Individual Resilience in Organizations in the Business Context: A Conceptual and a Bibliometric Analysis

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Abstract

While individual resilience has been extensively examined within organizational contexts, its conceptual clarity, especially in the business context, remains a subject of concern, necessitating further research. This study addresses this research gap by conducting a conceptual analysis of 97 scientific articles from international peer-reviewed journals, supplemented with bibliometric analysis, about the concept of individual resilience in organizations in the business context. The findings reveal that it is an interactive process influenced by the social environment and the organization itself. It can manifest before, during, or after encountering unusual situations or challenges and can take various forms, such as state-, outcome-, trait-, or process-based resilience. The study introduces a comprehensive model of individual resilience in organizations in the business context, encompassing critical elements, antecedents, and consequences. This model offers practical insights for enhancing leadership and establishing supportive mechanisms, while also serving as an agenda for future research.

Keywords

Individual resilience, Conceptual analysis, Bibliometric analysis

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1. Introduction

In the scholarly literature, resilience has been extensively studied from a variety of perspectives and across different fields of science. In organizational context, resilience is a topical and multi-level (individual, team, organizational) matter: the word resilience is increasingly being used in organizational everyday speech wherein resilience plays an important role, particularly amid turbulence and changes. Business and management consultants increasingly point to resilience as a concept that relates to organizational change processes, which have increased and are widely seen as necessary also for according to scholars (e.g. Shrivastava et al., 2021). Moreover, resilience has a long-running growing popularity as a research topic among individuals and communities (Vanhove *et al.*, 2016; Smith *et al.*, 2020), e.g. due to its recognized strategic importance in today's turbulent environment for organizations (Luthans *et al.*, 2004; King *et al.*, 2016; Sahni *et al.*, 2021). However, in the consultant language, which plays its own significant role in the life of organizations, individual resilience is sometimes oversimplified and referred e.g. to as a change capacity (Resilio, 2020; Mansourian and Moore, 2022).

Additionally, although resilience has been widely studied at multiple levels (individual, team and organizational) (e.g. Sudmeier-Rieux 2014; Britt *et al.,* 2016; King *et al.,* 2016; Linnenluecke 2017; Hartmann *et al.,* 2019; Raetze *et al.,* 2021), individual resilience as a phenomenon in organizations in the business context still seems to raise confusion. As Fisher *et al.* (2019, 584) note; "*there remains much work to be done in terms of understanding resilience as it occurs in organizations*". Furthermore, as Rodgers (2000) points out, the context of the conceptual analysis research matters for the use and understanding of the concept.

In a broad review, with a focus on psychological (i.e. individual-level) resilience in the U.S. Military, Meredith *et al.* (2011) found altogether 104 different definitions for individual resilience. Britt *et al.* (2016) call for research on individual-level resilience and emphasize that resilience is commonly mistaken as being associated with organizational stress. They add that this could be due to the absence of a clear definition of what individual resilience means in organizations (Britt *et al.,* 2016). There have also been calls for conceptual development and for further research on resilience at the individual employee level (Britt *et al.*, 2016; King *et al.*, 2016). Additionally, Fisher *et al.* (2018) call for further research on adversity triggers and resilience outcomes, mechanisms and promoting factors in an organizational context.

Since those calls, several studies have attempted to define individual resilience in organizations. Hartmann *et al.* (2020), for example, define individual resilience in organizations as a process of development that emerges in response to a range of situations and leads to a positive demonstration of adaptability. Also, Fisher *et al.* (2019, 592) adopt the process-view and define resilience as: "*the process by which individuals are able to positively adapt to substantial difficulties, adversity, or hardship.*" It is clear, therefore, that nowadays, there is a fairly good definitional understanding of individual resilience within organizations. However, in our view, this understanding is not fully congruent (for example due to a "*missing clarity*" [Raetze et al. 2021, p. 637]) and does not fully capture individual resilience in organizations in the business context, which can be seen to involve a particular kind of turbulence and, for example, constant and rapid change and the resulting particular strain and stress (see e.g. Giorgi *et al.,* 2017; Accenture 2018, see also Giustiniano *et al.,* 2020).

Individual resilience, which refers to an individual's flexibility and adaptability to change and unpleasant situations (Stein *et al.*, 2022), and which is widely seen as a part of Psychological Capital, is an important asset, as is also team-level resilience, especially in relation to manage-

ment in e.g. organizations in the business context (see e.g. Savolainen *et al.,* 2019). For clarification, according to Luthans *et al.* (2007), Psychological Capital (PsyCap) means an individual´s positive psychological state of development which is characterized by hope, (self-)efficacy, resilience and optimism. Such research, the knowledge from which is needed in leadership and organizational life in general, and which can also directly inform business strategy in relation to strengthening the capacity of individuals and the survival of communities, has also been recently called for (e.g. DiBella *et al.,* 2023, see also Borg *et al.,* 2022). Consequently, based on systematically searching and analysing the academic organizational and management literature, we fill the existing research gaps by conducting a conceptual analysis, complemented with a bibliometric analysis. We focus on clarifying the concept of and revealing antecedents and consequences of individual resilience in organizations in the business context.

In particular, one of our practical contributions relates to the previously called-for understanding of the utility of resilience as a personal resource in organizational life (e.g. Hartmann *et al.,* 2020). Teams and organizations are made up of individuals and their resources and we additionally see our research here as contributing to the research on team- (and organizational) level resilience that has been called for (see e.g. Borg *et al.,* 2022). One of the theoretical and practical contributions of our article lies in providing highly useful insights for further research in trying to understand the components, drivers, influences and factors of individual resilience in organizational life and especially in business context.

Through a conceptual analysis, we aim to clarify 1) the critical elements of individual resilience in organizations in the business context and 2) the factors that influence it. We perceive a particular need for our research in the turbulent world of organizations in the business context, which guided our choices for the selection of the search criteria. As a conclusion, we make a model that can also be used as the agenda for future research, as we noticed that the research data did not provide a perception that took into account all aspects and that adequately reflected the nature of business and also management (which we see as intrinsically linked to organizations and the business context) contexts in organizational life. Furthermore, we seek to 3) clarify the antecedents and consequences of individual resilience in organizations in the business context and how it manifests itself in social reality. At the end of the study, we also discuss the managerial implications. Our objective is not only to enhance organizational performance and efficiency through individual resilience but also to enhance the survival, coping, and well-being of the employee.

In our study, we integrate individual and organizational levels because as told, organizations are made of people and we believe the integration of these two levels is crucial for the reason that in the ever-changing work environment (e.g. Shrivastava *et al.,* 2021), factors related to both the organizational level (e.g., efficiency, culture) and the individual level (e.g., endurance and well-being) are highly important in the best possible survival (see e.g. Kuntz *et al.,* 2017; Tonkin *et al.,* 2018; Dhoopar *et al.,* 2022). However, our message is also that organizational actions, such as leadership (supportive, servant, positivity, etc.) and culture-related initiatives (support practices, interaction, etc.), can contribute to supporting resilience at the individual level (see Hartmann *et al.,* 2020; Mokline & Ben Abdallah, 2021). In our view, for example, individuals fare better in the workplace when they naturally possess qualities associated with resilience. On the other hand, as a pre-assumption, we believe that by combining personal resources, resilience can evolve from an individual trait towards a community trait (team-level, organizational level).

Naturally, individual-level resilience is evident in other areas of life besides organizations. Therefore, we consider it important to explore next, as a clarifying etymological introduction,

the dimensions of resilience through a historical journey. After that, we move to bring out current research on individual resilience in organizational and management contexts and the related constructs.

2. The concept of resilience – a historical journey

2.1. Etymology of the concept of resilience

The term "resilience" is an old and polysemic term that originates and has been studied in different fields of science. According to today´s understanding, the etymology of resilience derives from the Roman Latin resilire, resilio or resilientia which can be translated to jump, to leap, to bounce back – the fact of avoiding or the action of rebounding (Siambabala *et al.*, 2011; Alexander, 2013; see also Harper, 2021; Oxford English Dictionary, 2022). In science, the term resilience was used for the first time by Sir Francis Bacon in 1625 when he used the term resilience to illustrate the strength of the bouncing back echo (Alexander, 2013). Resilience, borrowed from natural sciences (physics or ecology), became a research topic in anthropology in the first half of the 20th century, due to the World Wars and the recession. Thereafter, resilience was increasingly studied in the field of psychology in the decades after the Second World War. For example, Tyhurst (1957) studied how individuals react to disasters.

In the 1960s, 1970s, and 1980s pioneering resilience researchers such as Garmezy (1974), Rutter (1979) and Werner and Smith (1982) studied resilience in the field of developmental psychology. In the 1990s, the concept of resilience began to attract research interest as a research topic within organizational and management studies and the interest increased exponentially at the turn of the millennium and continued its strong growth in the 2010s (Ollier-Malaterre, 2010; Cooper *et al.*, 2019) and thereafter, the popularity has only increased (Vähäkangas, 2010; Raetze *et al.*, 2021). It can be stated that the idea of physical resilience (i.e. physical strength of material) was "*extrapolated to psychological resilience*" (Meredith *et al.*, 2011, 2) referring to individual resilience.

2.2. Individual resilience in organizational and management research and the related constructs

At the individual level, resilience has been studied, in addition to being called individual resilience, in an organizational context at least as a career resilience (Abu-Tineh, 2011), employee resilience (Tonkin *et al.*, 2018; Teng-Calleja *et al.*, 2020), worker resilience (Fandiño *et al.*, 2019), entrepreneurial resilience (Santoro *et al.*, 2020), ego-resilience (Block and Block, 1980; Ferreira *et al.*, 2018), psychological resilience (Fletcher and Sarkar, 2013; Meredith et al., 2011; Hadjielias *et al.*, 2022), emotional resilience (Sahni *et al.*, 2021), collective resilience (Srour *et al.*, 2021), innovator resilience (Moenkemeyer *et al.*, (2012) and personal resilience (Labrague and Santos, 2020). Some researchers also distinguish between employee resilience (meaning e.g. maintaining productivity) and individual resilience (meaning e.g. personal ability to survive and thrive) (Tonkin *et al.*, 2018; Bardoel and Drago, 2021).

Accordingly, Luthans *et al.* (2007) define individual resilience, as a part of Psychological Capital (i.e. a positive psychological *state* characterized by hope, [self-]efficacy, resilience and optimism), popularly as: "*when beset by problems and adversity, sustaining and bouncing back and even beyond to attain success*" (p. 3). However, there are several other definitions of individual re-

silence. According to Fletcher and Sarkar (2013), most of these include "*two core concepts: adversity and positive adaptation*" (p. 12).

The resilience of an organization is largely made up of the resilience of its individuals. However, organizational resilience has its own definition, which, according to Hollnagel (2006), is: "*the ability of a system or an organization to react to and recover from disturbances at an early stage, with minimal effect on the dynamic stability*" (p. 16).

In the present study, we acknowledge the different nuances and levels surrounding the concept of resilience within organizations. However, we focus on individual resilience and, for the sake of clarity and despite the various nuances, we use only the term individual resilience to which we hereafter refer as resilience. It has been noted that the words resilience and resiliency are "*just different forms of the same word, but in today's English, ´resilience´ is far more common than ´resiliency´, especially outside the U.S. and Canada*" (Grammarist, 2009–2014). Consequently, in everyday speech, the term resilience is commonly used to describe both. Also, the terms resilience and resiliency are sometimes used interchangeably in the literature. Moreover, it must be emphasized that the concepts are not entirely synonymous. Hanson and Keplinger (2021) clarify that "*resilience as a capacity is known as resiliency*; [which] *prepares all for future stress, change and disruption, and is likely beneficial to sustainability over time*" (p. 450). Related to this, resilience has also been defined as bouncing forward, which is an optimistic psychological view (Siambabala et al., 2011). Thus, resiliency refers more to pre-adversity capacity and resilience than to post-adversity survival.

For the sake of balance, it should be noted that individual resilience can also have some negative dimensions in an organizational context. According to Britt *et al.* (2016), problems can be related, for instance, to stigmatization (a non-resilient person is somehow deficient, etc.), which can result in, for example, not seeking help when needed and in a timely manner. This can have adverse effects on the survival of the whole organization in the long run. Moreover, adapting from e.g. Hartman et al. (2019), some resilient individuals may act as "positive change agents", while others may focus on resisting necessary changes while encouraging others to join the resistance and consequently, this kind of unconstrained "negative change agency" can cause potential problems for resilience in an organization at multiple levels (individual, team and whole organization) (p.948).

3. Methodology

A conceptual analysis is a method that aims to understand concepts through an exact process (Wilson, 1969). It differs from a literature review in that a conceptual analysis is a non-empirical research method, focusing on an in-depth examination and understanding of one or more concepts, whereas a literature review compiles and evaluates existing literature in a particular research area (see e.g. Puusa, 2008, see also Salin & Koponen 2023). The objective of conceptual analysis is to identify, structure and analyse meanings of a concept (Walker and Avant, 1988; 1995) and sometimes also to propose a new concept definition (Näsi, 1983). Conceptual analysis helps to identify and define attributes of a concept and simultaneously, distinguishes the concept from related concepts (Wilson, 1969; Walker and Avant, 1992; Puusa, 2008). When there is a need to clarify the content and meaning of vague concepts that are nevertheless frequently in use, conceptual analysis is particularly relevant (Walker and Avant, 1992; Hupcey *et al.*, 1996). Thus, the aim of a conceptual analysis ranges from clarifying the meaning of the concept to developing an operational definition for the concept and distinguishing between the

ordinary and scientific use of language when speaking of the concept (Wilson, 1969; Nunnally, 1978; Näsi, 1983; Walker and Avant, 1988; 1992). Another contribution of conceptual analysis is promoting a shared understanding of the concept among scholars (Kakkuri-Knuuttila, 1998).

Several literature review and meta-analysis type publications (e.g. Vanhove *et al.,* 2016; Hartmann *et al.,* 2020; Raetze *et al.,* 2021) have brought together key issues on individual-level resilience in organizations. However, in our view, they do not provide a full picture and congruent understanding of the characteristics of individual resilience in organizations in the specific business context and, as discussed in the introduction, Rodgers (2000) points out that the context of the conceptual analysis research matters for the use and understanding of the concept. Thus, in the present study, we aim to identify and clarify characteristics of individual resilience in organizations in the business context.

We complement the conceptual analysis with a bibliometric analysis (in section 5. i.e. descriptive information) conducted using Bibliometrix (2023) – a comprehensive scientific mapping tool for bibliometric analysis (Aria and Cuccurullo, 2017). Bibliometric analysis employs a quantitative research approach to analyse, examine, and visualize the research that exists on a specific theme, and it includes several submetrics that describe the intellectual structure relating to the research theme (Small, 1973; White and Griffith, 1981). In their study, Zupic and Čater (2015) proposed a standard workflow for bibliometric analyses, consisting of five distinct phases: 1) study design, 2) data collection, 3) data analysis, 4) data visualization and 5) interpretation. Aria and Cuccurullo (2017) highlight that bibliometric analysis is performed at a specific point in time to present a static picture of the research that exists at the moment. Consequently, we consider this can support the conceptual analysis. Bibliometric methods and analyses are growing in popularity, and these methods are increasingly used with the aim of uncovering the structure and dynamics of an area under study (Ellegaard and Wallin, 2015; Singh *et al.*, 2020).

In the analysis of the results, alongside the conceptual analysis methodology (Wilson, 1969; Walker and Avant, 1992; Puusa, 2008), we also utilize theory-driven qualitative content analysis (e.g., Graneheim & Lundman 2004; Schwartz & Ungar, 2015) and researcher triangulation (Merriam & Tisdell, 2015; Puusa & Julkunen 2020) as part of the categorization process of the results. We will further elaborate on this in the results chapter.

4. Data collection and research process

In collecting the data for the present study, we systematically searched Scopus which is the largest scholarly database of peer-reviewed scientific publications that can thus provide and cover more perspectives, subjects and topics than offered by other databases (Mahmood and Shah, 2016; Md Khudzari *et al.*, 2018; Vijayakumar *et al.*, 2018). Additionally, we searched other search engines, e.g. Business Source Complete (EBSCO), ProQuest (ABI/INFORM), and Web of Science, but since the results of these did not differ significantly from those of Scopus, and since there were other reasons for choosing Scopus as mentioned above, we finally settled on Scopus. We performed our search in Scopus (3/2022) and the keyword resilience initially resulted with altogether 139,570 scientific articles. With our focal interest being in individual resilience in organizations in the business context, we further performed a search using a set of keywords including "individual AND resilience AND organization OR organizational AND individual AND resilience" (Figure 1). Scopus provided a ready-made filtering category for business, management, and accounting, which we utilized. Also, we felt that by doing so, we achieved the best available opportunity to focus our research on the business context. We limited our search to titles, abstracts, and key-

words, due to the fact that we first wanted to make sure that the articles were about resilience as their main topic. Only after this "pre-screening" did we check the main body of the articles. Such a methodology has been used in concept analyses (e.g. Salin & Koponen 2023).

This search (title, abstract, keywords) resulted in 249 studies (articles) published in English in the fields of business, management, and accounting, where we limited our search in Scopus. These choices (electronic filtering criteria provided by Scopus) comprise our inclusion criteria (Cooper *et al.*, 2020). The exclusion criteria (applying Cooper *et al.*, 2020) included articles that, based on the title and the abstract, 1) did not focus on resilience at all as a research topic and/or did not address resilience at the individual level at all, 2) clearly belonged to a context / scientific discipline other than business, management and accounting or 3) the context was something other than an organizational context. Articles dealing with resilience only at the organizational level were excluded, but articles where the organizational level was dominant, but where the individual level was also an important element, were included. In some cases, the title and the abstract did not indicate the suitability of the article, in which cases the full-text article was used to confirm the suitability. As a result of this systematic procedure (Figure 1), the article was included in the analysis when the criteria were met. These steps resulted altogether in 97 articles (Appendix A) being included in the conceptual analysis.
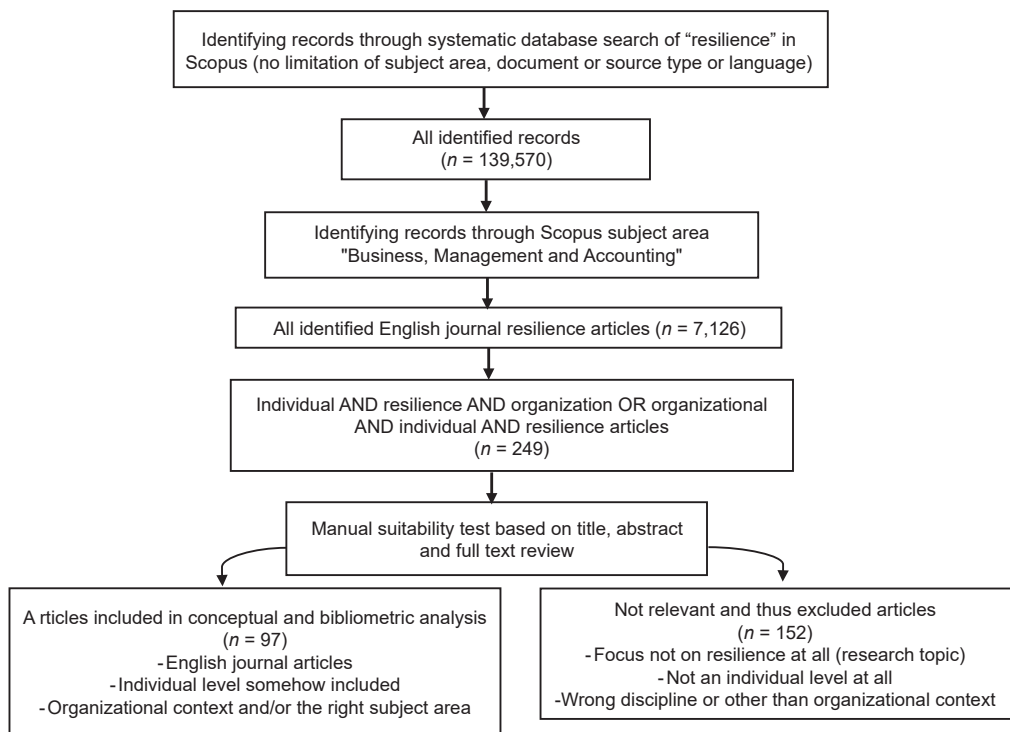
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┌─────────────────────────────────────────────────────────────┐
│ Identifying records through systematic database search of    │
│ "resilience" in Scopus (no limitation of subject area,       │
│ document or source type or language)                         │
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              │ All identified records         │
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        │ Identifying records through Scopus       │
        │ subject area "Business, Management and   │
        │ Accounting"                              │
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     │ All identified English journal resilience        │
     │ articles (n = 7,126)                             │
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     │ Individual AND resilience AND organization OR    │
     │ organizational AND individual AND resilience     │
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        │ Manual suitability test based on title,  │
        │ abstract and full text review            │
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│ Articles included in           │        │ Not relevant and thus excluded │
│ conceptual and bibliometric    │        │ articles (n = 152)             │
│ analysis (n = 97)              │        │ - Focus not on resilience at   │
│ - English journal articles     │        │   all (research topic)         │
│ - Individual level somehow     │        │ - Not an individual level at   │
│   included                     │        │   all                          │
│ - Organizational context       │        │ - Wrong discipline or other    │
│   and/or the right subject     │        │   than organizational context  │
│   area                         │        │                                │
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Figure 1. The search and pruning process

5. Descriptive information using a bibliometric analysis

To better understand the included studies, we first describe the characteristics of our sample (n = 97 journal articles) using a bibliometric approach. The studies were published between 1990 and 2022 in altogether 70 different journals and by 288 different authors. On average, the articles received 44.91 citations with each article being cited 6.1 times per year. The majority of the studies (87%) were published in high-impact journals, as ranked by the Academic Journal Guide (2021). Figure 2 illustrates the journals which have published more than two studies on individual resilience in organizations in the business context.
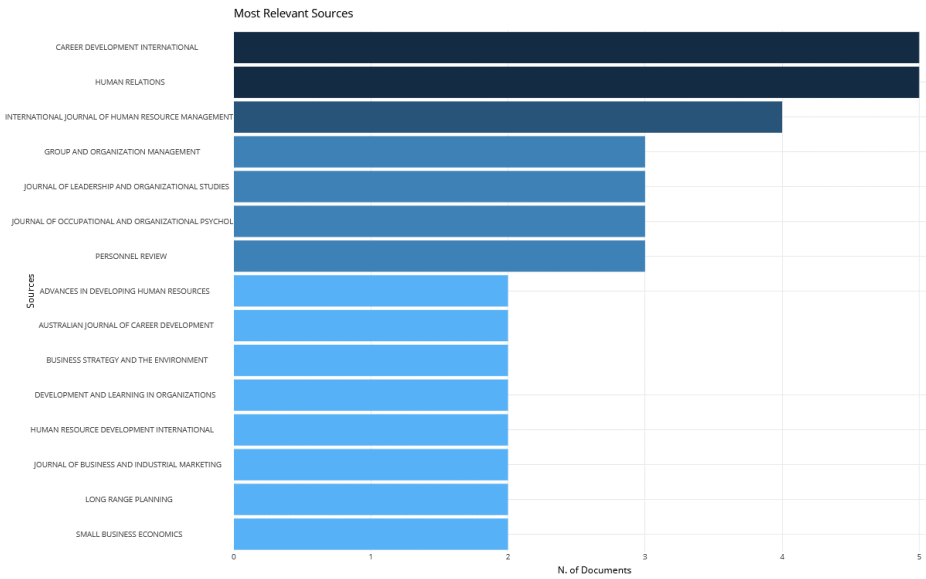
Figure 2. Top 15 journals publishing on individual resilience in organizations in the business context

Figure 3 illustrates that the first studies on individual resilience in an organizational context were published already in 1990. However, during the two decades that followed, only a number of studies focused on this topic, while individual resilience in organizations in the business context started to attract increasing research interest around 2010.

Figure 3. Annual Scientific Production

Figure 4 shows a co-occurrence network of words and themes that commonly occur with the concept of resilience. The co-occurrence network shows a mutual relatedness of terms according to their paired presence in the literature. In a co-occurrence network, each node represents a concept and each link depicts the co-occurrence of a pair of words while different colours illustrate different thematic areas. It seems that individual resilience in organizations in the business context is associated mostly with the word 'employee' and also to 'Psychological Capital' (red), 'organizational' (blue) and 'HRM' (green) related words. Moreover, there appear to be many workplace-related words (purple) that individual resilience in organizations in the business context has connections with.

Figure 4. Connection Map

As can be perceived from the Country Collaboration Map below (Figure 5), the studies are by far the most concentrated in Western industrialized countries. With regard to countries, we find that research on individual resilience in organizations in the business context comes from all continents. Figure 5 depicts the distribution of articles by country with the largest number of studies being from authors from the United States of America, Canada, the United Kingdom and Australia.
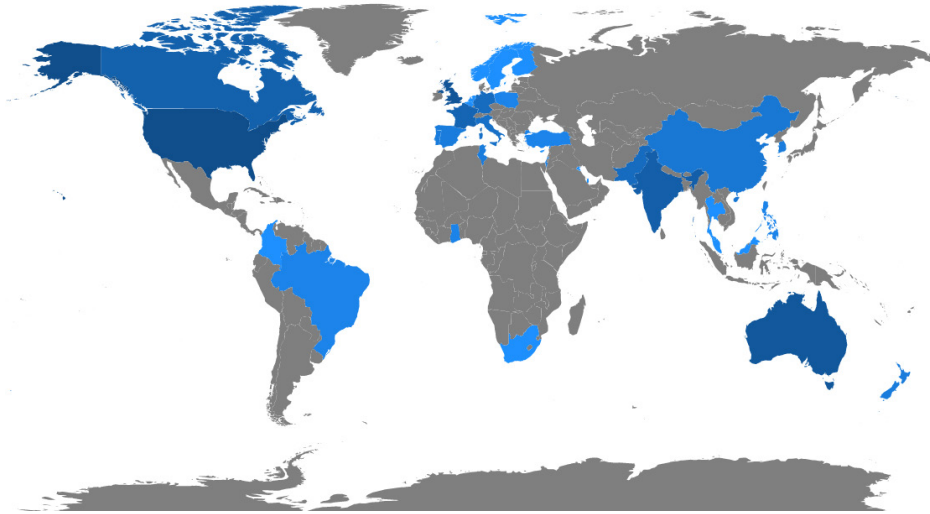
Figure 5. Country Collaboration Map

6. Results

6.1. Multiple definitions of individual resilience in organizations in the business context

Our data structure process (applying Gioia *et al*., 2013*)* reveals that the literature approaches individual resilience in organizations in the business context from four alternative viewpoints, including resilience as a state, an outcome, a trait and a process. This categorization had already been identified in our data, for example, by Moreno *et al.* (2019 [originally Pangallo *et al.,* 2015]). Since we also observed this classification in our own structuring process, we deemed it justified to adopt it as our approach.

We conducted our data structuring process by compiling all the resilience definitions by article into a Word file, which we categorized using a combination of theory-driven qualitative content analysis (applying e.g. Graneheim & Lundman, 2004), conceptual analysis methodology (Wilson, 1969; Walker and Avant, 1992; Puusa, 2008) and Gioia-methodology (Gioia *et al.,* 2013). Moreover, we used researcher triangulation (e.g. Merriam & Tisdell, 2015; Puusa & Julkunen 2020, 200) to find references in the resilience definitions for each article as to whether the article belonged to the state, outcome, trait or process categories according to our interpretation. This meant discussing matters on Teams or in email meetings. This proved to be a highly challenging

task right from the beginning, as only a few articles could be unequivocally assigned to just one category. In other words, the majority of articles addressed resilience through more than one of these categories (state, outcome, trait, and process). Additionally, only in a few articles was a new and unique definition formed. In Table I, we present a few definition examples from each category, in the spirit of analysis transparency and reader-friendliness. Appendix A shows all the research articles and, in context, the categories to which we interpreted their resilience definitions to belong. As noted, there could be multiple definitions in one article, and in some cases, we saw the only option to link the article to multiple categories. The categorization was made according to the perspectives that were discussed in the article and/or the perspective or perspectives that were perceived to be relied upon. The outcome perspective was the most common (67) and the process perspective was the least common (41). The State perspective (54) was the second least common and the Trait perspective (61) was the second most common perspective.

The data included a wide range of types of articles (see Appendix A); empirical (qualitative [22] / quantitative [56]), conceptual (somehow linked to creating a new or development of an existing concept [8]), literature review (20), meta-analysis (a literature review, including the use of an appropriate statistical analysis method [2]), theoretical (focused on developing a theoretical perspective, but was not directly or explicitly linked to the other paper types mentioned [6]) or a combination of these (see Appendix A). We found this diversity of paper types to be an enriching and reliable feature of the data.

In structuring the data, we applied the Gioia method (e.g. Gioia *et al.,* 2013) (Table I). We implemented our structuring process practically by interpreting the definitions of resilience in articles. If we interpreted that the definitions in an article supported the perspective of resilience as returning to a normal state, the article was categorized under the "state" category. If it was interpretable that the emphasis of the definitions of resilience in an article lay on the role of favorable outcomes, the article with its definitions ended up in the "outcome" category. If, on the other hand, the article emphasized the view of resilience as a trait-like ability, characteristic, capacity, etc., the article was classified under the "trait" category. Conversely, if the article predominantly emphasized the perspective of resilience as a developing process influenced by different factors, it was categorized under the "process" category along with its definitions.

Table I. The data structure and some examples of the analysing process of the perspectives "state", "outcome", "trait", and "process"

EXAMPLES OF THE AUTHORS	EXAMPLES OF AUTHENTIC CITATIONS (BELOW ALSO EXAMPLES OF 1ST ORDER CONCEPTS)	EXAMPLES OF 2ND ORDER THEMES (BOLDED) AND JUSTIFICATION INFORMATION OF THEM	AGGREGATE DIMENSIONS (CATEGORIES)
Malik, (2022); Srivastava & Madan, (2020); Varshney, (2022)	Srivastava & Madan (2020): *"capacity to 'bounce back' [to normal state] from adversity enables employees to survive unfavourable events"* (p.44) – normal state – bouncing back – PsyCap-citation	In quotes like this, as we interpreted it, **the central idea of resilience was a "normal" state of returning to after adverse situations or events** If an article's definition of resilience was based on the PsyCap definition, it was always categorised as at least 'state' and 'outcome'	**State** (54 articles relied either fully or partly on this perspective)
Luthans *et al.*, (2004); Moenkemeyer *et al.*, (2012); Duerden *et al.*, (2018); Tonkin *et al.*, (2018); Fandiño *et al.*, (2019); Hanson and Keplinger, (2021).	Luthans *et al.*, (2004): *"capacity to ´bounce back´ from adversity or even dramatic positive changes is particularly relevant in today's turbulent business environment"* (p.47) Fandiño *et al.* (2019): *"how individuals can bounce back from adverse situations and achieve good outcomes"* (p. 137) – trajectory-based descriptions – a good outcome after an adverse event	In quotes like these, as we interpreted it **the central idea of resilience is some favourable outcome** If an article's definition of resilience was based on the PsyCap definition, it was always categorised as at least 'state' and 'outcome'	**Outcome** (67 articles relied either fully or partly on this perspective)
Noe *et al.*, (1990); London (1993); Krisor *et al.*, (2015); Raetze *et al.*, (2021); Steen and Pollock, (2022)	London, (1993): *"resilience is the ability to adapt to changing circumstances"* (p. 55) Krisor *et al.* (2015): *"resilience as mental resistance and therefore, on its trait aspect – [which] is characterized by effective adaptive behavior in challenging situations and the ability to recover successfully after stressful situations"* (p. 651) – cumulative and/or developable individual or collective trait-like ability – capacity – characteristic – resource, or – capability or – a set of skills and attributes	In quotes like these, as we interpreted it, **the central idea of resilience was a trait already existing and/or developing in the person, or a pattern of behaviour, for example**	**Trait** (61 articles relied either fully or partly on this perspective)

| Abu-Tineh, (2011); Flynn *et al*., (2021); Hanson and Keplinger, (2021); Flynn *et al*., (2021); Mokline and Ben Abdallah, (2021); Dhoopar *et al*., (2022) | Flynn *et al*., (2021): *"when conceptualized as a dynamic process, resilience is inferred from patterns of responses to adverse circumstances or events; in the dynamic view, resilience may be captured by a multilevel model of within-individual response trajectories over time."* (p. 693)

 – resilience is formed over time
 – it is influenced by many factors (family, organization, etc.) | In quotes like these, as we interpreted it, **the central idea of resilience was process-oriented; resilience was not seen as bound to a particular state or as emphasizing only some certain outcome(s) but as a dynamic phenomenon with a temporal dimension, interactivity and evolvability** | **Process**

 (41 articles relied either fully or partly on this perspective) |

We open Table I and our interpretations below. Overall, many of the research articles referred to the Psychological Capital's state-like perspective of resilience either directly or by seeing "bouncing back" to a normal state after adversity as one of the most important characteristics of resilience (e.g. Luthans *et al*., 2007; Malik, 2022; Varshney, 2022). Kuntz *et al*., (2017) rightly note that: "*bouncing back typically characterizes individual resilience*" (p. 421). Such a return to "normality" at the individual level can be seen as a very important aspect of turbulent organizational life in the business context, even for organizations.

Fandiño et al., (2019) define resilience as "*how individuals can bounce back from adverse situations and achieve good outcomes*" (p. 137). In many other articles, and in their definitions of resilience, this outcome-basedness is considered a key element of resilience (Moenkemeyer *et al*., 2012; Duerden *et al*., 2018; Tonkin *et al*., 2018; Hanson and Keplinger, 2021). In this context, outcome-basedness refers to a perspective that emphasizes the positive outcomes of resilience, such as growth, success, and survival. Bouncing back is one of the outcomes, and consequently, the Psychological Capital perspective also falls into this category as to how we understand it; the Psychological Capital perspective combines state and outcome perspectives. Hodges (2017) states that people who are resilient, believe that change brings positive outcomes, which can be interpreted as indicating a positive attitude towards change and a potential commitment to change in resilient people. Moreover, Meintjes and Hofmeyr (2018) point out that resilience can be seen to be associated with positive organizational outcomes, such as engagement, and that resilient employees are required in organizations, for example, because of their ability to constructively respond and succeed and even grow in the face of chaos, uncertainty and constant change. In this context, many articles see the potential for growth or to respond productively after adversity, stress or change as related to resilience (Petersen and Youssef-Morgan, 2018; Turner et al., 2020; Hanson and Keplinger, 2021). In our opinion, in a turbulent and ever-changing business environment (see e.g. Accenture 2018), individual-level growth and the favourable and beneficial outcomes that go with it are also very important for organizations.

London (1993) defines resilience as follows: "*resilience is the ability to adapt to changing circumstances*" (p. 55), while Krisor *et al.* (2015) consider "*resilience as mental resistance and therefore, on its trait aspect – [which] is characterized by effective adaptive behavior in challenging situations and the ability to recover successfully after stressful situations*" (p. 651). In addition, in many other research articles, the emphasis on resilience definitions is placed on the view that resilience is at least partly a cumulative and/or developable individual or collective trait-like ability, capa-

city, characteristic, resource, or capability or a set of skills and attributes that can be enhanced and which are beneficial in facing e.g. significant adversities, setbacks, challenges or changes or negative work situations and overcoming and adapting to them (Noe *et al.*, 1990; Raetze *et al.*, 2021; Steen and Pollock, 2022). In our point of view, such trait-related abilities, resources and skills of individuals are also needed to help organizations survive in increasingly complex business environments.

In their st udy, Flynn *et al.* (2021) conceptualize resilience as "*a dynamic process*" (p. 693) and see, among some others, dynamic elements (i.e. processual, active, developing, etc.) in resilience (Abu-Tineh 2011; Hanson and Keplinger 2021; Flynn *et al.*, 2021; Dhoopar *et al.*, 2022). We found this process perspective of resilience to be particularly popular in more recent studies. Furthermore, Flynn *et al.* (2021) add the following: "*when conceptualized as a dynamic process, resilience is inferred from patterns of responses to adverse circumstances or events; in the dynamic view, resilience may be captured by a multilevel model of within-individual response trajectories over time.*" (p. 693). Mokline and Ben Abdallah (2021) note that the process perspective understands that resilience is formed over time and is influenced by factors such as family and other social environments (e.g. community). In this dynamic process, Kuntz *et al.* (2017) emphasize that it is important that the organization provides resources that enable the employee to cope, thrive, adapt and be supported in the face of adversity. To see resilience from the perspective of individuals as a process can support organizations in many ways. The workplaces have evolved, for example, with the advent of multitasking, to a point where individual resilience is increasingly needed in everyday situations. Recognizing temporal development (and the opportunity for development) and understanding the need for support (which is evident from a process perspective) are, in our view, crucially important in the context of organizations striving for optimal surviving.

6.2. Other special characteristics of individual resilience in organizations in the business context

According to Partouche-Sebban et al. (2021), resilience can be expressed simultaneously in an organizational context at both an individual and organizational level (cf. collective intangible capital), thus revealing the collective nature of individual resilience in an organizational context: "*dynamic combination of members' resilience characteristics helps an organization to increase its capacity to face difficulties*" (p. 4). Steen and Pollock (2022) emphasize the collective resilience-based approach by noting that; "*in a resilience-based approach, the emphasis is on making sense of ongoing changes and updating the risk picture collaboratively to address uncertainties*" (p. 6). In their study, Bridges et al. (2021) note that "*resilience is a suite of learned behaviors where, through a range of organizational supports, employees can build skills such as the ability to be adaptive, to seek networking, to professionally develop and grow*" (p. 2). According to Hodges (2017), asking for support is an important characteristic of resilient people. Job and career satisfaction are interrelated to resilience as Smith et al. (2020) perceive resilience as "*a coping strategy for enhancing job satisfaction*" (p. 483), while Srivastava and Madan (2020) state that: "*from the career perspective, employees can be considered resilient when they manage adverse work situations and generate higher career satisfaction*" (p. 44).

In recent research resilience is not perceived as "*inborn*" (Lyons *et al.*, 2015, 365; Mokline and Ben Abdallah, 2021), thus, resilience is not "*something that people are born with*" (Sahni *et al.*, 2021, 40) but rather "*it can be developed*" (p. 40) and strengthened through life-long (Fandiño *et al.*, 2019) interventions (Lyons *et al.*, 2015). Resilience is fairly common, arising from ordinary

human adaptive processes and it can be seen as the opposite of psychological vulnerability, although not implying complete invulnerability (Lyons *et al.*, 2015). Moreover, it is noteworthy that higher resilience does not necessarily predict higher job performance (Meneghel *et al.*, 2016).

There are conflicting views among researchers as to whether resilience is an every day or an extreme phenomenon. Many scholars agree that resilience only becomes apparent in the face of significantly difficult, extreme or severe life events, threats, risks, adversity or change (West *et al.*, 2009; Tonkin *et al.*, 2018; Bardoel and Drago, 2021; Dhoopar *et al.*, 2022). For example, Bardoel and Drago (2021) define resilience as "*positive response to a significant adverse event, where a ´significant adverse event´ is defined as having expected or actual significant resource losses*" (p. 662). In other words, the majority of the data does not perceive resilience as being evident in everyday working life before e.g. a major adversity, change or difficult situation. However, e.g. Branicki *et al.* (2019) point out that resilience can be either an ´everyday´ or an extreme phenomenon (p. 1264). Furthermore, Luthans *et al.* (2004) highlight Masten's (2001) classical idea of resilience as an ordinary "magic", which refers to a view of resilience perceived as an everyday phenomenon. Kuntz *et al.* (2017) note that (employee) resilience: "*comprises adaptive, proactive, support-seeking, learning, and crisis management behaviours that can be continually developed and enacted in everyday practice*" (p. 421).

In addition, as many scholars point out, resilience seems to be an interactive concept of social reality that includes behaviours, outlooks, thoughts, meanings, feelings, shared sensemaking, and other actions that can be learned and developed (Hind *et al.*, 1996; Abu-Tineh, 2011; Tonkin *et al.*, 2018; Teng-Calleja *et al.*, 2020; Malik, 2022). In everyday organizational life, the importance and interactive nature of resilience is also reflected by Ojansivu & Hermes (2021) in that they link meanings and communication as important sources of resilience in business relationships. Furthermore, Duerden *et al.* (2018) propose that: "*feelings of personal expressiveness via participation in LAW (leisure-at-work) will result in greater employee resilience*" (p. 642) and that "*resilience is a fundamental, primary outcome of recreation*" (p. 642). The ability to improvise, be creative, innovative or see alternative perspectives was also mentioned as an important part of resilience (Hind *et al.*, 1996; Vickers and Kouzmin, 2001; Meneghel *et al.*, 2016; Farrukh *et al.*, 2021). Farrukh *et al.* (2021) note that resilient individuals "*use creative exploration in facing challenging circumstances*" (p. 796) and are "*self-motivated to display innovative work behaviors*" (p. 796).

Altogether, researchers do not share a consensus about whether resilience arises before, during, or after an unpleasant situation or adversity. This is reflected, for example, in the interpretation of resilience as preparing (Hanson and Keplinger, 2021), responding (e.g. flexibility, agility) (Santoro *et al.*, 2020) or covering both "*preparing and responding*" (Turner *et al.*, 2020, 2). Sharma and Sharma (2020) combine perspectives and simplify the issue heuristically: "*for resilience to be demonstrated, both adversity and positive adaptation must be evident*" (p. 290).

Only a few studies comprised a self-made definition of resilience. Instead, studies mainly referred to existing definitions of resilience, often even several overlapping definitions (Raetze *et al.*, 2021; Dhoopar *et al.*, 2022). Therefore, it is not surprising that it has been seen that there is a risk that resilience becomes a "*quicksand term*" (Britt *et al.*, 2016, 379).

6.3. Antecedents and consequences of individual resilience in organizations in the business context

As can be seen from Figure 3, the research interest in resilience has significantly increased in recent times. Britt *et al.*, (2016) note that "*with the growth of interest in resilience has come confusion regarding the conceptualization of resilience, as well as distinctions between the assessment and the antecedents of resilience*" (p. 379). We argue that in organizations, it is possible not only to become better aware of the characteristics of individual resilience and the conditions for its organizational support and facilitation but also to strengthen them, by understanding the antecedents and consequences of the phenomenon. We also argue that the antecedents for individual resilience in organization in the business context are not only everyday and significant negative events and experiences and individual-related factors (traits, resources, etc.), but also reflections from the social environment, by which we mean for example family and community (Mokline and Ben Abdallah 2021; Tonkin *et al.*, 2018).

According to Puusa (2008), antecedents cannot be both features and antecedents of a concept concurrently. Antecedents refer to events or coincidences that must occur before the concept can occur while consequences occur as a result of the occurrence of the concept. In the context of the consequences of resilience, the research articles use terminology such as coping, survival, personal development, enduring workplace pressures, empowerment from survival, improving job and career satisfaction, productivity, retention and performance. We interpret them as enduring, growth and learning (Table II) because in our opinion these summarize the terminology used in research articles. Based on research articles, we interpret that resilience can be neutrally bouncing back to a normal state or bouncing back with positive aspects (Table II). Based on the data, we conclude the antecedents and consequences of individual resilience in organizations in the business context as follows (Table II):

Table II. The antecedents and the consequences of individual resilience in organizations in the business context

ANTECEDENTS OF INDIVIDUAL RESILIENCE IN ORGANIZATIONS IN THE BUSINESS CONTEXT	CONSEQUENCES OF INDIVIDUAL RESILIENCE IN ORGANIZATIONS IN THE BUSINESS CONTEXT
• Sufficient or significant negative experiences, adversity, change, challenge, disruption, challenging situations, threats • Stressful and unusual everyday situations • Reflections on unusual negative, difficult or unpleasant events in the social environment • Personality traits, personal resources, capacities, capabilities, attitudes, positive outlook and behaviour, self-control, ability to improvize, creativeness	• Bouncing back • Bouncing back and positive adaptation • Well-being, maintaining positive functioning, performance and outcomes • Flexibility and agility in change and uncertainty • Enduring, growth and learning • Potentially strengthens employees´ commitment to change

In practice, we conducted the analysis using a combination of theory-driven qualitative content analysis (applying e.g. Graneheim & Lundman, 2004) and conceptual analysis (Wilson, 1969; Walker and Avant, 1992; Puusa, 2008). Moreover, we used researcher triangulation (e.g. Merriam & Tisdell, 2015; Puusa & Julkunen 2020, 200) to find and interpret article by article what kinds of antecedents and consequences are associated with individual resilience in organizations in

the business context. We discussed our findings on Teams or in email meetings, and based on these discussions, the principal investigator made decisions.

7. Conclusions and discussion

7.1. Theoretical contribution

The present study contributes to the literature by highlighting the importance of individual resilience in an organizational context, seen as both an every day and an extreme phenomenon, and thus complements existing theoretical knowledge. Additionally, the contribution of our article relates to answering those strong calls presented in the literature regarding the conceptual development of individual-level resilience in an organizational context (Britt *et al.*, 2016; King *et al.*, 2016; Raetze *et al.,* 2021). Furthermore, our article clarifies the depiction of individual resilience as a phenomenon within organizations and thereby enhances understanding (and the usability) of this highly important human intangible asset, particularly in organizations in the business context (see e.g. Savolainen *et al.,* 2019, see also Giorgi *et al.,* 2017; Accenture 2018; Giustiniano *et al.,* 2020). As retrieved from Hartmann *et al.* (2020, 948): "*future research might seek to understand the impact of individual and team resilience on the development of resilience at the organisational level*". Related to that, we see that by increasing understanding about the antecedents and consequences of resilience and by revealing the nature of resilience in other ways, and thereby helping to develop support mechanisms for resilience, for example, our article makes a practical contribution to organizational life.

Although this is a business and management study, some of our sources were very much in the psychological field. Human beings are holistic beings, so we do not really have a separate self and work self and therefore the use of understanding the individual through knowledge gained in the field of psychology is relevant here.

Primarily, the present study aimed to reveal the structure and dynamics of resilience and the studies around it through a conceptual analysis complemented by a bibliometric analysis (Ellegaard and Wallin, 2015; Singh *et al.*, 2020), and to clarify the content and meaning of resilience which as a concept is vague but nevertheless frequently in use (Walker and Avant, 1992, see also Hupcey *et al.*, 1996). We contribute to the literature by forming a more coherent view of individual resilience in organizations in the business context. In the data, the diversity of definitions highlights the fragmented and incoherent nature of the current understanding of resilience as a concept and there exists no definition that reflects all the various perspectives presented by scholars. Moreover, the existing definitions alone do not adequately reflect today's organizational environment in the business context, with new situations and working methods involving stress and balancing, such as multitasking, but which do not directly involve significant adversities (see e.g. Giorgi *et al.,* 2017; Accenture 2018). Organizational and environmental support is important for individual resilience, and since much of the day is spent at work, the role of organizational support is huge and at the same time both resilience and support are everyday phenomena. Additionally, individuals bring unpleasant aspects of their social environment (such as family conflicts, social anxieties, etc.) into the workplace, because it is impossible to completely exclude them. However, most of the definitions in the data focus on describing resilience as a phenomenon that only emerges through significant adversity. In our view, the manifestation of resilience in organizational life and in the business context does not always require significant adversity. Consequently, we contribute to the current literature

and consider resilience as being activated also in today´s everyday work situations that require adaptation, coping, balancing or flexibility. In other words, a significant contribution of our article is the emphasized portrayal of the everyday nature of individual-level resilience, which surpasses many previous studies. In one of the few previous studies that support our view, Stokes *et al.* (2019) suggest that resilience should be seen more as an every day (rather than exceptional) phenomenon among HRM practices and managers in organizations. We perceive this as particularly important in organizations in the business context where turbulence is a particularly topical issue, for example, due to fierce competition and market volatility. The ability of individuals to adapt to change and to turbulent situations is key to both organizational effectiveness and individual well-being. On the other hand, there are sometimes major upheavals in the environment, such as the COVID-19 pandemic, which has a strong impact on organizations and the employees who work within them. Preparing for these upheavals and also for major disasters, by strengthening both individual and, through this, organizational resilience, is also important for both individuals and organizations, and in this, organizations play a significant role (Daellenbach *et al.*, 2018).

Individual resilience in organizations in the business context is influenced by a number of factors related to the personality, abilities, and, for example, resources of individuals (trait- or state-like resilience). Additionally, as many scholars point out, resilience is not just a personal characteristic, trait or attitude but rather an interactive concept (i.e. interactive with other individuals, environment and the organization) and phenomenon of social reality, which involves behaviours, outlooks, thoughts, meanings, feelings, shared sensemaking, and other actions that can be learned and developed and, because of those defining attributes, among other things, resilience has an important role in organizational life (Hind *et al.*, 1996; Abu-Tineh, 2011; Tonkin *et al.*, 2018; Teng-Calleja *et al.*, 2020; Malik, 2022). Thus, individual resilience clearly also has many social impacts. Furthermore, the importance of environmental and organizational support to individual-level resilience was highlighted by many scholars (Hind *et al.*, 1996; Rees and Rumbles, 2012; Tonkin *et al.,* 2018; Bridges *et al.*, 2021; Bilgetürk and Baykal, 2021). For example, Tonkin *et al.*, (2018) note that resilience; "*may be enhanced by the presence of resources and support in an occupational context*" (p. 109).

Based on the results, the view of resilience as a positive phenomenon of social reality seems to be coherent. All the findings, with different emphases, point to resilience as a phenomenon that is seen as positive in organizational life, with different positive effects. In all findings, resilience appears to be highly beneficial for individuals, while none of the findings suggest that individual resilience is not beneficial to organizations. In addition, we interpret resilience as learning (Table II), because resilience can also be strengthened experientially through survival experiences. We further interpret that resilience can be neutrally bouncing back to a normal state or bouncing back with positive aspects (Table II). Consequently, resilience can even be bouncing forward (Siambabala *et al.*, 2011).

However, the results show that views on individual resilience in organizations in the business context are divided on many levels. Ontologically, there is a division of perspectives of understanding resilience as a state, process, trait and outcome (Moreno *et al.*, 2019 [originally Pangallo *et al.,* 2015]), which, according to our results, we suggest is an illustrative ontological summarization of individual resilience in organizations in the business context. This division naturally affects whether resilience is understood as dynamic, or as something that does not change, as something that can be learned, or as something that cannot be learned, and as an evolving or stagnant state. Chronologically, there seems to be a trend in resilience research as

moving more and more from a stable trait perspective to a process perspective and, on the other hand, to understand individual resilience and the associated bouncing back to a normal state after adversity or even forward (growth) as a useful outcome for the organizations (state- and outcome- perspectives).

In relation to the manifestation of resilience over time in the face of adversity, views are divided among the periods before, during and after. However, some scholars saw resilience as occurring both before, during *and* after adversity, which suggests that resilience is useful before, during and after an unpleasant event. Continuous support for individual resilience from the organizational level is vital. Apparently, seeing resilience from the process approach works best from the point of view of organizational support (Flynn *et al.*, 2021; Mokline and Ben Abdallah, 2021).

As an agenda for future studies, we propose in our model (Figure 6)that individual resilience in organizations in the business context is always interactive in nature with both the (social) environment (e.g. family, society) and the organization (the environment and the organization can be both the cause and the support), and it may occur before, during or after unusual or challenging everyday situations or significant adversity, stress, change, threat or trauma. Furthermore, it can occur at least as a state-, process-, trait- or outcome-based phenomenon of social reality, while always including the idea of coping, balancing, flexing or adapting, and also bouncing back or even forward. The model (Figure 6) can be seen as a contribution to the present study, and, it can also serve as an agenda or rather as a reference framework for future studies. Our model is loosely and partially based on models made by Moreno *et al.* (2019) and Tonkin *et al.* (2018). With the model, we aim to clarify the perception of both the critical elements of individual resilience in organizations in the business context and the factors that influence it.
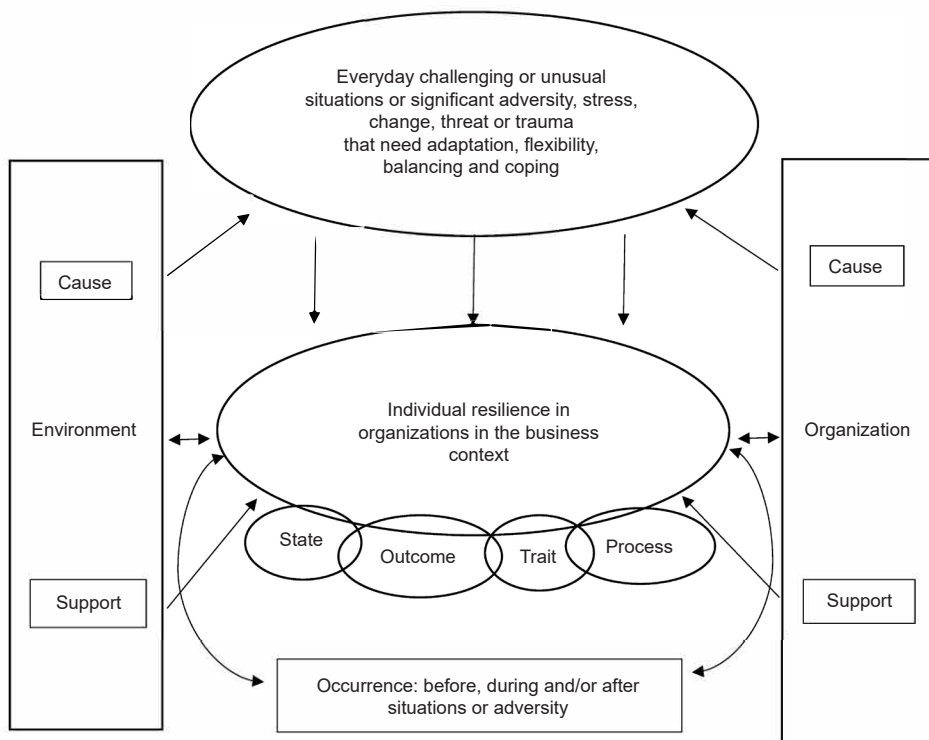

Figure 6. Individual resilience in organizations in the business context

7.2. Managerial implications

In managing organizations, it is important to take into account that resilience is both an individual and a collective phenomenon. Humanity-related issues such as support, interaction and emotional skills (e.g. Koponen *et al.,* 2022), which are also linked to resilience, are playing an increasingly important role in organizational leadership. In addition, in management, individual differences in resilience must be taken into account. For example, depending on personality, experience, etc. change can be stressful in different ways for different people. For this reason, management must also adapt its own actions to different people in different ways in change situations so that they can provide the best possible support to those they lead. Moreover, sufficient support must be available for managers themselves. Thus, it is very important that managers invest in adequate support arrangements at the organizational level, related to supporting workers' resilience in everyday work life. Such support arrangements could include, for example, recognizing and utilizing employees' strengths, sufficient individualized listening through, for instance, supervisor work, consciously building and supporting a culture of encouraging feedback and enabling open discussion culture and appropriate encounters through various technological applications.

Furthermore, as well as individual resilience in organizations in the business context, the vulnerability of every member of the work community must be understood as an everyday and complex phenomenon. Consequently, anyone can experience vulnerabilities, and when faced with them, a resilience-related and strength-based approach together with a multiple-actor network to provide support plays an important role (Johns and Davey 2021). Finally, we believe that in a managerial and organizational context, it would be very important to capitalize on the collective nature (Srour *et al.,* 2021) of resilience and ask the question "does it stick?". This seems to happen, for example, through shared experiences of coping with challenging situations and learning by example (survival and growth-based stories, etc.) (West *et al.,* 2009; Moenkemeyer *et al.,* 2012). This, of course, gives a new perspective and adds relevance to issues such as managerial interaction and employee teamwork. In particular, in Scandinavia, where we are accustomed to valuing both data-driven leadership and leadership based on a humane view of individuals, gaining a better understanding of the connections of individual resilience in organizations in the business context, which our article provides, offers practical implications for supporting and improving leadership and organizational life. For example, understanding and accepting the support, multilevel nature, and manifestations required for individual resilience in organizations in the business context helps to create better support mechanisms for individual resilience. Furthermore, understanding the critical elements, antecedents, and consequences of resilience aids in developing models for resilience enhancement and recognizing the benefits of individual resilience, such as improved organizational performance and effectiveness. In fact, we argue that resilient individuals are often thriving, and thriving individuals, in turn, are efficient and perform well in their tasks, which has implications for organizational performance and efficiency.

7.3. Limitations and further research

As with all studies, our study has some limitations. First, our empirical setting comprised only articles from Scopus. Therefore, it could be useful to use also other search engines. Secondly, it is possible that the search string combination we used excluded some relevant articles. Thirdly,

our research focuses on the Western context, so it would be useful to try to find different ways to include research data from, for example, developing countries in further studies. Moreover, we call for further longitudinal research on individual resilience in organizations in the business context, for example as an everyday phenomenon and in the context of increasing efficiency and changes and also in preparation for future turbulent conditions.

In our view, the data did not provide a fully exhaustive view of individual resilience in organizations in the business context and some very important aspects were missing. For example, it would be important for further research to investigate whether an emotion, knowledge, a lesson learned or similar can trigger resilience – also, more research should be done on those factors that influence resilience and, in general, on the ontology of resilience, including its temporal dimension. Furthermore, it would also be useful to consider the positive and negative dimensions of resilience and whether resilience can also be neutral in nature. In current definitions, resilience is always associated with positivity, for example in survival.

References

Abu-Tineh, A.M. (2011). Exploring the relationship between organizational learning and career resilience among faculty members at Qatar University. *International Journal of Educational Management* 25:6, 635–650.

Academic Journal Guide (2021). Available at: https://charteredabs.org/academic-journal-guide-2021/ (accessed 15th February 2023).

Accenture (2018). Enterprise agility in financial services: The new strategic imperative. Available at: https://www.accenture.com/content/dam/accenture/final/a-com-migration/manual/pdf/careers/pdf-43/Accenture-Enterprise-Agility-Web.pdf (accessed 22 March 2024)

Alexander, D.E. (2013). Resilience and disaster risk reduction: An etymological journey. *Natural Hazards Earth System Sciences* 13, 2707–2716.

Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics* 11:4, 959–975.

Bardoel, E.A., & Drago, R. (2021). Acceptance and strategic resilience: An application of conservation of resources theory. *Group and Organization Management* 46:4, 657–691.

Bilgetürk, M., & Baykal, E. (2021). How does perceived organizational support affect psychological capital? the mediating role of authentic leadership. *Organizacija* 54:1, 82–95.

Block, J.H. & Block, J. (1980). The role of ego-control and ego-resiliency in the organization of Behavior. In W. A. Collins (Ed.), *The Minnesota Symposia on Child Psychology* (pp. 39–101). Erlbaum.

Borg, N., Naderpajouh, N., Scott-Young, C. M., & Borg, J. (2022). An interdisciplinary and multi-level review of resilience to inform training of human resources for critical infrastructure. *International Journal of Disaster Risk Reduction* 78, 103113–.

Branicki, L., Steyer, V., & Sullivan-Taylor, B. (2019). Why resilience managers aren't resilient, and what human resource management can do about it. *International Journal of Human Resource Management*, 30:8, 1261–1286.

Bridges, D., Wulff, E. & Bamberry, L. (2021). Resilience for gender inclusion: Developing a model for women in male-dominated occupations. *Gender, Work, and Organization* 30:1, 263–279.

Britt, T.W., Shen, W., Sinclair, R.R., Grossman, M.R. & Klieger, D.M. (2016). How much do we really know about employee resilience? *Industrial and Organizational Psychology* 9:2, 378–404.

Cooper, B., Wang, J., Bartram, T. & Cooke, F.L. (2019). Well-being-oriented human resource management practices and employee performance in the Chinese banking sector: The role of social climate and resilience. *Human Resource Management* 58:1, 85–97.

Cooper, A.L., Brown, J.A., Rees, C.S. & Leslie, G.D. (2020). Nurse resilience: A concept analysis. International Journal of *Mental Health Nursing* 29:4, 553–575.

Daellenbach, K., Parkinson, J. & Krisjanous, J. (2018). Just how prepared are you? An application of marketing segmentation and theory of planned behavior for disaster preparation. *Journal of Nonprofit & Public Sector Marketing* 30:4, 413–443.

Dhoopar, A., Sihag, P., Kumar, A. & Suhag, A.K. (2022). Organizational resilience and employee performance in COVID-19 pandemic: The mediating effect of emotional intelligence. *International Journal of Organizational Analysis* 30:1, 130–155.

DiBella, J., Forrest, N., Burch, S., Rao-Williams, J., Ninomiya, S. M., Hermelingmeier, V., & Chisholm, K. (2023). Exploring the potential of SMEs to build individual, organizational, and community resilience through sustainability – oriented business practices. *Business Strategy and the Environment* 32:1, 721–735.

Duerden, M.D., Courtright, S.H. & Widmer, M.A. (2018). Why people play at work: A theoretical examination of leisure-at-work. *Leisure Sciences* 40:6, 634–648.

Ellegaard, O. & Wallin, J.A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics* 105:3, 1809–1831.

Fandiño, A.M., Formiga, N.S. & de Menezes, R.M. (2019). Organizational social capital, resilience and innovation validation of a theoretical model for specialized workers. *Journal of Strategy and Management* 12:1, 137–152.

Farrukh, M., Ansari, N.Y., Raza, A., Meng, F. & Wang, H. (2022). High-performance work practices do much, but H.E.R.O does more: An empirical investigation of employees' innovative behavior from the hospitality industry. *European Journal of Innovation Management* 25:3, 791–812.

Ferreira, A.I., Cardoso, C. & Braun, T. (2018). The mediating effects of ego-resilience in the relationship between organizational support and resistance to change. *Baltic Journal of Management* 13:1, 104–124.

Fisher, D.M., Ragsdale, J. M., & Fisher, E.C.S. (2019). The importance of definitional and temporal issues in the study of resilience. *Applied Psychology* 68:4, 583–620.

Fletcher, D. & Sarkar, M. (2013). Psychological resilience: A review and critique of definitions, concepts, and theory. *European Psychologist* 18:1, 12–23.

Flynn, P.J., Bliese, P.D., Korsgaard, M.A. & Cannon, C. (2021). Tracking the process of resilience: How emotional stability and experience influence exhaustion and commitment trajectories. *Group and Organization Management* 46:4, 692–736.

Garmezy, N. (1974). The study of competence in children at risk for severe psychopathology. In E. J. Anthony & C. Koupernik (Eds.), *The Child in His Family: Children at Psychiatric Risk* (pp. 77–97). Wiley.

Gioia, D.A., Corley, K.G., & Hamilton, A.L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods* 16:1, 15–31.

Giorgi, G., Arcangeli, G., Perminiene, M., Lorini, C., Ariza-Montes, A., Fiz- Perez, J., Di Fabio, A., & Mucci, N. (2017). Work-related stress in the banking sector: A review of incidence, correlated factors, and major consequences. *Frontiers in Psychology* 8, 2166–2166.

Giustiniano, L., Cunha, M. P. e, Simpson, A. V., Rego, A., & Clegg, S. (2020). Resilient leadership as paradox work: Notes from COVID-19. *Management and Organization Review* 16:5, 971–975.

Grammarist. (2009–2014). Resilience vs. resiliency. Available at: https://grammarist.com/usage/resilience-resiliency/ (accessed 1st February 2023)

Graneheim, U.H. & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today* 24:2, 105–112.

Hadjielias, E., Christofi, M. & Tarba, S. (2022). Contextualizing small business resilience during the COVID-19 pandemic: evidence from small business owner-managers. *Small Business Economics* 59:4, 1351–1380.

Hanson, S.K. & Keplinger, K. (2021). The balance that sustains benedictines: family entrepreneurship across generations. *Entrepreneurship and Regional Development* 33:5–6, 442–456.

Harper, D. (2021). Etymology of resilience. Online Etymology Dictionary. Available at: https://www.etymonline.com/word/resilience (accessed 27th October, 2022)

Hartmann, S., Weiss, M., Newman, A., & Hoegl, M. (2020). Resilience in the workplace: A multi-level review and synthesis. *Applied Psychology* 69:3, 913–959.

Hodges, J. (2017). Building capabilities for change: The crucial role of resilience. *Development and Learning in Organizations* 31:1, 5–8.

Hind, P., Frost, M. & Rowley, S. (1996). The resilience audit and the psychological contract. *Journal of Managerial Psychology* 11:7, 18–29.

Hollnagel, E. (2006). Resilience: The challenge of the unstable. In E. Hollnagel, D. D. Woods, & N. Leveson (Eds.), *Resilient Engineering: Concepts and Precepts* (p. 16). Burlington, VT: Ashgate.

Hupcey, J.E., Morse, J.M., Lenz, E.R. & Tasón, M.C. (1996). Wilsonian methods of concept analysis: A critique. *Research and Theory for Nursing Practice* 10:3, 185–.

Johns, R. & Davey, J. (2021). Guest editorial: Solving problems for service consumers experiencing vulnerabilities: a marketplace challenge. *The Journal of Services Marketing* 35:6, 685–691.

Kakkuri-Knuuttila, M-L. (1998). Hypoteesien testaus. In M.-L. Kakkuri-Knuuttila (Ed.), *Argumentti ja kritiikki. Lukemisen, keskustelun ja vaikuttamisen taidot* (pp. 302–326). Helsinki: Gaudeamus.

King, D.D., Newman, A. & Luthans, F. (2016). Not if, but when we need resilience in the workplace. *Journal of Organizational Behavior* 37:5, 782–786.

Koponen, J., Heikkilä, E., Karhapää, S-J., Ikonen, M. & Hiltunen, E. (2022). "It´s time to focus on humanity": Millenial business students´ perceptions of competencies needed by future leaders. *Nordic Journal of Business* 71:2, 102–125.

Krisor, S.M., Diebig, M. & Rowold, J. (2015). Is cortisol as a biomarker of stress influenced by the interplay of work-family conflict, work-family balance and resilience? *Personnel Review* 44:4, 648–661.

Kuntz, J., Connell, P. & Näswall, K. (2017). Workplace resources and employee resilience: The role of regulatory profiles. *Career Development International* 22:4, 419–435.

Labrague, L.J. & Santos, J.A.A. (2020). COVID-19 anxiety among front-line nurses: Predictive role of organisational support, personal resilience and social support. *Journal of Nursing Management* 28:7, 1653–1661.

Linnenluecke, M.K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews: IJMR* 19:1, 4–30.

London, M. (1993). Relationships between career motivation, empowerment and support for career development. *Journal of Occupational and Organizational Psychology* 66:1, 55–69.

Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. *Business Horizons*, 47(1), pp.45–50.

Luthans F., Youssef, C.M. & Avolio, B.J. (2007). *Psychological Capital: Developing the Human Competitive Edge.* New York, NY: Oxford University Press.

Lyons, S.T., Schweitzer, L. & Ng, E.S.W. (2015). Resilience in the modern career. *Career Development International*, 20(4), pp.363–383.

Mahmood, K. and Shah, S.R.U. (2016). Validation of journal impact metrics of Web of Science and Scopus. *Pakistan Journal of Information Management & Libraries (PJIM&L)*. Vol.18, No.2.

Malik, P. (2022). Measuring the impact of learning organization on proactive work behavior: Mediating role of employee resilience. *Asia-Pacific Journal of Business Administration* 15:3, 325–344.

Mansourian, A. & Moore, H. (2022). Successfully transforming the organization for resilience. Consulting.us. Available at: https://www.consulting.us/news/7500/successfully-transforming-the-organization-for-resilience

Masten, A.S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56, pp.227–238.

Md Khudzari, J., Kurian, J., Tartakovsky, B. & Raghavan, G.S.V. (2018). Bibliometric analysis of global research trends on microbial fuel cells using Scopus database. *Biochemical Engineering Journal,* 136, pp.51–60.

Meintjes, A. & Hofmeyr, K. (2018). The impact of resilience and perceived organisational support on employee engagement in a competitive sales environment. *SA Journal of Human Resource Management*, 16.

Meneghel, I., Borgogni, L., Miraglia, M., Salanova, M. & Martínez, I.M. (2016). From social context and resilience to performance through job satisfaction: A multilevel study over time. *Human Relations* 69:11, 2047–2067.

Meredith, L.S., Sherbourne, C.D., Gaillot, S.J., Hansell, L., Parker, A.M., Wrenn, G. & Ritschard, H.V. (2011). *Promoting Psychological Resilience in the U.S. Military.* Santa Monica: RAND Corporation.

Merriam, S.B., & Tisdell, E.J. (2015). *Qualitative Research: A Guide to Design and Implementation.* Newark: Wiley.

Neuendorf, K.A. (2017). *The Content Analysis Guidebook.* SAGE. Mitsakis, F.V. (2020). Human resource development (HRD) resilience: A new 'success element' of organizational resilience? *Human Resource Development International* 23:3, 321–328.

Moenkemeyer, G., Hoegl, M. & Weiss, M. (2012). Innovator resilience potential: A process perspective of individual resilience as influenced by innovation project termination. *Human Relations* 65:5, 627–655.

Mokline, B. & Ben Abdallah, M.A. (2021). Individual resilience in the organization in the face of crisis: Study of the concept in the context of COVID-19. *Global Journal of Flexible Systems Management* 22:3, 219–231.

Moreno, A., Navarro, C., Molleda, J.-C. & Fuentes-Lara, M.C. (2019). Measurement and predictors of resilience among Latin American public relations professionals: An application of the Connor-Davidson Resilience Scale (CD-RISC). *Journal of Communication Management* 23:4, 393–411.

Noe, R.A., Noe, A.W. & Bachhuber, J.A. (1990). An investigation of the correlates of career motivation. *Journal of Vocational Behavior* 37:3, 340–356.

Nunnally, J.C. (1978) *Psychometric Theory.* McGraw-Hill, New York. Näsi, J. (1983). *Tieteelliset tutkimusotteet ja suomalainen liiketaloustiede, hallinto: Viitekehyksen konstruointi ja historiallisparadigmaattinen analyysi.* Tampereen yliopisto.

Ojansivu, I.T. & Hermes, J. (2021). Maintaining business relationships: Resilience through institutional work. *Journal of Business and Industrial Marketing* 36:11, 2049–2061.

Ollier-Malaterre, A. (2010). Contributions of work—life and resilience initiatives to the individual/organization relationship. *Human Relations* 63:1, 41–62.

Oxford English Dictionary, OED. (2022). Resilience, n. OED Online. Oxford University Press. Available at: https://www-oed-com.ezproxy.uef.fi:2443/view/Entry/163619?redirectedFrom=resilience

Pangallo, A., Zibarras, L., Lewis, R., & Flaxman, P. (2015). Resilience through the lens of interactionism: A systematic review. *Psychological Assessment* 27:1, 1–20.

Partouche-Sebban, J., Rezaee Vessal, S. & Bernhard, F. (2021). When co-creation pays off: The effect of co-creation on well-being, work performance and team resilience. *Journal of Business and Industrial Marketing* 37:8, 1640–1649.

Petersen, K. & Youssef-Morgan, C.M. (2018). The "left side" of authentic leadership: Contributions of climate and psychological capital. *Leadership and Organization Development Journal* 39:3, 436–452.

Puusa, A. (2008). Käsiteanalyysi tutkimusmenetelmänä. *Premissi* 4:2008. 36–43.

Puusa, A. & Julkunen, S. (2020). Uskottavuuden arviointi laadullisessa tutkimuksessa. In A. Puusa & P. Juuti (Eds.), *Laadullisen tutkimuksen näkökulmat ja menetelmät* (pp. 189–201). Helsinki: Gaudeamus.

Raetze, S., Duchek, S., Maynard, M.T. & Kirkman, B.L. (2021). Resilience in organizations: An integrative multilevel review and editorial introduction. *Group and Organization Management* 46:4, 607–656.

Rees, G. & Rumbles, S. (2012). Continuous organizational change and burnout. *International Journal of Knowledge, Culture and Change Management* 11:3, 179–194.

Resilio. (2020). Muutoskyvykkyys. Resilio Oy. Available at: https://www.resilio.fi/muutosjohtaminen/muutoskyvykkyys/

Rodgers, B.L. (2000). Concept analysis: An evolutionary view. In B. Rodgers & K. Knafl (Eds.), *Concept Development in Nursing: Foundations, Techniques and Applications* (2nd ed., pp. 77–102). Saunders.

Rutter, M. (1979). Protective factors in children's responses to stress and disadvantage. *Annals of the Academy of Medicine* 8:3, 324–338.

Salin, L. & Koponen, J. (2023). Käsiteanalyysi etäjohtamisesta. *Hallinnon tutkimus* 42:5, 545–559.

Sahni, S., Kumari, S. & Pachaury, P. (2021). Building emotional resilience with big five personality model against COVID-19 pandemic. *FIIB Business Review* 10:1, 39–51.

Santoro, G., Bertoldi, B., Giachino, C. & Candelo, E. (2020). Exploring the relationship between entrepreneurial resilience and success: The moderating role of stakeholders' engagement. *Journal of Business Research* 119, 142–150.

Savolainen, T., Ikonen, M. & Nurmenniemi, H. (2019). Trust and resilience supporting the entrepreneurial process of becoming a self-employed entrepreneur. *Nordic Journal of Business* 68:3, 5–22.

Sharma, S. & Sharma, S.K. (2020). Probing the links between team resilience, competitive advantage, and organizational effectiveness: Evidence from information technology industry. *Business Perspectives and Research* 8:2, 289–307.

Shrivastava, P., Ikonen, M., Savolainen, T. & Dorjgotov, E-O. (2021). Developing and sustaining trust within human capital during organisational transformation. *Nordic Journal of Business* 70:3, 20–223.

Siambabala, B.M., O'Brien, G., O'Keefe, P. & Rose, J. (2011). Disaster resilience: A bounce back or bounce forward ability? *Local Environment* 16:5, 417–424.

Singh, S., Dhir, S., Das, V.M. & Sharma, A. (2020). Bibliometric overview of the Technological Forecasting and Social Change journal: Analysis from 1970 to 2018. T*echnological Forecasting and Social Change* 154, 119963.

Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for information Science* 24:4, 265–269.

Smith, K.J. , Haight, T.D., Emerson, D.J. , Mauldin, S. & Wood, B.G. (2020). Resilience as a coping strategy for reducing departure intensions of accounting students. *Accounting Education* 29:1, 77–108.

Srivastava, S. & Madan, P. (2020). The relationship between resilience and career satisfaction: Trust, political skills and organizational identification as moderators. *Australian Journal of Career Development* 29:1, 44–53.

Srour, Y., Shefer, N. & Carmeli, A. (2021). Positive Chair-CEO work relationships: Micro-relational foundations of organizational capabilities. *Long Range Planning,* 102124–.

Steen, R. & Pollock, K. (2022). Effect of stress on safety-critical behaviour: An examination of combined resilience engineering and naturalistic decision-making approaches. *Journal of Contingencies and Crisis Management* 30:3, 339–351.

Stein, K.V., Rutz, W., Hladschik-Kermer, B. & Dorner, T.E. (2022). Tapping the potential of resilience to support an integrated and person-centred approach to health and wellbeing—Developing a simple assessment tool for practice. *International Journal of Environmental Research and Public Health*, 19(5), 2679.

Stokes, P., Smith, S., Wall, T., Moore, N., Rowland, C., Ward, T. & Cronshaw, S. (2019). Resilience and the (micro-)dynamics of organizational ambidexterity: implications for strategic HRM. *International Journal of Human Resource Management* 30:8, 1287–1322.

Sudmeier-Rieux, K. (2014). Resilience – an emerging paradigm of danger or of hope? *Disaster Prevention and Management* 23:1, 67–80.

Schwartz, H.A., & Ungar, L.H. (2015). Data-driven content analysis of social media: A systematic overview of automated methods. *The Annals of the American Academy of Political and Social Science* 659:1, 78–94.

Teng-Calleja, M., Hechanova, M.R.M., Sabile, P.R. & Villasanta, A.P.V.P. (2020). Building organization and employee resilience in disaster contexts. *International Journal of Workplace Health Management* 13:4, 393–411.

Tonkin, K., Malinen, S., Näswall, K. & Kuntz, J.C. (2018). Building employee resilience through wellbeing in organizations. *Human Resource Development Quarterly* 29:2, 107–124.

Turner, N., Kutsch, E., Maylor, H. & Swart, J. (2020). Hits and (near) misses: Exploring managers' actions and their effects on localised resilience. *Long Range Planning* 53:3, 101944–.

Tyhurst, J.S. (1957). Psychological and social aspects of civilian disaster. *Canadian Medical Association Journal* 76:5, 385–393.

Vanhove, A.J., Herian, M.N., Perez, A.L.U., Harms, P.D. & Lester, P.B. (2016). 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.

Varshney, D. (2022). Machiavellianism, self-concept and resilience: Do they affect employee performance? A moderated-mediated analysis. *International Journal of Productivity and Performance Management* 72:7, 2093–2118.

Vickers, M.H. & Kouzmin, A. (2001). 'Resilience' in organizational actors and rearticulating 'voice': Towards a humanistic critique of new public management. *Public Management Review* 3:1, 95–119.

Vijayakumar, P.B., Morley, M.J., Heraty, N., Mendenhall, M.E. & Osland, J.S. (2018). Leadership in the global context: Bibliometric and thematic patterns of an evolving field. *Advances in Global Leadership* 11, 31–72.

Vähäkangas, L. (2010). *The Resilient Organization. How Adaptive Cultures Thrive Even When Strategy Fails.* McGraw-Hill.

Walker, L.O. & Avant, K.C. (1988). *Strategies for Theory Construction in Nursing.* Appleton & Lange, Norwalk.

Walker, L.O. & Avant, K.C. (1992). *Teoria - avain hoitotyöhön.* Helsinki: Sairaanhoitajien koulutussäätiö.

Walker, L.O. & Avant, K.C. (1995). Concept Development. In L. O. Walker & K. C. Avant (Eds.), *Strategies for Theory Construction in Nursing* (3rd ed., pp. 35–78). Appleton & Lange.

Werner, E.E. & Smith, R.S. (1982). *Vulnerable But Invincible: A Study of Resilient Children.* New York, NY: McGraw-Hill.

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

White, H.D. & Griffith, B.C. (1981). Author cocitation: A literature measure of intellectual structure. *Journal of the American Society for information Science* 32:3, 163–171.

Wilson, J. (1969). *Thinking with Concepts.* Cambridge, England: Cambridge University Press. Zupic, I. & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods* 18:3, 429–472.

Appendix

Appendix A. Full list of the 97 research articles and our interpretation of the distribution of the articles' main emphasis on either state, outcome, trait or process viewpoint (or on more than one of them) and the paper types of the selected articles

ARTICLE	EMPHASIZED PERSPECTIVE ON RESILIENCE	PAPER TYPE
Abu-Tineh, A.M. (2011). Exploring the relationship between organizational learning and career resilience among faculty members at qatar university. *International Journal of Educational Management* 25:6, 635–650.	Process	Empirical / Quantitative paper
Ahmad, J., Athar, M. R., Azam, R. I., Hamstra, M. R. W., & Hanif, M. (2019). A resource perspective on abusive supervision and extra-role behaviors: The role of subordinates' psychological capital. *Journal of Leadership and Organizational Studies* 26:1, 73–86.	State, outcome	Empirical / Quantitative paper
Ahmad, S., Islam, T., Sohal, A. S., Wolfram Cox, J., & Kaleem, A. (2021). Managing bullying in the workplace: A model of servant leadership, employee resilience and proactive personality. *Personnel Review* 50:7, 1613–1631.	State, outcome	Conceptual paper
Al-Hawari, M. A., Bani-Melhem, S., & Quratulain, S. (2020). Do frontline employees cope effectively with abusive supervision and customer incivility? testing the effect of employee resilience. *Journal of Business and Psychology* 35:2, 223–240.	State, outcome, trait	Empirical / Quantitative paper
Anglin, A. H., Short, J. C., Drover, W., Stevenson, R. M., McKenny, A. F., & Allison, T. H. (2018). The power of positivity? the influence of positive psychological capital language on crowdfunding performance. *Journal of Business Venturing*, 33(4), 470–492. doi:10.1016/j.jbusvent.2018.03.003	State, outcome, trait	Empirical / Quantitative paper
Annor, F., & Amponsah-Tawiah, K. (2020). Relationship between workplace bullying and employees' subjective well-being: Does resilience make a difference? *Employee Responsibilities and Rights Journal* 32:3, 123–135.	Trait	Empirical / Quantitative paper
Anwar, A., Coviello, N., & Rouziou, M. (2021). Weathering a crisis: A multi-level analysis of resilience in young ventures. *Entrepreneurship: Theory and Practice* 47:3, 864–892.	Trait	Empirical / Quantitative paper
Avey, J. B., Nimnicht, J. L., & Graber Pigeon, N. (2010). Two field studies examining the association between positive psychological capital and employee performance. *Leadership & Organization Development Journal* 31:5, 384–401.	State, outcome	Empirical / Quantitative paper
Avey, J. B., Wernsing, T. S., & Mhatre, K. H. (2011). A longitudinal analysis of positive psychological constructs and emotions on stress, anxiety, and well-being. *Journal of Leadership and Organizational Studies* 18:2, 216–228.	State, outcome (trait)	Meta-analysis (/ Quantitative paper)
Bardoel, E. A., & Drago, R. (2021). Acceptance and strategic resilience: An application of conservation of resources theory. *Group and Organization Management* 46:4, 657–691.	Outcome, trait, process	Theoretical paper / literature review
Bernard, M. -., & Barbosa, S. D. (2016). Resilience and entrepreneurship: A dynamic and biographical approach to the entrepreneurial act. *Management (France)* 19:2, 89–23.	Trait, process	Empirical / Qualitative paper

Bilgetürk, M., & Baykal, E. (2021). How does perceived organizational support affect psychological capital? the mediating role of authentic leadership. *Organizacija* 54:1, 82–95.	State, outcome, process	Empirical / Quantitative paper
Borg, J., Borg, N., Scott-Young, C. M., & Naderpajouh, N. (2020). The work readiness–career resilience linkage: Implications for project talent management. *International Journal of Managing Projects in Business* 14:4, 917–935.	State	Literature review
Boudrias, J.-S., Desrumaux, P., Gaudreau, P., Nelson, K., Brunet, L., & Savoie, A. (2011). Modeling the experience of psychological health at work: The role of personal resources, social-organizational resources, and job demands. *International Journal of Stress Management* 18:4, 372–395.	State, outcome	Empirical / Quantitative paper
Branicki, L., Steyer, V., & Sullivan-Taylor, B. (2019). Why resilience managers aren't resilient, and what human resource management can do about it. *International Journal of Human Resource Management* 30:8, 1261–1286.	State, outcome, trait	Empirical / Qualitative paper
Bridges, D., Wulff, E., & Bamberry, L. (2021). Resilience for gender inclusion: Developing a model for women in male-dominat*ed* occupations. *Gender, Work and Organization* 30:1, 263–279.	Trait, process	Literature review / theoretical paper
Cham, B. S., Boeing, A. A., Wilson, M. D., Griffin, M. A., & Jorritsma, K. (2021). Endurance in extreme work environments. *Organizational Psychology Review* 11:4, 343–364.	State, outcome	Conceptual paper / literature review
Cho, I., Park, H., & Dahlgaard-Park, S. M. (2017). The impacts of organisational justice and psychological resilience on employee commitment to change in an M&A context. *Total Quality Management and Business Excellence* 28:9–10, 989–1002.	Outcome, trait	Empirical / Quantitative paper
Cooke, F. L., Cooper, B., Bartram, T., Wang, J., & Mei, H. (2019). Mapping the relationships between high-performance work systems, employee resilience and engagement: A study of the banking industry in china. *International Journal of Human Resource Management* 30:8, 1239–1260.	Trait	Empirical / Quantitative paper
Cooper, B., Wang, J., Bartram, T., & Cooke, F. L. (2019). Well-being-oriented human resource management practices and employee performance in the chinese banking sector: The role of social climate and resilience. *Human Resource Management* 58:1, 85–97.	State, outcome, trait, process	Empirical / Quantitative paper
Dhoopar, A., Sihag, P., Kumar, A., & Suhag, A. K. (2022). Organizational resilience and employee performance in COVID-19 pandemic: The mediating effect of emotional intelligence. *International Journal of Organizational Analysis* 30:1, 130–155.	Process	Empirical / Quantitative paper
DiBella, J., Forrest, N., Burch, S., Rao-Williams, J., Ninomiya, S. M., Hermelingmeier, V., & Chisholm, K. (2022). Exploring the potential of SMEs to build individual, organizational, and community resilience through sustainability-oriented business practices. *Business Strategy and the Environment* 32:1, 721–735.	State, outcome, process	Empirical / Qualitative paper

Duerden, M. D., Courtright, S. H., & Widmer, M. A. (2018). Why people play at work: A theoretical examination of leisure-at-work. *Leisure Sciences* 40:6, 634–648.	Outcome	Literature review (+ partly Conceptual paper)
Fandiño, A. M., Formiga, N. S., & de Menezes, R. M. (2019). Organizational social capital, resilience and innovation validation of a theoretical model for specialized workers. *Journal of Strategy and Management* 12:1, 137–152.	Outcome	Empirical / Quantitative paper
Farrukh, M., Ansari, N. Y., Raza, A., Meng, F., & Wang, H. (2022). High-performance work practices do much, but H.E.R.O does more: An empirical investigation of employees' innovative behavior from the hospitality industry. *European Journal of Innovation Management* 25:3, 791–812.	Trait	Empirical / Quantitative paper
Ferreira, A. I., Cardoso, C., & Braun, T. (2018). The mediating effects of ego-resilience in the relationship between organizational support and resistance to change. *Baltic Journal of Management* 13:1, 104–124.	Outcome, trait	Empirical / Quantitative paper
Flynn, P. J., Bliese, P. D., Korsgaard, M. A., & Cannon, C. (2021). Tracking the process of resilience: How emotional stability and experience influence exhaustion and commitment trajectories. *Group and Organization Management* 46:4, 692–736.	Process	Empirical / Quantitative paper
Gibson, C. B., Dunlop, P. D., & Raghav, S. (2021). Navigating identities in global work: Antecedents and consequences of intrapersonal identity conflict. *Human Relations* 74:4, 556–586.	Outcome, trait, process	Empirical / Qualitative / Quantitative paper
Grzeda, M. M. (1999). Re-conceptualizing career change: A career development perspective. *Career Development International* 4:6, 305–311.	Outcome, trait	Empirical / Quantitative paper
Gucciardi, D. F., Crane, M., Ntoumanis, N., Parker, S. K., Thøgersen-Ntoumani, C., Ducker, K. J., . . . Temby, P. (2018). The emergence of team resilience: A multilevel conceptual model of facilitating factors. *Journal of Occupational and Organizational Psychology* 91:4, 729–768.	State, outcome, trait, process	Literature review / Conceptual paper
Hadjielias, E., Christofi, M., & Tarba, S. (2022). Contextualizing small business resilience during the COVID-19 pandemic: Evidence from small business owner-managers. *Small Business Economics* 59:4, 1351–1380.	Outcome, trait, process	Empirical / Qualitative paper
Hanson, S. K., & Keplinger, K. (2021). The balance that sustains benedictines: Family entrepreneurship across generations. *Entrepreneurship and Regional Development*, 33:5–6, 442–456.	Outcome, Process	Conceptual paper
Hind, P., Frost, M., & Rowley, S. (1996). The resilience audit and the psychological contract. *Journal of Managerial Psychology* 11:7, 18–29.	Outcome, process	A combination of a limited Literature review and an Empirical / Quantitative paper
Hodges, J. (2017). Building capabilities for change: The crucial role of resilience. *Development and Learning in Organizations* 31:1, 5–8.	State, outcome, trait, process	Theoretical paper
Huang, Q., Xing, Y., & Gamble, J. (2019). Job demands–resources: A gender perspective on employee well-being and resilience in retail stores in china. International *Journal of Human Resource Management* 30:8, 1323–1341.	Trait	Empirical / Quantitative paper

Iles, P. (1997). Sustainable high-potential career development: A resource-based view. *Career Development International* 2:7, 347–353.	Outcome, trait	Literature review
Jin, C.-H. (2017). The effect of psychological capital on start-up intention among young start-up entrepreneurs: A cross-cultural comparison. *Chinese Management Studies* 11:4, 707–729.	State, outcome	Empirical / Quantitative paper
Karman, A. (2020). An examination of factors influencing the application of mechanisms of organizations' resilience to weather extremes. *Business Strategy and the Environment* 29:1, 276–290.	Trait	Empirical / Quantitative paper
Krisor, S. M., Diebig, M., & Rowold, J. (2015). Is cortisol as a biomarker of stress influenced by the interplay of work-family conflict, work-family balance and resilience? *Personnel Review* 44:4, 648–661.	Trait	Empirical / Quantitative paper
Kuntz, J., Connell, P., & Näswall, K. (2017). Workplace resources and employee resilience: The role of regulatory profiles. *Career Development International* 22:4, 419–435.	State, outcome, trait, process	Empirical / Quantitative paper
Lefebvre, J. -., Montani, F., & Courcy, F. (2020). Self-compassion and resilience at work: A practice-oriented review. *Advances in Developing Human Resources* 22:4, 437–452.	State, outcome, process	Literature review
Lengnick-Hall, C. A., Beck, T. E., & Lengnick-Hall, M. L. (2011). Developing a capacity for organizational resilience through strategic human resource management. *Human Resource Management Review* 21:3, 243–255.	Outcome, trait	Literature review
London, M. (1993). Relationships between career motivation, empowerment and support for career development. *Journal of Occupational and Organizational Psychology* 66:1, 55–69.	Trait	Empirical / Quantitative paper
Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. *Business Horizons* 47:1, 45–50.	Outcome	Theoretical / Conceptual paper
Lyons, S. T., Schweitzer, L., & Ng, E. S. W. (2015). Resilience in the modern career. *Career Development International* 20:4, 363–383.	State, outcome, trait, process	Empirical / Quantitative paper
Malik, P. (2022). Measuring the impact of learning organization on proactive work behavior: Mediating role of employee resilience. Asia-Pacific *Journal of Business Administration* 15:3, 325–344.	State	Empirical / Quantitative paper
Masood, H., Karakowsky, L., & Podolsky, M. (2021). Exploring job crafting as a response to abusive supervision. *Career Development International* 26:2, 174–200.	State, outcome	Q Empirical / Qualitative paper
McCormac, A., Calic, D., Parsons, K., Butavicius, M., Pattinson, M., & Lillie, M. (2018). The effect of resilience and job stress on information security awareness. *Information and Computer Security* 26:3, 277–289.	Process	Empirical / Quantitative paper
McCray, J., Turner, H., Hall, B., Price, M., & Constable, G. (2014). Social care mentorship and employee engagement in the transformation of the social care workforce. *Journal of Workplace Learning*, 26:3, 267–280.	State, outcome, trait	Empirical / Qualitative paper / case study

McInnis-Bowers, C., Parris, D. L., & Galperin, B. L. (2017). Which came first, the chicken or the egg?: Exploring the relationship between entrepreneurship and resilience among the boruca indians of costa rica. *Journal of Enterprising Communities* 11:1, 39–60.	State, outcome, trait, process	Empirical / Quantitative paper (Case study)
Meintjes, A., & Hofmeyr, K. (2018). The impact of resilience and perceived organisational support on employee engagement in a competitive sales environment. *SA Journal of Human Resource Management* 16:1, 1–11.	State, outcome, trait, process	Empirical / Quantitative paper
Mendy, J. (2020). Bouncing back from workplace stress: From HRD's individual Employee's developmental focus to multi-facetted collective workforce resilience intervention. *Advances in Developing Human Resources* 22:4, 353–369.	State, outcome, trait, process	Literature review
Meneghel, I., Borgogni, L., Miraglia, M., Salanova, M., & Martínez, I. M. (2016). From social context and resilience to performance through job satisfaction: A multilevel study over time. *Human Relations* 69:11, 2047–2067.	State, trait	Empirical / Quantitative paper
Mitsakis, F. V. (2020). Human resource development (HRD) resilience: A new 'success element' of organizational resilience? *Human Resource Development International* 23:3, 321–328.	State, outcome	Literature review
Moenkemeyer, G., Hoegl, M., & Weiss, M. (2012). Innovator resilience potential: A process perspective of individual resilience as influenced by innovation project termination. *Human Relations* 65:5, 627–655.	Outcome	Empirical / Qualitative paper (Case study)
Mokline, B., & Ben Abdallah, M. A. (2021). Individual resilience in the organization in the face of crisis: Study of the concept in the context of COVID-19. *Global Journal of Flexible Systems Management* 22:3, 219–231.	Process	Empirical / Qualitative paper (+ Literature review)
Moreno, A., Navarro, C., Molleda, J. -., & Fuentes-Lara, M. C. (2019). Measurement and predictors of resilience among latin american public relations professionals: An application of the connor-davidson resilience scale (CD-RISC). *Journal of Communication Management* 23:4, 393–411.	State, outcome, trait, process	Empirical / Quantitative paper
Mukerjee, J., Montani, F., & Vandenberghe, C. (2021). A dual model of coping with and commitment to organizational change: The role of appraisals and resources. *Journal of Organizational Change Management* 34:5, 1144–1161.	Trait	Literature review / Conceptual paper
Mzid, I., Khachlouf, N., & Soparnot, R. (2019). How does family capital influence the resilience of family firms? *Journal of International Entrepreneurship* 17:2, 249–277.	Trait	Empirical / Qualitative paper
Ngoasong, M. Z., & Groves, W. N. (2016). Determinants of personal resilience in the workplace: Nurse prescribing in an african work context. *Human Resource Development International* 19:3, 229–244.	Outcome, trait	Empirical / Qualitative paper

Nimmi, P. M., Kuriakose, V., Donald, W. E., & Muhammed Nowfal, S. (2021). HERO elements of psychological capital: Fostering career sustainability via resource caravans. *Australian Journal of Career Development* 30:3, 199–210.	State, outcome, process	Empirical / Quantitative paper
Noe, R. A., Noe, A. W., & Bachhuber, J. A. (1990). An investigation of the correlates of career motivation. *Journal of Vocational Behavior* 37:3, 340–356.	Trait	Empirical / Quantitative paper
Nolzen, N. (2018). The concept of psychological capital: A comprehensive review. *Management Review Quarterly* 68:3, 237–277.	State, outcome, trait	Literature review
Ojansivu, I. T., & Hermes, J. (2021). Maintaining business relationships: Resilience through institutional work. *Journal of Business and Industrial Marketing* 36:11, 2049–2061.	Process	Empirical / Qualitative paper
Ollier-Malaterre, A. (2010). Contributions of work-life and resilience initiatives to the individual/organization relationship. *Human Relations* 63:1, 41–62.	State, outcome	Empirical / Qualitative / Quantitative paper (Case study)
Partouche-Sebban, J., Rezaee Vessal, S., & Bernhard, F. (2022). When co-creation pays off: The effect of co-creation on well-being, work performance and team resilience. *Journal of Business and Industrial Marketing* 37:8, 1640–1649.	Trait	Empirical / Quantitative paper
Petersen, K., & Youssef-Morgan, C. M. (2018). The "left side" of authentic leadership: Contributions of climate and psychological capital. *Leadership and Organization Development Journal* 39:3, 436–452.	State, outcome	Empirical / Quantitative paper
Peterson, S. J., Luthans, F., Avolio, B. J., Walumbwa, F. O., & Zhang, Z. (2011). Psychological capital and employee performance: A latent growth modeling approach. *Personnel Psychology* 64:2, 427–450.	State, outcome	Empirical / Quantitative paper
Pitichat, T., Reichard, R. J., Kea-Edwards, A., Middleton, E., & Norman, S. M. (2018). Psychological capital for leader development. *Journal of Leadership and Organizational Studies* 25:1, 47–62.	State, outcome	Empirical / Quantitative paper
Powley, E. H. (2009). Reclaiming resilience and safety: Resilience activation in the critical period of crisis. *Human Relations* 62:9, 1289–1326.	State, outcome, trait, process	Empirical / Qualitative paper
Puja Prasad, & Sandhyavani, K. V. (2019). The impact of demography on psychological capital: An empirical study in the retail sector. *International Journal of Management* 10:1, 43–50.	State, outcome	Empirical / Quantitative paper
Raetze, S., Duchek, S., Maynard, M. T., & Kirkman, B. L. (2021). Resilience in organizations: An integrative multilevel review and editorial introduction. *Group and Organization Management* 46:4, 607–656.	State, outcome, trait, process	Literature review / conceptual paper
Raqshin, S., & Nirjar, A. (2012). Accruing individual potential for creativity and innovation in biotechnology firms. *International Journal of Innovation and Learning* 11:2, 162–181.	State, outcome	Empirical / Qualitative paper (Case study)

Rees, G., & Rumbles, S. (2012). Continuous organizational change and burnout. *International Journal of Knowledge, Culture and Change Management* 11:3, 179–194.	State, outcome, trait	Empirical / Quantitative paper
Sahni, S., Kumari, S., & Pachaury, P. (2021). Building emotional resilience with big five personality model against COVID-19 pandemic. *FIIB Business Review* 10:1, 39–51.	State, outcome, trait, process	Empirical / Quantitative paper
Santoro, G., Bertoldi, B., Giachino, C., & Candelo, E. (2020). Exploring the relationship between entrepreneurial resilience and success: The moderating role of stakeholders' engagement. *Journal of Business Research* 119, 142–150.	State, outcome, trait, process	Empirical / Quantitative paper
Santoro, G., Messeni-Petruzzelli, A., & Del Giudice, M. (2021). Searching for resilience: The impact of employee-level and entrepreneur-level resilience on firm performance in small family firms. *Small Business Economics* 57:1, 455–471.	State, outcome, trait, process	Empirical / Quantitative paper
Sarfraz, M., Nisar, Q. A., & Raza, A. (2022). Expatriates' adjustment and performance in risky environments: The role of organizational support and rewards, risk propensity and resilience. *Personnel Review* 52:4, 1126–1145.	Trait	Empirical / Quantitative paper
Sarkar, A., & Garg, N. (2020). "Peaceful workplace" only a myth?: Examining the mediating role of psychological capital on spirituality and nonviolence behaviour at the workplace. *International Journal of Conflict Management* 31:5, 709–728.	State, outcome, trait	Empirical / Quantitative paper
Seville, E. (2018). Building resilience: How to have a positive impact at the organizational and individual employee level. *Development and Learning in Organizations* 32:3, 15–18.	Trait, process	Theoretical paper
Sharma, S., & Sharma, S. K. (2020). Probing the links between team resilience, competitive advantage, and organizational effectiveness: Evidence from information technology industry. *Business Perspectives and Research* 8:2, 289–307.	State, outcome, trait, process	Empirical / Quantitative paper
Smith, K. J., Emerson, D. J., Boster, C. R., & Everly, G. S. (2020). Resilience as a coping strategy for reducing auditor turnover intentions. *Accounting Research Journal* 33:3, 483–498.	Outcome, trait	Empirical / Quantitative paper
Srivastava, S., & Madan, P. (2020). The relationship between resilience and career satisfaction: Trust, political skills and organizational identification as moderators. *Australian Journal of Career Development* 29:1, 44–53.	State	Empirical / Quantitative paper
Srour, Y., Shefer, N., & Carmeli, A. (2022). Positive chair-CEO work relationships: Micro-relational foundations of organizational capabilities. *Long Range Planning* 55:3, 102124–.	State, outcome, trait	Empirical / Qualitative paper
Steen, R., & Pollock, K. (2022). Effect of stress on safety-critical behaviour: An examination of combined resilience engineering and naturalistic decision-making approaches. *Journal of Contingencies and Crisis Management* 30:3, 339–351.	Trait	Empirical / Qualitative paper

Stokes, P., Smith, S., Wall, T., Moore, N., Rowland, C., Ward, T., & Cronshaw, S. (2019). Resilience and the (micro-)dynamics of organizational ambidexterity: Implications for strategic HRM. *International Journal of Human Resource Management* 30:8, 1287–1322.	State, outcome, trait, process	Empirical / Qualitative paper
Teng-Calleja, M., Hechanova, M. R. M., Sabile, P. R., & Villasanta, A. P. V. P. (2020). Building organization and employee resilience in disaster contexts. *International Journal of Workplace Health Management* 13:4, 393–411.	Trait, process	Empirical / Qualitative / Quantitative paper
Tonkin, K., Malinen, S., Näswall, K., & Kuntz, J. C. (2018). Building employee resilience through wellbeing in organizations. *Human Resource Development Quarterly* 29:2, 107–124.	Outcome	Empirical / Quantitative paper
Turner, N., Kutsch, E., Maylor, H., & Swart, J. (2020). Hits and (near) misses. exploring managers' actions and their effects on localised resilience. *Long Range Planning* 53:3, 101944–	State, outcome, trait, process	Empirical / Qualitative paper
Vanhove, A. J., Herian, M. N., Perez, A. L. U., Harms, P. D., & Lester, P. B. (2016). 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.	State, outcome, trait, process	Meta-analysis
Varshney, D. (2022). Machiavellianism, self-concept and resilience: Do they affect employee performance? A moderated-mediated analysis. *International Journal of Productivity and Performance Management* 72:7, 2093–2118.	State	Empirical / Quantitative paper
Vickers, M. H., & Kouzmin, A. (2001). 'Resilience' in organizational actors and rearticulating 'voice': Towards a humanistic critique of new public management. *Public Management Review* 3:1, 95–119.	State, outcome, trait	Empirical / Qualitative paper
Visser, W. (2021). Measuring future resilience: A multilevel index. *Corporate Governance (Bingley)* 21:2, 252–267.	State, outcome, trait, process	Literature review / Empirical / Quantitative paper
Vough, H. C., & Caza, B. B. (2017). Where do i go from here? sensemaking and the construction of growth-based stories in the wake of denied promotions. *Academy of Management Review* 42:1, 103–128.	State, outcome, trait, process	Literature review
West, B. J., Patema, J. L., & Caesten, M. K. (2009). Team level positivity: Investigating positive psychological capacities and team level outcomes. *Journal of Organizational Behavior* 30:2, 249–267.	State, outcome	Empirical / Quantitative paper
Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational response to adversity: Fusing crisis management and resilience research streams. *Academy of Management Annals* 11:2, 733–769.	Trait, process	Literature review
Zheng, W., Kark, R., & Meister, A. L. (2018). Paradox versus dilemma mindset: A theory of how women leaders navigate the tensions between agency and communion. *Leadership Quarterly* 29:5, 584–596.	Outcome, trait, process	Theoretical paper / Literature review