creating *positive personal emotions* and looking boundaryless into wishes and dreams, probably feeling joy and excitement. It also fosters *personal perceptions* such as calling and purpose. An individual discovers one's most positive future and thus discovers one's why. This proposition is supported by research on the importance of meaning, calling and purpose for resilience (Bernard & Barbosa, 2016; Cameron & Brownie, 2010) and the positive effect of positive emotions on resilience (Sommer *et al.*, 2016).

Proposition 2: The "Design" phase positively influences resilience antecedents, mostly positive emotions and personal perceptions and attitudes.

Phase 3 – Deliver

"Deliver" involves experimenting and prototyping, thus testing one's ideas. We expect this phase to foster an entrepreneur's feeling of competence (personal resource) as learning that results from this process potentially elevates competencies. A study by Verleysen *et al.* (2015) shows that resilience is strengthened when the need for competence is satisfied. This empirical finding is based on the self-determination theory by Deci and Ryan (2000). In the same vein, we expect that the learning process in the "Deliver" phase strengthens personal self-efficacy (personal resource). Self-efficacy is one of the most vital antecedents of resilience (Hartmann *et al.*, 2019). Furthermore, reflective ability (personal resource) positively correlates with resilience (Kinman & Grant, 2011). Such a reflective ability is expected to be strengthened by a structured process for experimenting and testing.

Proposition 3: We propose that the phase of "Deliver" positively influences resilience antecedents, primarily personal resources.

Phase 4 - Discuss

"Discuss" involves reflecting on the process and the outcome. It helps to define further one's standpoint, self-identity, and positioning, which is supposedly well connected to a sense of purpose and self-direction (*personal perceptions/attitudes*). Further, the discussion process includes identifying suitable partners/supporters for one's endeavours, which directly links to social support, suitable partnerships, and teamwork (*work resources and demands*). Furthermore, we find that feedback from others, which is an integral part of the "Discuss" phase, influences resilience positively.

Research shows that these social resources and feedback within the work context foster resilience (e.g., Foerster & Ducheck, 2017; Kuntz *et al.*, 2017). Social support is one of the most robust antecedents of resilience (Masten, 2001).

Proposition 4: We propose that the phase of "Discuss" positively influences several resilience antecedents, primarily work-related resources, demands, personal perceptions and attitudes.

DISCUSSION AND CONCLUSIONS

Summary

As a practical application of the ELD framework, 4D LOOPING demonstrates significant potential for continuously strengthening personal resilience resources, offering essential support to entrepreneurs as they navigate the peaks and valleys of their journey. We have grounded this approach in numerous theoretical foundations, indicating that the integration of resilience into the entrepreneurial process can be effectively fostered through 4D LOOPING. This paper represents the first theoretical attempt to merge ELD with resilience explicitly.

Initiatives such as the ELD track at the EURAM conference since 2022 (EURAM, 2024), the growing ELD community, and recent publications have heightened interest in ELD from academics and practitioners. Furthermore, with the rising focus on entrepreneurs' mental health (Munoz *et al.*, 2023), this study underscores the importance and potential of integrating resilience into ELD. We propose this integration as a promising area for future research within EE. Conceptually, this paper contributes to the theoretical advancement of ELD while offering practical implications for enhancing start-up resilience and the well-being of founders.

Limitations & Future Research

The primary limitation of this paper lies in its theoretical nature, as it examines the integration of ELD and resilience within EE without empirical validation. While the proposed conceptual framework is promising, the absence of concrete data or case studies restricts our ability to assess its practical impact effectively. This highlights the need for further empirical studies to test and refine the framework's effectiveness in fostering resilience and driving entrepreneurial success.

Future research should prioritise evaluating various implementations of ELD to determine their resilience-building potential across different contexts. Additionally, investigating the contextual factors influencing resilience development is crucial for understanding its broader applicability in entrepreneurial settings. Ultimately, more comprehensive studies are

needed to explore the short- and long-term impacts of ELD interventions, particularly in challenging environments, ensuring that positive outcomes are achieved for entrepreneurs and their ecosystems.

Explicit incorporation of Resilience in ELD

Beyond the previously discussed implications, a key recommendation emerges: While the ELD framework inherently fosters resilience, we argue that resilience should be explicitly integrated into ELD training within EE. Specifically, resilience must be clearly defined and taught within ELD applications like the 4D LOOPING. Additionally, practical guidance should be provided on how entrepreneurs can actively apply these resilience resources when facing challenges in their entrepreneurial journey. This will better equip them to recognise, develop, and deploy their resilience throughout their ventures.

Contributions

This paper marks a significant step towards integrating resilience more explicitly into the ELD framework, offering entrepreneurs a structured approach to navigating their journey's inevitable challenges and setbacks. By equipping entrepreneurs with the tools to foster resilience, the ELD framework—mainly through practical applications like 4D LOOPING—paves the way for more sustainable entrepreneurial success. As entrepreneurs become better prepared to face adversity, their businesses will likely thrive long-term, creating robust ecosystems that foster innovation and drive economic prosperity.

In conclusion, this paper aims to initiate a research dialogue on integrating resilience development into ELD within EE to strengthen resilience resources and contribute to more sustainable entrepreneurial success. By explicitly encouraging entrepreneurship educators to incorporate resilience into their training programs, we aim to inspire a broader impact, benefiting both individuals and the societies in which they operate. This is just the beginning of a deeper exploration into how ELD can serve as a transformative tool for building more resilient and successful entrepreneurs.

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