

Entrepreneurial Attributes During Times of Crisis: The role of Bullshit Praxis and other factors

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the degree of

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under the supervision of A. Prof Paul Brown, A. Prof Martin
Bliemel, and Dr Jan Henrik Gruenhagen

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Certificate of Original Authorship

I, Jennifer Amy Binetter, declare that this thesis is submitted in fulfilment of the requirements for the award of Doctor of Philosophy, in the TD School at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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This thesis follows the format of a thesis by compilation and is structured as a composition of chapters and publishable works. It includes:

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Each publishable paper includes a section on the research approach and methodology specific to their work. The thesis format will follow the convention: Introduction, Chapter Two, Chapter Three, Chapter Four, Conclusion and Implications.

All papers are solely authored by the PhD candidate, Jennifer Amy Binetter, with support from supervisors A. Prof Paul Brown, A. Prof Martin Bliemel and Dr Jan Henrik Gruenhagen.

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Thesis Abstract

This thesis examines entrepreneurial attributes within the context of the COVID-19 crisis. It seeks to address two central objectives. First, to explore the extent to which current conceptualisations of entrepreneurial attributes reflect how entrepreneurs understand their own actions, thoughts and behaviours. Second, to understand the firsthand experiences of entrepreneurs with a view to uncover and explore novel attributes. These objectives bear significance for scholars, policymakers and practitioners seeking deeper insights into the role of entrepreneurial attributes during crises. This is especially significant given the dearth of research regarding entrepreneurial attributes in crises, particularly concerning COVID-19, highlighting a significant research gap in the domain.

First, this research has unveiled fresh insights within the relatively underexplored category of Curiosity, and introduced three novel and individually observable attributes of entrepreneurs, Bullshit Praxis, Pro-Ethical Self-Assessment and Dissatisfaction Mindset. These attributes manifested with notable frequency and distinctiveness. Second, established entrepreneurial attributes were observed with variations in salience. Attributes such as risk attitude and entrepreneurial self-efficacy exhibited higher prevalence than the Big Five personality traits. Finally, a detailed typological classification of entrepreneurial Bullshit Praxis is presented, highlighting two overarching types and ten subtypes, offering a framework for comprehending entrepreneurial Bullshit Praxis.

This thesis yielded several key contributions, drawing from a sample of 18 founder entrepreneurs, located in Sydney, Australia. First, this is the first study to identify and articulate the concept of "Bullshit Praxis" as an original and before-uncharted attribute intrinsic to entrepreneurs. Second, this is the first study to identify and theorise how Pro-Ethical Self-Assessment and Dissatisfaction Mindset present in entrepreneurial speech, together with identifying Bullshit Praxis and offering new insights on Curiosity.

This research, rooted in a qualitative, phenomenographic approach, surpasses conventional survey methodologies to deliver a nuanced portrayal of the entrepreneurial experience. By delving into cognitive intricacies and contextual dimensions, it refines entrepreneurial personality delineation. Concurrently, the thesis

uncovers novel dimensions of entrepreneurial attributes by exploring firsthand experiences—a critical undertaking, particularly in crises.

Consequently, this thesis extends valuable insights to scholars, policymakers and practitioners navigating the complex landscape of entrepreneurship during turbulent times, providing a nuanced understanding of how established and novel attributes manifest in the unique context of COVID-19. Second, it equips entrepreneurs with a practical understanding for self-assessment and reflection, enhancing their adaptive capacities in crisis scenarios. This thesis highlights the need for further exploration and provides a foundation for understanding the intricate relationship of entrepreneurial attributes in crises.

Chapter One—Introduction

Background

In this thesis, an investigation is conducted into the personality attributes of entrepreneurs within the unique context of the COVID-19 social and economic crisis. Entrepreneurship, a multifaceted concept often defined by a combination of individual-level attributes, is subject to varying interpretations. For the purpose of this study, a definitional demarcation is employed, aligning with the approach advocated by Gartner (1988), wherein an entrepreneur is delineated as the creator of an organisation. Within the framework of qualitative in-depth interviews, the sample is further refined to exclusively encompass 'founding' entrepreneurs, denoting individuals who serve as the initiators and creators of a business venture, aligning with Gartner's definition. This demarcation serves a dual purpose: to enhance the conceptual clarity of the research and to establish a well-defined target audience for this thesis and its ensuing outcomes.

The literature dedicated to exploring the personality attributes of entrepreneurs is extensive and multifaceted (Kerr et al., 2018). Personality attributes, encompassing facets of cognition, mindset and behaviour, are frequently subjects of investigation within entrepreneurship attribute research (Kuratko et al., 2021). These attributes are often examined separately (e.g., Bandura, 1982; Şahin et al., 2019; Syed et al., 2019) or, on occasion, in a more integrated manner (e.g., Kerr et al., 2018). However, it is common for research in this domain to predominantly focus on cognitive attributes or personality traits, with occasional interchangeability between the two terms.

The foundational features of cognitive attribute research have been thoughtfully delineated in prior scholarly works. For instance, Grégoire et al. (2011) offer a comprehensive definition that encompasses: i) "Mentalism", which involves a concentrated inquiry into the mental representations of individuals, their perceptions of others, events, contexts and various mental states and constructs; ii) "A process orientation", highlighting the study of the development, transformation and utilisation of these mental representations and constructs; and iii) "The operation of cognitive dynamics across different levels of analysis." Consequently, cognitive attributes can be understood as dynamic mental states or constructs intricately intertwined with the entrepreneurial context (Brockhaus, 1982).

Similarly, the essential characteristics of personality attributes or traits have been meticulously articulated. In particular, McCrae and Costa (1997) elucidate personality traits as "relatively enduring styles of thinking, feeling, and acting." This definition underscores the inclusive nature of personality, which encompasses both cognitive facets and behavioural dimensions, thereby contributing to a holistic understanding of the entrepreneurial psyche. Hereafter, for the sake of clarity and ease of comprehension within the context of this thesis, the overarching term "entrepreneurial attribute" will be employed to encompass the multifaceted dimensions of mindset factors, cognitive attributes and personality traits that collectively constitute the intricate psychological makeup of entrepreneurs. This conceptual agglomeration will facilitate the coherent discussion of these attributes and their interplay in the entrepreneurial context.

The landscape of entrepreneurial attribute literature has exhibited a diverse array of focal points throughout its historical evolution. Brownell (2022) adeptly delineates this historical trajectory, which has primarily gravitated towards three central avenues of inquiry. The first body of research endeavours to distinguish entrepreneurs from other demographic categories, such as non-entrepreneurs or managerial cohorts (Brockhaus and Horwitz, 1986; McClelland, 1961). The second avenue delves into the ontological dimensions of entrepreneurial identity, centring on factors like organisational inception and creation, dismissing the need for trait-based work (Gartner, 1988; Ramoglou, Gartner and Tsang, 2020). The third, arguably the most extensive strand, revolves around trait-based scrutiny of successful entrepreneurial outcomes (Baum, Frese and Baron, 2014). A raft of studies have highlighted the role of specific attributes in enabling entrepreneurs to perform more effectively, often serving as explanatory variables for entrepreneurial intentions, actions, and achievements (e.g., Bird, 1988; Borland, 1975; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000).

Nonetheless, the outcomes of these inquiries frequently present challenges in terms of interpretation and practical applicability for entrepreneurial practitioners. While many of the scales used to assess attributes were initially created qualitatively, this challenge arises from a predilection for quantifying well-established attributes, reinterpreting them in various contexts to gauge their prevalence and frequency, rather than offering pragmatic guidance to researchers and aspiring founders. This pattern endures even in times of crisis. Consequently, this fixation has contributed to a degree of stagnation within the field (Doern et al., 2019). It is plausible that this impediment to progress can

partly be attributed to the methodological approaches prevalent in extant literature. The predominant approach leans heavily on quantitative methodologies, typically manifested in large-scale surveys aimed at quantifying the frequency or magnitude of these attributes within the entrepreneurial cohort. While this methodology does engender confidence in results and lends itself to replicability, it tends to constrain the potential for research participants' responses to fundamentally reshape the research trajectory. Instead, it predominantly furnishes outcomes aligned with predetermined measurement scales.

In response to recognised concerns and a growing scholarly discourse, the imperative emerges to integrate qualitative and phenomenographic research methodologies into the domain of entrepreneurship scholarship (Hjorth and Steyaert, 2004; Johannisson et al., 2018). Qualitative research approaches, typified by in-depth interviews, case studies and content analysis, inherently facilitate the multifaceted exploration of the cognitive substrates, affective undercurrents and intricate contextual dimensions that underlie entrepreneurial decision-making processes (Goss, 2005; Sarason et al., 2006).

Motivation for the Research

The emergence of the COVID-19 pandemic, a globally unprecedented event, left profound and far-reaching disruptions in its wake. This pandemic's repercussions have been extensive, impacting both societal and economic domains significantly (Backman et al., 2023; Yu et al., 2021). The marked effects of the pandemic are particularly evident, given the implementation of governmental interventions and lockdown strategies, placing substantial pressure on various sectors. As evidenced by prior research (Alshater et al., 2022; Castro and Zermeño, 2020; Kuckertz et al., 2020), these measures have triggered considerable economic strain. Considering these reflections, it becomes evident that crises, exemplified by the profound exogenous shock of the COVID-19 pandemic, present an opportune juncture to rekindle the exploration of various facets of the entrepreneurial experience.

The motivation underlying this thesis is characterised by a dual rationale: i) to harness a more extensive reservoir of experiential insights directly from entrepreneurs through phenomenological enquiry and ii) to document entrepreneurial attributes during such a critical economic and social juncture. Firstly, the literature on entrepreneurial attributes has notably lacked substantive updates in recent history. Extant work tends to

recurrently reinterpret established attributes, employing analogous survey-based quantitative methodologies to gauge the prevalence and frequency of recognised attributes. This pattern endures even within the context of social and economic crises, which serves as the contextual backdrop for this thesis. For instance, Castro and Zermeño (2020) note that “attributes of the individual entrepreneurs, directly and indirectly, influence the resilience of SMEs”, finding that certain attributes significantly elevate the prospects of entrepreneurial success in the aftermath of a crisis, thereby emphasising the need for a more comprehensive examination of these attributes within the context of crises. While certain entrepreneurial attribute studies conducted in crisis contexts do engage with established attributes concerning distinctions between entrepreneurs and managers (e.g., Envick and Langford, 2000) or between entrepreneurs and the broader working population (e.g., Collins et al., 2004), as well as exploring attribute presentations across diverse regional settings, such as emerging economies (e.g., Maina and Nyambura, 2019; Owoseni, 2014), and established entrepreneurial ecosystems (e.g., Röhl, 2019; Suzuki et al., 2002), they tend to provide limited insights beyond variations in frequency and measurement.

This persistent recurrence of research outcomes over time has created an opportunity, albeit a unique challenge: the prospect of reimagining research on entrepreneurial attributes to align better and add value to the needs of its primary audience, namely, entrepreneurship practitioners. Consequently, this thesis is underpinned by a profound curiosity regarding the potential evolution of this research domain, which seeks to harness a more extensive reservoir of experiential insights directly from entrepreneurs. This approach, in turn, aspires to yield practical, comprehensible and consequential outcomes for this intended audience. It is essential to underscore that this challenge holds equal relevance for scholars and policymakers keen on deepening their comprehension of the personality attributes of entrepreneurs—an especially pertinent opportunity within the context of this work.

Secondly, it is essential to recognise the historical precedent of leveraging entrepreneurship and small and medium-sized enterprise (SME) growth as mechanisms to alleviate adverse societal impacts during periods of crisis, a context in which the implications of the COVID-19 pandemic hold particular significance for these entities (Papaoikonomou et al., 2012). Recent research within the domain of entrepreneurship, conducted against the backdrop of the COVID-19 crisis, has predominantly centred on a variety of topics, with much focus on entrepreneurship education (Liguori and Winkler, 2020; Ratten and Jones, 2021; Secundo et al., 2021)

and social entrepreneurship (Bacq and Lumpkin, 2020; Bacq et al., 2020; Weaver, 2020). Remarkably, the literature pertaining to entrepreneurial attributes has largely been relegated to the periphery and has received minimal recent attention. While the specific impact of COVID-19 on these attributes remains uncertain, the documentation of entrepreneurs' experiences during this unprecedented period, with a focus on entrepreneurial attributes, may prove invaluable to future researchers conducting reflective analyses or comparative studies.

The significance of this research endeavour is underscored by the historical evidence that emphasises the pivotal role of entrepreneurship in economic recovery, applicable to both developing and developed economies following crises. For instance, Ratten (2020a) highlights the exigency of novel research in the domain of entrepreneurship and crises, emphasising that "an entrepreneurial approach is required to alleviate and help end the COVID-19 crisis". This has resulted in a rapid response from scholars investigating the pivotal role entrepreneurial activities play in broader crisis recovery (e.g., Castro and Zermeño, 2020; Khan et al., 2021; Ratten, 2020a; Ravina-Ripoll et al., 2021). Moreover, it is noteworthy that a substantial proportion of the business landscape in Australia comprises small businesses, accounting for over 32% of the country's total economy each year and employing more than 41% of the workforce (ASBFEO, 2022). The economic repercussions of the COVID-19 pandemic on growth have been a subject of public concern, prompting increased governmental support for entrepreneurial activities through grants and tax incentives in response to the pandemic. Since entrepreneurial attributes constitute the foundational underpinning of entrepreneurial intentions, subsequent behaviours, and actions (Kuratko et al., 2021), documenting these attributes during such a critical juncture is paramount. Such documentation benefits researchers, policymakers, and practitioners alike, offering insights that can inform future research endeavours and guide actionable interventions, now and in the future.

Objectives

Within this overarching context, this thesis aligns itself with two principal objectives. First, to explore the extent to which current conceptualisations of entrepreneurial attributes reflect how entrepreneurs understand their own actions, thoughts and behaviours. To address this objective, I investigate and refine the explication of entrepreneurial personalities by applying a qualitative, phenomenographic research approach. This entails an intricate exploration of the cognitive intricacies, emotive

subtleties and contextual intricacies that engender and characterise entrepreneurial personas. By embracing qualitative methodologies, notably the employment of in-depth interviews and incisive case studies, this objective aspires to delve profoundly into the multifaceted facets of entrepreneurial psychology. It endeavours to transcend the confines of conventional survey-driven methodologies to furnish a more authentic, nuanced, and in-depth portrayal of entrepreneurs.

Second, to understand the firsthand experiences of entrepreneurs with a view to uncover and explore novel attributes. This thesis endeavours to unveil any previously uncharted dimensions of the entrepreneurial psyche, offering novel insights into the experiential contours and practical ramifications of entrepreneurial personality traits. Rooted in phenomenographic approaches designed to unveil individuals' experiential landscapes, this objective seeks to illuminate the unexplored facets of entrepreneurial personalities. By engaging in an exploration of the lived experiences of entrepreneurs, this thesis aspires to unearth dimensions that may have yet remained concealed within the precincts of conventional quantitative research theories, given that extant work tends to consistently reinterpret established attributes, using analogous survey-based quantitative methodologies to gauge the prevalence and frequency of recognised attributes. Considering these reflections, it becomes evident that crises, exemplified by the profound exogenous shock of the COVID-19 pandemic, present an opportune juncture to rekindle the exploration of entrepreneurial attributes. The inherent disruptions and challenges introduced by a crisis of this magnitude emphasise the relevance and urgency of investigating the dynamics of these attributes within the entrepreneurial context.

Methods

The empirical foundation of this thesis is rooted in a sample comprising 18 founding entrepreneurs located in Sydney who were actively engaged in their entrepreneurial endeavours during the years 2020 and 2021. Collectively, these entrepreneurs possess a wealth of experience, totalling more than 106 years of combined entrepreneurship involvement within their respective ventures at the time of their interviews. The sample encompasses a diverse array of industries, including but not limited to employment, cybersecurity, consulting, compliance, data, education, finance, technology, marketing, hospitality and food.

The methods used for this study are discussed more deeply in each chapter in their own section to provide context around their use. In brief, Chapter Two's research

design encompasses a systematic literature review and snowball sampling techniques to comprehensively explore entrepreneurship literature during crises. It uses a dual methodological approach, which enables the synthesis of a nomothetic model, unifying diverse research strands and providing a nuanced understanding of the scholarly discourse. A snowball sampling technique coupled with a systematic review of the Scopus database ensures a robust examination of the literature. This leads to the identification and inclusion of 462 relevant documents on COVID-19 and entrepreneurs, which are then summarised into 28 documents relating to attributes. This methodology lays a substantial foundation for theoretical discussions, emphasising the nascent nature of the research terrain and setting the stage for future scholarly explorations.

Chapter Three adopts an abductive, qualitative, phenomenological approach to explore the entrepreneurial attributes exhibited by founders during the COVID-19 crisis. It employs purposive sampling. Eighteen founder entrepreneurs in Sydney are interviewed, and thematic coding, guided by an adapted Gioia Grounded Theory approach, is utilised to identify attributes. The analysis includes well-established entrepreneurial attributes such as the Big-5 personality traits, risk attitude, self-efficacy and novel findings like "Bullshit Praxis", derived from rich interview data. The study's rigour is underscored by its methodological alignment with established frameworks, ensuring a nuanced understanding of the lived experiences of entrepreneurs in a crisis context.

Chapter Four builds off Chapter Three and, accordingly, also employs an abductive, qualitative, phenomenographic methodological approach to gain an authentic understanding of the experiences of founder entrepreneurs during the COVID-19 pandemic, focusing on the emergent concept of entrepreneurial Bullshit Praxis. Through semi-structured interviews conducted with 18 founder entrepreneurs in Sydney, the research adopts criterion-based purposive sampling, meticulous data collection, and thematic coding analysis, resulting in the development of a comprehensive typology of Bullshit Praxis categories. The deliberate temporal delay in initiating data collection, combined with a focused participant sample, enhances the depth and specificity of the findings, contributing to the nuanced exploration of entrepreneurial attributes in the context of the pandemic.

A qualitative, phenomenographic approach, "the process of pursuing understanding through the construction of other people's constructions" (Doern, 2016, pp. 5), while not

often utilised in entrepreneurial attribute literature, is known to bring out the ‘essences’ of experiences or appearances (phenomena), to describe their underlying ‘reason’” (Cope, 2005). Phenomenographic methods, renowned for their capacity to elucidate individuals’ perceptions and lived experiences, proffer a promising avenue for cultivating a more comprehensive understanding of the entrepreneurial phenomenon (Sjöström and Dahlgren, 2002). The ongoing confluence of qualitative and quantitative research paradigms, underscored by the exigency for an enriched and contextually grounded comprehension of entrepreneurship, represents a crucial juncture in the evolution of entrepreneurial scholarship (Welter, 2011). The conjoining of these methodological strands not only seeks to ameliorate the perceived impasse inherent to hypothesis-driven, survey-centric investigations but also endeavours to engender a more profound and nuanced apprehension of the manifold dimensions encapsulating the entrepreneurial domain. Consequently, phenomenographic work of this nature may also allow researchers to better understand the practical manifestations of entrepreneurial attributes rather than simply measuring their prevalence.

In the context of this study, the practical manifestations of entrepreneurial attributes pertain to the self-described cognitive frameworks and behavioural dispositions exhibited by participants throughout their entrepreneurial journeys. This investigation posits that cognition fundamentally underpins these mindset and behavioural factors (Kuratako et al., 2021), suggesting that adopting a research methodology rooted in phenomenography may enhance the clarity and precision of their identification.

Accordingly, this method holds the potential to alleviate the prevailing stagnation within the field by drawing directly from the experiential knowledge of entrepreneurs, forming the basis of this thesis. Notably, this approach is relatively uncommon in similar research endeavours, primarily due to the distinctive challenges encountered when engaging with entrepreneurial participants. Research has shown that entrepreneurs often harbour scepticism towards researchers, resulting in a reluctance to partake in comprehensive studies that delve deeply into the entrepreneurial experience (Hannafey, 2003). This scepticism poses a unique challenge for researchers aiming to employ a qualitative phenomenographic approach to entrepreneurship personality research, as this methodology necessitates the full participation and trust of the targeted sample to authentically record their experiences and subsequently shape the research outcomes from their unique perspectives.

Key Findings

Chapter Two illuminates the existing research landscape concerning entrepreneurial attributes within the domain of crises. This comprehensive examination, rooted in robust theoretical development, finds a notable research gap: a paucity of studies dedicated to exploring entrepreneurial attributes within crisis contexts, including a distinct dearth of research pertinent to the unprecedented COVID-19 crisis. This foundational finding serves as a cornerstone for the subsequent chapters, shaping the trajectory and significance of the entire thesis. These findings allow the production of a nomothetic model of entrepreneurial crisis.

Chapter Three provides an in-depth qualitative analysis to explore the manifestation of entrepreneurial attributes and how these relate to the COVID-19 crisis. Grounded in the literature review performed in Chapter Two, Chapter Three involves an examination of how these attributes are expressed by founding entrepreneurs during the pandemic through a series of in-depth interviews. Employing rigorous coding and analysis techniques using NVIVO software, this chapter thoroughly accounts for the presence and presentation of established attributes identified in the literature discussed in Chapter Two. Additionally, it introduces four novel attributes to the scholarly discourse, offering verbatim accounts of each attribute's expression, including to what extent they are crisis-specific, and quantifying their prevalence within the sample through the coding and subsequent data analysis process.

Furthermore, Chapter Three has two key findings. First, it finds that established attributes were observable and present among entrepreneurs who were describing their experiences of the pandemic, shedding light on attributes such as risk attitude and entrepreneurial self-efficacy as recurrent themes, often surpassing the frequency of the Big Five personality traits. The chapter also enriches the scholarly discourse by presenting participant verbatims, thus furnishing authentic accounts of attribute expressions during the COVID-19 crisis.

Second, this chapter reveals new insights into the under-researched category of Curiosity and introduces three novel attributes—Bullshit Praxis, Pro-Ethical Self-Assessment, and Dissatisfaction Mindset, all of which are separately observable and identifiable. These attributes exhibit a high salience in their appearance, and Chapter Three outlines their distinct manifestations in relation to the crisis, elucidating their emergence through the recorded discourse of study participants. This pivotal chapter not only broadens our understanding of entrepreneurial personality attributes but also

underscores the nuanced and multifaceted nature of these attributes in real-world entrepreneurial contexts.

Chapter Four of this thesis, building on the finding of Bullshit Praxis as an attribute of entrepreneurs illustrated in Chapter Three, develops a comprehensive typology and model pertaining to the phenomenon of Bullshit Praxis within the context of entrepreneurship and how entrepreneurs respond to crises. Notably, the term "Bullshit Praxis" is introduced within this thesis, marking a distinctive contribution to the academic discourse as, to the best of the author's knowledge, it remains absent from prior scholarly research into entrepreneurship. Bullshit has previously been discussed in organisational literature (e.g., Ferreira et al., 2022; Spicer, 2020), yet entrepreneurs and organisational managers are known to exhibit their cognitive attributes differently (Chen et al., 1998; Envick and Langford, 2000). This chapter's fundamental finding lies in the identification and classification of two overarching types and ten subtypes of distinct variations in Bullshit Praxis. These variations are systematically categorised under the overarching themes of "Evasive" and "persuasive" Bullshit Praxis.

Within the domain of entrepreneurial Persuasive Bullshit Praxis, the chapter highlights specific manifestations such as creating and communicating an admittedly unrealistic vision, vague communication to enhance positive perceptions, ambiguous communication to prevent panic, ethically selling the truth, self-promotion, and unrealistic self-assurance. Conversely, entrepreneurial Evasive Bullshit Praxis encompasses dimensions like Bullshit condemnation, a grey area justification, living in the future, and competing interests. As a culmination of these findings, Chapter Four presents a comprehensive model of entrepreneurial Bullshit Praxis, contributing a novel framework for understanding and categorising the various dimensions and manifestations of this phenomenon within the entrepreneurial realm.

Contributions of the Research

This thesis presents several significant contributions to existing literature. In Chapter Two, a thorough literature review is undertaken, revealing a distinct dearth of research pertinent to the unprecedented COVID-19 crisis, particularly in relation to entrepreneurial attributes. This review leads to the provision of a nomothetic model of entrepreneurial crisis literature. The novelty of the nomothetic model lies in its ability to synthesise a wide range of research, unifying the domains of COVID-19's impact on businesses, the intricate interaction between the pandemic and entrepreneurship, crisis

dynamics and entrepreneurial attributes. This thesis advances the academic discourse on entrepreneurship, specifically focusing on the pivotal role played by entrepreneurs in the economic recovery process amid challenging circumstances, as exemplified by the COVID-19 pandemic. This work extends the foundational research conducted by prior scholars (e.g., Chakrabarti, 2015; Kreitmeyer, 2017; Miles et al., 2016; Roman and Rusu, 2018) by offering a comprehensive model that assimilates the distinctive dynamics of entrepreneurship during the COVID-19 crisis. Notably, this model not only enriches our comprehension of the field but also establishes the groundwork for prospective investigations in this critical domain.

Moreover, this study identifies and underscores the exigency of further research within this sphere, particularly emphasising the intricate exploration of the attributes characterising entrepreneurs during crises. By delineating these prospective areas of inquiry, this thesis contributes by outlining a tangible roadmap for future research pursuits, thereby facilitating the pursuit of studies that hold the potential to significantly impact the resolution of the social and economic challenges precipitated by the pandemic.

Chapter Three represents two pivotal contributions. This chapter's in-depth qualitative analysis reveals a foundational shift in traditional entrepreneurial attribute frameworks. First, this thesis is the first study to identify and articulate the concept of "Bullshit Praxis" as an original and before-uncharted attribute intrinsic to entrepreneurs. Defined as the transformation of an internal bullshit concept into an unconscious bullshit action being exercised by entrepreneurs, finding that it operates as an unconscious Praxis, a tangible, accepted custom that lives in the minds of entrepreneurs prior to its actionable expression, Bullshit Praxis enhances our understanding of how entrepreneurs engage with this distinctive attribute.

Second, to the author's knowledge, this is the first study to identify and theorise how Pro-Ethical Self-Assessment and Dissatisfaction Mindset present in entrepreneurial speech, together with identifying Bullshit Praxis and offering new insights on Curiosity. These findings extend the work of Kerr (2018) and other scholars who have explored the various existing attributes of entrepreneurs, such as the Big-5, Need for Achievement, Locus of Control, Self-Efficacy, Innovativeness and Risk Attitude (e.g., Bird, 1988; Borland, 1975; Kihlstrom and Laffont 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000). These novel insights allow for a richer understanding of entrepreneurs and highlight the exigency of further investigation.

Notably, we reveal that previous studies, typically focusing on one specific attribute or set of attributes, are incomplete in both the breadth of cognitive and personality attributes, and there is a necessity to explore further how entrepreneurs present these attributes.

In Chapter Four, a comprehensive typology and model pertaining to the phenomenon of Bullshit Praxis is developed, revealing novel insights into the entrepreneurial psyche. This thesis contributes to the existing body of literature on Bullshit by pioneering the concept of "Bullshit Praxis" within the entrepreneurial domain. While philosophical investigations have delved into the theoretical dimensions of Bullshit (Cohen, 2002; Frankfurt, 2009), our study is the inaugural exploration that identifies and explicates Bullshit Praxis as an integral attribute of entrepreneurs, extending the prior work on Bullshit within an organisational sphere (e.g., Ferreira et al., 2022; Spicer, 2020). This definition characterises Bullshit Praxis as the transformation of an internal bullshit concept into an unconscious bullshit action being exercised by entrepreneurs. While organisational scholars have suggested Bullshit may be present in "conceptual" entrepreneurs to enhance their image (Spicer, 2020), this thesis extends this work by finding that Bullshit operates as an unconscious Praxis, thereby extending the work of Littrell et al. (2021a), expanding their concepts of Evasive and persuasive Bullshitting into an entrepreneurial territory and adding to it by providing ten subtypes of entrepreneurial Bullshit Praxis.

Collectively, the multifaceted contributions of this research bear significance for the academic community, policymakers and practitioners alike who wish to understand the attributes of entrepreneurs better as they play a role in responding to the crisis. The synthesis of a nomothetic model in Chapter Two not only addresses the existing research gap in the context of the unprecedented COVID-19 crisis but also lays the foundation for a more comprehensive understanding of entrepreneurial dynamics during times of upheaval. The model serves as a valuable guidepost for scholars exploring the evolving landscape of entrepreneurship amid crises. Chapter Three's contributions, particularly the introduction of "Bullshit Praxis" in entrepreneurship, mark a shift in entrepreneurial attribute frameworks. By recognising and articulating this previously uncharted attribute in this context, the study not only enhances our understanding of entrepreneurs but also opens avenues for further exploration and theoretical development. In Chapter Four, the development of a comprehensive typology and framework related to Bullshit Praxis takes the research a step further by uncovering profound insights into the founder entrepreneur. This framework presents

practical implications for entrepreneurs and practitioners. The far-reaching impact of this contribution has the potential to influence organisational practices and shaping the discourse on ethical considerations in entrepreneurial decision-making.

By bridging gaps in existing literature, this research provides a robust foundation for future studies, shaping the trajectory of research inquiries in the field of entrepreneurship during crises. The outlined roadmap for future research pursuits not only identifies potential areas of inquiry but also emphasises the urgency of further investigation. Scholars, policymakers, and practitioners armed with the insights from this work can collaboratively work towards developing strategies and interventions that are not only theoretically grounded but also practically relevant.

Structure of the Thesis

The structure of the thesis is as follows. Chapter Two serves as the foundational framework for this thesis, offering a comprehensive synthesis and model of existing entrepreneurial attribute research, both in isolation and within the context of crises. Chapter Three is dedicated to the pursuit of the first objective of this study, which is to explore the extent to which current conceptualisations of entrepreneurial attributes are reflective of how entrepreneurs understand their own actions, thoughts and behaviours. This chapter accomplishes this objective by meticulously refining the elucidation of entrepreneurial personalities through the application of a qualitative phenomenographic research paradigm. In doing so, it qualitatively examines the existence, manifestation and presentation of established attributes within founding entrepreneurs, particularly during the context of the pandemic. Furthermore, it addresses the second objective, namely, to understand the firsthand experiences of entrepreneurs with a view to uncovering and exploring novel attributes. It also identifies four previously unexplored attributes, which serve as promising avenues for future research. Chapter Four extends the exploration of the second objective articulated in Chapter Three. It goes beyond the established attributes and introduces a typology of a novel entrepreneurship attribute, a subject, to the best of the author's knowledge, yet unexamined within the extant entrepreneurship literature. Chapter Five, the concluding chapter, presents a comprehensive summary of the thesis, encapsulating key findings and insights. It also candidly discusses the limitations of this research endeavour, outlines the practical implications of the research findings, and offers recommendations for future research in the field of entrepreneurship, thereby concluding this thesis.

Chapter Two—Understanding Entrepreneurial Attributes in The Face Of Adversity: A Literature Review

Abstract

Despite the extensive body of traditional research dedicated to entrepreneurial attributes, a conspicuous gap exists in the exploration of the presence and functional mechanisms of these attributes within the context of crises. The emergence of renewed interest in crisis-based entrepreneurial modelling has been catalysed by the profound disruptions caused by the COVID-19 pandemic, fundamentally altering the landscape of commercial enterprises—how they operate and succeed. Entrepreneurs are often characterised by a distinct and predictable set of cognitive and personality features, which wield substantial influence over the prevalence and success of new venture creation.

This paper recognises the imperative for an enhanced comprehension of effective entrepreneurial intervention within this dynamically evolving economic milieu and undertakes the task of consolidating existing knowledge. It conducts a comprehensive literature review of contemporary literature pertaining to entrepreneurship attributes, scrutinises their applicability and relevance in the crucible of crises, and, most significantly, delineates logical trajectories for future academic inquiries.

Keywords

Entrepreneurship, crisis, theory development, COVID-19, cognitive attributes, personality

Introduction

Motivated by the unprecedented global event of the COVID-19 pandemic, this chapter endeavours to shed light on the multifaceted intersection of entrepreneurship, crises, and the attributes of entrepreneurs. Our primary objective is to comprehensively review

existing literature, addressing the noticeable gap in the scholarly landscape regarding the role of entrepreneurial attributes in times of crisis. By delving into this critical domain, we aim to not only discern significant deficiencies but also identify unexplored opportunities. This study contributes to the fields of entrepreneurship and COVID-19 documentation, offering a comprehensive understanding of the dynamics of entrepreneurship during crises, the pivotal role of entrepreneurs in economic resurgence, and the determinants of venture outcomes during turbulent periods. A key contribution lies in the nomothetic model of entrepreneurial crisis literature we present, delineating the landscape of entrepreneurial crisis literature, which paves the way for future research trajectories. Additionally, we provide practical recommendations with profound implications for research engagement in the ever-evolving terrain of commercial enterprise. This work aspires to benefit scholars, policymakers and practitioners alike by unravelling the complexities of entrepreneurial attributes in crisis response and recovery, thereby contributing to the collective understanding of these crucial aspects in the post-COVID-19 world.

The COVID-19 pandemic is a global event of unparalleled significance. Originating in the distant regions of China, the virus swiftly traversed international borders, leaving in its wake a wake of profound and far-reaching disruption. The consequences of this pandemic have been both sweeping and profound, spanning the domains of society and economics alike (Backman et al., 2023; Yu et al., 2021). The pandemic's impact has been especially marked, with governmental interventions and lockdown strategies imposing substantial pressures on numerous sectors. These measures have precipitated considerable economic strain, as highlighted by previous research (Alshater et al., 2022; Castro and Zermeño, 2020; Kuckertz et al., 2020).

Within the specific context of Australia, the pandemic necessitated stringent closures and restrictions to curb viral transmission, an imperative that unavoidably inflicted severe economic and societal ramifications (O'Sullivan and Rahamathulla, 2020). This predicament has led to speculations regarding the potential emergence of a significant recession (Maritz et al., 2020; Tervalo and Watson, 2022). The pervasive uncertainty surrounding the pandemic's duration and its multifaceted effects has underscored the urgent need for interventions that extend beyond the scope of government initiatives.

Historically, entrepreneurship and the growth of SMEs have been recognised as strategic mechanisms for mitigating societal damage during periods of crisis (Papaoikonomou et al., 2012). Consequently, the implications of the COVID-19

pandemic are of particular importance for these entrepreneurial entities. This rapid response from various scholars to look into the immediate effects of the pandemic has begun to highlight the pivotal role that entrepreneurial activities can play in the broader process of societal rejuvenation amid the throes of an economic and social catastrophe (e.g., Castro and Zermeño, 2020; Khan et al., 2021; Ratten, 2020a; Ravina-Ripoll et al., 2021). As aptly noted by Ratten (2020a), the current juncture underscores the imperative for novel research endeavours within the domain of entrepreneurship and crises, given that "an entrepreneurial approach is required to alleviate and help end the COVID-19 crisis". It is worth highlighting that crises can act as external enablers (Davidsson, 2015)¹, providing push factors² that create opportunities for 'disaster entrepreneurship'³. During such times, entrepreneurs' responses assume a central role in determining the fate of their ventures, as corroborated by previous research (Devece et al., 2016; Doern et al., 2019; Linnenluecke and McKnight, 2017).

While there is burgeoning literature around COVID-19's effects on business outcomes, entrepreneurship-focused research has predominantly centred on specific domains, notably entrepreneurship education (Liguori and Winkler, 2020; Ratten and Jones, 2021; Secundo et al., 2021), and the burgeoning field of social entrepreneurship (Bacq and Lumpkin, 2020; Bacq et al., 2020; Weaver, 2020), and more. The prevailing direction of this body of work has been to gauge the overall repercussions of crises on entrepreneurship. However, there exists a noticeable paucity of studies dedicated to the examination of entrepreneurial attributes within the context of crises.

In the landscape of entrepreneurship literature, many scholars explore entrepreneurs' psychological characteristics, navigating the domains of "mindset factors", "personality traits", and "cognitive attributes." Mindset factors encapsulate foundational perspectives, attitudes and abilities that shape an entrepreneur's approach (Kuratko et al., 2021). Personality traits are enduring patterns of psychological thoughts and behaviours (Kerr et al., 2018). Cognitive attributes, essential in decision-making and strategic thinking, can encompass various facets, including thoughts, interpretations and the influence of external dynamics (Grégoire et al., 2011). For clarity, this paper

¹ External enablers are external circumstances which enable, "a variety of venture development attempts by several Actors" (Davidsson, 2015).

² Push factors generally refer to crises or other external circumstances that force individuals into creating entrepreneurial ventures. This can relate to unemployment, education, race and other factors.

³ Disaster entrepreneurship is a term often used to describe private sector innovation opportunities and activities that present in crises. This is usually related to novel firm activities but can also refer to entrepreneurial activities undertaken by individuals to fill venture voids.

adopts the term "entrepreneurial attribute", as a conceptual agglomeration, unifying mindset factors, cognitive attributes, and personality traits into a coherent exploration of the complex composition of entrepreneurs.

Numerous investigations have emphasised the pivotal role played by various attributes in enhancing entrepreneurial performance, often elucidating their significance in explicating entrepreneurial intentions, actions, and ultimate success (e.g., Bird, 1988; Borland, 1975; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000). Nevertheless, contemporary research on entrepreneurial attributes has frequently sidestepped crises or the repercussions of crises on entrepreneurs and SMEs. For instance, Castro and Zermeño (2020) note that "attributes of the individual entrepreneurs, directly and indirectly, influence the resilience of SMEs", finding that certain attributes significantly elevate the prospects of entrepreneurial success in the aftermath of a crisis, thereby emphasising the need for a more comprehensive examination of these attributes within the context of crises.

This chapter conducts a rigorous and systematic examination of contemporary academic literature in the field of entrepreneurial attributes, with a specific focus on their distinctive characteristics and how they are discussed in the context of crises. The primary objective of this paper is to perform a comprehensive review of existing research aimed at clarifying areas of ambiguity and identifying notable gaps that warrant further scholarly inquiry. This process serves to delineate methodological and thematic recommendations, offering valuable guidance for future research endeavours in this domain.

It is essential to emphasise that this paper does not aspire to undertake an exhaustive, meta-analytical assessment of the entire body of literature. Instead, its purpose is to fulfil a pivotal role by discerning significant deficiencies within the existing academic landscape and proposing novel avenues for forthcoming investigations in a scholarly context.

Structure and Contributions

This study initiates its discourse with the section "entrepreneurial attributes", shining a spotlight on the individual cognitive, personality and mindset attributes of entrepreneurs while delineating their presence, or lack thereof, within crisis-related discussions. As elucidated in this section, the prevailing body of work in this domain typically fails to encompass a substantive acknowledgment or analysis of crises beyond a superficial

association with economic turmoil or entrepreneurship as a last resort during periods of desperation. The principal aim of this section is to underscore the pronounced void of scholarship in this critical domain.

The second section embarks upon a comprehensive exposition of the existing corpus of literature concerning crises and their ramifications on the domain of entrepreneurship. Subsequently, it undertakes a thorough examination of contemporary research endeavours that delve into the intricate terrain of entrepreneurial attributes. The ensuing sections are dedicated to the elucidation of theoretical constructs and conceptual frameworks, illustrating key challenges intrinsic to prominent research paradigms employed in the realms of entrepreneurial attribute and crisis scholarship.

The corpus of significant literature pertaining to entrepreneurship attributes within the context of crises typically adopts one of two predominant viewpoints: the examination of individual entrepreneurs or the assessment of nascent ventures' impact on post-crisis economic rejuvenation, with a particular emphasis on developing nations. This paper traverses both perspectives, exploring three distinct sections based on the literature review: "*Crises in the Context of Entrepreneurship—A Chronological Overview of the Evolving Field*", and "*The Influence of Crises on Entrepreneurship—A Contemporary Review*".

The initial section furnishes a concise historical survey of entrepreneurship literature that addresses their attributes, serving as a foundational backdrop to facilitate a comprehensive comprehension of the ensuing discourse. The subsequent section delves into the multifaceted considerations associated with entrepreneurial ventures as complex entities embedded within society during times of crisis, particularly in recent years. While numerous studies within this domain concentrate on isolated aspects like adaptability or post-crisis recovery, this section endeavours to provide a succinct summation of extant literature, shedding light on the complex interplay between entrepreneurship and crises.

This study represents a substantive and robust contribution to the multidisciplinary domains of entrepreneurship and COVID-19 documentation, thereby extending the evolving landscape of research encompassing entrepreneurship within crisis contexts. The narrative threads explored within this research encompass the intricate dynamics of entrepreneurship during crises, the pivotal role of entrepreneurs in the intricate process of economic resurgence, and the multifaceted determinants of venture

outcomes during turbulent periods (e.g., Chakrabarti, 2015; Kreitmeyer, 2017; Miles et al., 2016; Roman and Rusu, 2018).

Crucially, this study elucidates that an indispensable prerequisite for the delineation of research agendas and strategic interventions in this realm hinges on a comprehensive understanding of its constituent dimensions, a void addressed adeptly by this research endeavour. The paramount contribution of this work lies in its discernment of a myriad of untapped opportunities, not merely in the context of prospective research trajectories traversing entrepreneurship, crises, COVID-19 and entrepreneurial attributes but also in the form of pragmatic and actionable recommendations. These recommendations harbour the potential to effectuate substantial transformations, both social and economic, in response to the profound devastation unleashed by the pandemic. Consequently, this work emerges as an imperative for the survival and flourishing of entrepreneurs within the ever-evolving terrain of commercial enterprise.

A pivotal contribution of this study is a nomothetic model of entrepreneurial crisis literature. This model serves as an instrumental scaffold for the elucidation of previously uncharted territories and unexplored research trajectories, laying the foundation for prospective academic endeavours. The novelty of the nomothetic model lies in its ability to synthesise a wide range of research, unifying the domains of COVID-19's impact on businesses, the intricate interaction between the pandemic and entrepreneurship, crisis dynamics and entrepreneurial attributes. This paper culminates in the presentation of pragmatic recommendations that have practical consequences. Such recommendations have heightened significance given the intricate nature of entrepreneurial research, compounded by the perennial definitional conundrum enveloping the essence of entrepreneurship and the challenges associated with researcher–participant engagement.

The inherent challenges encompassing the identification of entrepreneurs, coupled with the task of securing their trust, are accentuated in the contemporary context, where the demands of their schedules often impede their participation in academic inquiries, be it interviews or surveys (Hannafey, 2003). This renders the practical recommendations offered within this study all the more indispensable. The significance of this work is underscored by the pivotal role that entrepreneurship assumes in the context of global economic growth, especially in the context of post-crisis resurgence, such as that witnessed in the aftermath of the COVID-19 pandemic. As such, this scholarly endeavour stands as an invaluable resource of profound interest to the scholarly

community, policymakers and practitioners alike, all of whom share the collective aspiration of comprehending the intricacies of entrepreneurial attributes as they impinge upon crisis response and recovery.

Background

The following section provides a summary of extant research on the ramifications of COVID-19 and the consequential impact entrepreneurs have on the socioeconomic landscape post-crisis. Subsequently, it offers a summary of entrepreneurial attributes encompassing facets such as mindset, personality, and cognition. Following this, an in-depth contextual backdrop is presented, revealing the prevailing scholarly discourse on the literature pertaining to entrepreneurial attributes.

While there is a burgeoning literature on COVID-19's effects on business outcomes, much of the focus has not been on entrepreneurship; rather, on COVID-19 and global economy (Gill, 2020; Gräbner et al., 2020; Ng, 2020; Welfens, 2020; Yotzov et al., 2020), Dynamics of COVID-19 in business and management research (Lee et al., 2020; Miles and Shipway, 2020; Mostafanezhad, 2020; Trachsler and Jong, 2020), COVID-19 and financial markets (Albulescu, 2021; Cepoi, 2020; Harjoto et al., 2020; Huo and Qiu, 2020), COVID-19 and its implication for tourism and hospitality industry (Choe et al., 2021; Ioannides and Gyimóthy, 2020; Qiu et al., 2020; Williams, 2021; Yang et al., 2020; Zenker and Kock, 2020), Dynamic of supply chain and COVID-19 (Govindan et al., 2020; Ivanov, 2020a, 2020b; Sharma et al., 2020) and COVID-19 and functionality of government (Abdullah and Kim, 2020; Ghosh, 2020; Kim, 2020; Maher et al., 2020; Trivedi, 2020) with most studies coming out of China and the USA (Alshater, et al., 2022)⁴.

Entrepreneurs play a pivotal role within the intricate system of societal and economic revival during and following a crisis, making them an integral element of the aforementioned business outcomes. In order to comprehend their significance in this context, it is imperative to adopt a systems theory perspective, which elucidates how entities within a complex, organised system interact, adapt and evolve in response to various factors and attractors (Dudkowski et al., 2016). Systems theory, a fundamental concept in social sciences, provides a valuable framework for comprehending the

⁴ COVID-19 and global economy, Dynamics of COVID-19 in business and management research, COVID-19 and financial markets, COVID-19 and its implication for tourism & hospitality industry, Dynamic of supply chain and COVID-19 and COVID-19 and functionality of government highlighted in Alshater et al. (2022)

multifaceted interplay of actors and variables within a dynamic system (Bertalanffy, 1968).

In the context of entrepreneurship during a crisis, external attractors become particularly salient. These attractors are influential forces or factors, often arising from the external environment, that exert a significant pull on the behaviour and trajectory of the system's elements (Nicolis and Prigogine, 1977). In the context of the COVID-19 pandemic, external attractors may encompass a range of factors, including governmental policies, market conditions, consumer behaviour and technological advancements. Entrepreneurs, as integral components of this dynamic system, respond to these attractors by adjusting their strategies, initiatives and resource allocation (Elam and Sardana, 2008). Their ability to navigate these external attractors effectively can influence the system's overall resilience and capacity for revival.

Thus, within a systems theory framework, entrepreneurs are viewed as dynamic agents within a larger socioeconomic system, continually adapting their roles and actions in response to external attractors. Understanding the intricate interplay between entrepreneurs and these attractors is of paramount importance in comprehending the system's ability to recover and thrive post-crisis.

Entrepreneurial Attributes

In the field of entrepreneurship literature, researchers often explore various facets of entrepreneurs' psychological characteristics, encompassing "mindset factors", "personality traits", and "cognitive attributes." Here, we provide a succinct overview of each of these terms.

Mindset Factors

Mindset factors refer to the underlying beliefs, behaviours and mental frameworks that shape an individual's approach to entrepreneurial activities (Kuratko et al., 2021). This often encompasses an entrepreneur's overall outlook, including their self-perception, resilience, and orientation towards challenges and opportunities, as well as the behaviours stemming from these views (Pidduck et al., 2023). Historically, this has been measured in many ways, including Entrepreneurship Mindset Profile (EMP), a skills and capabilities assessment tool (Davis et al., 2016), 16 Personality Factors Questionnaire (16PF), a self-reported personality test (Cattell, Eber and Tatsuoka, 1970), Myers-Briggs Type Indicator (MBTI), a self-reported questionnaire indicating

psychological preferences (Myers, McCaulley and Most, 1985), and measures of the Five Factor Model, an organisation of traits including Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness (e.g., Costa and McCrae, 1992).

Personality Traits

Personality traits are enduring patterns of thoughts, feelings, and behaviours that distinguish one individual from another (Ajzen, 2005). In the entrepreneurship literature, specific personality traits are explored to understand their impact on entrepreneurial activities, decision-making and outcomes. The "Big Five Personality Traits" model is frequently employed to measure personality traits in entrepreneurship research. This model includes Openness, Conscientiousness, Extraversion, Agreeableness and Neuroticism (OCEAN). Researchers use surveys like the NEO-PI-R (e.g., Costa and McCrae, 1992) or the Big Five Inventory (BFI) (e.g., John et al., 1991) to assess an entrepreneur's personality traits in relation to their entrepreneurial behaviour and performance.

Cognitive Attributes

Cognitive attributes concern an entrepreneur's cognitive processes, including their problem-solving abilities, decision-making strategies, information processing and other mental faculties. These attributes are critical in shaping how entrepreneurs identify opportunities, solve challenges and make strategic decisions. Cognitive attributes are often measured using various tools tailored to specific attributes. For example, the "Cognitive Adaptability Scale" (CAS) (e.g., Duran, 1992) assesses an individual's adaptability and cognitive flexibility. Other various 7-point Likert scales of psychometric characteristics are usually used, but these differ based on the individual attribute being measured.

Hereafter, in the interest of clarity and enhanced comprehension within the scope of this paper, we will adopt the inclusive term "entrepreneurial attribute". This term encompasses the diverse facets of mindset factors, cognitive attributes and personality traits that collectively form the complex psychological composition of entrepreneurs. This conceptual agglomeration will enable a more coherent exploration of these attributes and their interactions in the entrepreneurial context.

Background on Entrepreneurial Attributes

The literature pertaining to entrepreneurial attributes has exhibited a degree of stagnancy in recent years, characterised by its consistent focus on a select group of extensively researched factors, which are subjected to recurrent recontextualisation. Research works directly involving the collection and analysis of data related to these attributes predominantly fall within four primary categories: an emphasis on the Big-5 Model, self-efficacy, innovativeness, locus of control and the need for achievement. These factors have been intricately woven into Kerr, Kerr and Xu's (2018)⁵ process model of entrepreneurship, collectively encapsulated under the overarching category of 'personality'. These attributes have featured prominently in recent entrepreneurship literature (Leblanc, 2017), with an emphasis on revealing their role in shaping entrepreneurial success (Taylor, 2018). The literature posits that entrepreneurial attributes provide founders with a heuristic approach to decision-making in the realm of business. This heuristic approach emanates from their capacity to navigate novel, unpredictable, and complex situations (Jiang et. al., 2017). However, it is crucial to highlight that the relevance and efficacy of these attributes are contingent upon the specific contextual and environmental conditions (Brockhaus, 1982). Although substantial academic work has delved into many specialised contexts, the methods employed often lack the requisite depth in understanding and documentation of participant perceptions, which is indispensable for innovative research needs (Neergaard and Uihøi, 2007).

This paper centres its focus on the examination of entrepreneurial attributes, and therefore, it is important to contextualise the study within the framework of the Theory of Planned Behaviour (Ajzen, 1985). This theoretical perspective assumes significance in disentangling the intricate relationships between mindset, intention and behaviour within the horizon of entrepreneurial research. It is noteworthy that the demarcation between these three elements is often blurred, necessitating a nuanced understanding. The Theory of Planned Behaviour posits that mindset or attributes are intricately linked to normative beliefs or subjective norms, encompassing an individual's perception of societal norms and corresponding actions. These normative beliefs, in turn, exert a discernible influence on an individual's intention to engage in specific actions, subsequently culminating in the manifestation of behaviour. Given the robust associations underpinning these conceptual domains, scholars often contend with the

⁵ Figure 1

challenge of delineating between attributes, intentions and behaviours, recognising that one frequently serves as a precursor to the other. While the attributes explained in the literature primarily pertain to the cognitive landscape of entrepreneurs, the tangible manifestation of these attributes through observable behaviour serves as a compelling indicator of their existence and relevance.

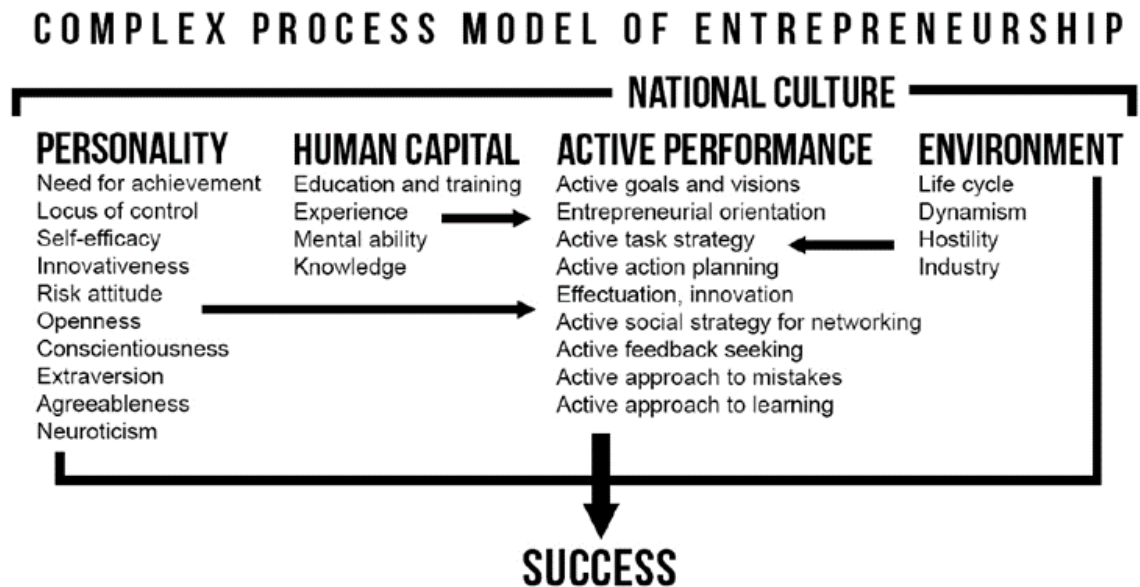


Figure 2.1: Kerr, Kerr and Xu, 2018, pp.23, Prototype Complex Process Model of Entrepreneurship

The Big-5 or OCEAN model constitutes an established framework designed to discern and assess entrepreneurial attributes by gauging five fundamental dimensions: openness, conscientiousness, extraversion, agreeableness and neuroticism. Originally created to explore the interaction between cognitive and academic behaviours, this model swiftly garnered attention from researchers seeking to apply factor analysis techniques to verbal descriptors of human behaviour (Digman, 1990; Poropat, 2009). While certain studies have adopted a more granular approach, aiming to pinpoint the specific entrepreneurial attributes that correlate with the Big-5 framework and delineate distinct presentations of each attribute within entrepreneurial samples (Antoncic et al., 2015; Gao et al., 2020; Slavec et al., 2017), a broader utilisation of these attributes has been evident across diverse research contexts. This extended application encompasses investigations into entrepreneurial success, entrepreneurship in crisis scenarios and the examination of gender roles in entrepreneurship, surpassing the model's conventional utilisation within the realm of psychology.

While originally designed for purposes other than assessing entrepreneurial attributes, the Big-5 Model has gained widespread traction within entrepreneurship literature, primarily attributed to its purported influence on work performance and career choices (Cameron et al., 2018; Ward et. al, 2019; Şahin et al., 2019). Notably, this influence extends to the decision to pursue entrepreneurship as a career path (Kerr, Kerr and Xu, 2018). Research employing this method for attribute analysis often gravitates towards the differentiation between entrepreneurs and managers (e.g., Envick and Langford, 2000) or between entrepreneurs and the general working population (e.g., Collins et al., 2004). In both scenarios, the outcomes display a noticeable lack of consistency and agreement, with many studies yielding incongruent results, leading to the observation of "no strong pattern of significant results" (Kerr et al., 2018).

Additionally, certain studies delve into the manifestation of these attributes across diverse regional populations, encompassing emerging economies like Nigeria or Kenya (e.g., Maina and Nyambura, 2019; Owoseni, 2014) as well as established entrepreneurial ecosystems like Tel Aviv or Silicon Valley (e.g., Röhl, 2019; Suzuki et al., 2002). Interestingly, it has often been observed that similar results are attained irrespective of the regional environment. However, the recurrent nature of these investigations has culminated in a dearth of innovative findings and a proclivity towards abandoning this avenue of study.

Entrepreneurial self-efficacy (ESE) has garnered substantial attention as an explanatory variable influencing entrepreneurial intention and motivation, with the understanding that entrepreneurial intentions serve as precursors to entrepreneurial actions (Bird, 1988; McGee et al., 2009). Self-efficacy, as articulated in the literature, pertains to an individual's belief in their capacity to exert a positive influence on and exercise control over events within their lives (Chen et al., 1998; Wood and Bandura, 1989). ESE has emerged as a prominent driving force behind the initiation of new ventures, leading to extensive research in this domain. This research has notably employed various measurement instruments to assess ESE and its impact on intention and action across diverse contexts (Elliott et al., 2020). As previously highlighted, ESE stands as the predominant attribute of entrepreneurs examined in the context of crises and exogenous shocks. Despite its well-established status in research, it remains imperative to corroborate this finding. This is particularly the case when addressing novel scenarios such as the COVID-19 pandemic, and while considering a comprehensive spectrum of known attributes.

Innovativeness, while frequently associated with ESE as a situationally pertinent measure, is also recognised as an independent attribute of entrepreneurs. Research has indicated a noteworthy and positive correlation between innovativeness and ESE, particularly in the context of SME founder entrepreneurs (Utsch and Rauch, 2000; Kerr et al., 2018). Broadly defined, innovativeness pertains to how individuals respond to novelty, encompassing a wide array of novel concepts, including economic conditions and technological advancements (Goldsmith and Foxall, 2003). Innovativeness has been shown to enhance business performance over time, implying its potential influence on favourable entrepreneurial outcomes, particularly within the realm of SMEs (Al-Ansari et al., 2013; Hult et al., 2004). A significant portion of research on innovativeness as an attribute of entrepreneurship concentrates on corporate entrepreneurship, where entrepreneurial orientation and corporate structure may impact innovativeness (Kreiser and Davis, 2012). Consequently, there exists a notable gap for research that specifically addresses innovativeness within the context of SMEs and solo founder entrepreneurs, offering a nuanced examination within these less complex entrepreneurial settings.

Locus of Control (LOC) represents a prominent focus in numerous studies exploring entrepreneurial attributes, primarily due to its heightened prevalence within entrepreneurial populations (Levine and Rubenstein, 2017; Kerr et al., 2018). Within the context of entrepreneurship attribute research, LOC relates to the influence of internal LOC on entrepreneurial outcomes, where an internal LOC signifies a personal belief in their capacity to exert influence or control over outcomes through individual effort, as opposed to outcomes being controlled by external factors (Rotter, 1954). Internal LOC has exhibited a notable correlation with entrepreneurial intention, particularly among student populations, a relationship that can be linked to subsequent entrepreneurial behaviours and the adoption of innovative strategies (Brockhaus, 1975; Prakash et al., 2015). Interestingly, some studies suggest that entrepreneurship education can foster the development of an internal LOC alongside a need for achievement, thereby fostering more favourable entrepreneurial outcomes (Hansemark, 1998). However, it has been suggested that research in this realm often lacks a contextual element, as it frequently overlooks the influence of environmental factors (Home, 2011).

The concept of Need for Achievement frequently intertwines with LOC in the literature addressing entrepreneurial attributes. Need for Achievement can be defined as an individual's innate desire for success, the pursuit of excellence, and the desire for self-

improvement (Borland, 1975). Numerous studies have theorised that a high Need for Achievement can serve as a predictive factor for one's choice of entrepreneurship as a career path (Kerr et al., 2018). Nonetheless, the levels and prevalence of the Need for Achievement exhibit variation across different contexts. For example, research has revealed that Swiss entrepreneurs tend to exhibit a higher Need for Achievement compared to their counterparts in the United Kingdom (Mueller and Thomas, 2001). However, it is worth noting that some studies suggest that the body of work in this domain remains inconclusive and necessitates further investigation. Specifically, longitudinal analyses have questioned the predictive validity of the Need for Achievement for entrepreneurial activity, in contrast to the more robust predictive capacity attributed to LOC (Hansemark, 2003).

Although some studies do touch on the topic of risk attitude in the context of entrepreneurship, it is noteworthy that this attribute remains relatively underexplored compared to the other attributes previously discussed. Some studies have observed that individuals with a propensity for risk aversion are less inclined to embark on entrepreneurial ventures, opting instead for more conventional forms of employment (Kanbur, 1979; Kihlstrom and Laffont, 1979). Also, a diminishing degree of risk aversion is suggested to be associated with an increased propensity to initiate new businesses and accumulate wealth (Cressy, 2000; Kan and Tsai, 2006). However, many of these investigations often conclude their inquiries with the observation that heightened risk aversion tends to dissuade individuals from pursuing entrepreneurship (Cramer et al., 2002). Evidently, the research landscape for this attribute offers considerable potential for further exploration. Specifically, there is an opportunity to facilitate the emergence of more recent studies while also scrutinising whether the risk attitudes of entrepreneurs exhibit stability or variation in the face of societal and economic crises.

Studies primarily focusing on the attributes discussed often gravitate towards the examination of entrepreneurial intention (Kerr et al., 2018). These inquiries have yielded insights into how specific attributes, for instance, openness, may exert a positive influence on entrepreneurial intention (Singh and DeNoble, 2003). A substantial body of research tends to concentrate on action-based parameters, typically focused on larger enterprises and the progression of entrepreneurial endeavours over time (Caliendo et al., 2014; Kessler et al., 2012). This orientation persists even in the context of established entrepreneurs.

Within this area, numerous frameworks have been devised to assess various aspects of this, such as the likelihood of serial entrepreneurial ventures, early-stage success, or the survival of ventures, particularly in the context of nascent entrepreneurs (Hyytinen et al., 2015; Lanivich et al., 2021). Nevertheless, recent literature on entrepreneurial intention, success, and attributes has highlighted a critical gap in research—one that encompasses a broader spectrum of variables beyond the traditionally examined attributes. This gap, in turn, hinders the precision of predictions regarding entrepreneurial success (López-Núñez et al., 2020). Consequently, there is a need for studies that look into the experiences of solo entrepreneurs or SMEs confronted with action precipitated by significant momentum, such as a crisis. Currently, these dimensions remain largely unexplored within the literature.

In recent years, there has been an abundance of diverse models based on entrepreneurial attributes, frequently centring on well-established frameworks such as the BIG-5 attributes or ESE. These models are subsequently applied across a spectrum of regional and economic contexts, spanning from highly concentrated entrepreneurial ecosystems like Silicon Valley (Suzuki et al., 2002) to developing economies such as Nigeria or Kenya (e.g., Maina and Nyambura, 2019; Owoseni, 2014). These investigations shed light on the unique challenges stemming from the social and economic dynamics inherent to these regions, offering valuable insights for devising strategies tailored to emerging communities. In contrast, some recent studies have taken a novel approach, examining the 'dark triad' attributes—namely narcissism, psychopathy, and Machiavellianism—instead of adhering to the traditional BIG-5 framework (Cooke, 2020; Peixoto et al., 2021). While this emerging area of interest is promising, it often overlooks the established attributes featured in the extant literature, potentially missing valuable links and associations that could enhance the current model. However, this granular focus on region-based strategy work often ignores the visible concern with entrepreneurial attribute literature, in that well-researched attributes are being consistently and analytically recontextualised, usually using rigorous quantitative models, meaning that the opportunity for the introduction of less conventional approaches is lacking.

In the current landscape of entrepreneurial attribute research, an evident gap exists in the generation of novel attributes. Instead, recent studies tend to engage in the recontextualisation of existing entrepreneurial attribute models, such as the BIG-5 framework, with a focus on specific subgroups of entrepreneurs. Examples include investigations into social entrepreneurs (e.g., Bernardino et al., 2018), nascent

entrepreneurs (e.g., Muñoz-Bullón et al., 2015), or serial entrepreneurs (e.g., Brem, 2008). While these endeavours contribute valuable insights for the analysis of particular sectors or entrepreneurial ecosystems, they fall short of providing the comprehensive understanding required to address more pressing issues, such as the revitalisation of societies and economies in the wake of crises. To better comprehend the recovery of SMEs, it is imperative to broaden the scope of attribute-based research. Regrettably, only a limited number of studies have adopted a more expansive approach to entrepreneurial attribute research in recent years. Consequently, the nuanced impact of crises on founder entrepreneurs remains inadequately explored, leaving critical gaps in our understanding (Doern, 2016).

Moreover, it is noteworthy that there is a relative scarcity of research employing less conventional phenomenological approaches within the domain of entrepreneurial attribute investigation. This limited utilisation of such methodologies raises concerns, given that phenomenological data collection can yield a more profound, rich and holistic comprehension of a situation compared to the more distant and detached approaches often employed in traditional entrepreneurial attribute research, such as surveys and meta-analyses (Raco and Tanod, 2014). The consequence of this reliance on traditional methods is the potential for replication of similar research outcomes, contributing little substantial depth into realistic business practice and “nothing much really” of substance (Neergaard and Ulhøi, 2007, p. 25).

It is pertinent to acknowledge that perception-based research, although somewhat at odds with a substantial portion of the published entrepreneurship literature, does find its place in specific domains of entrepreneurial attribute exploration. This is particularly evident in investigations focused on success factors, as observed in studies of female entrepreneurs (Rieger, 2012), regional entrepreneurs, such as those in Pakistan (Nisar et al., 2020), or inquiries into lived experiences (Bann, 2009). Nonetheless, the application of perception-based research to comprehend and address entrepreneurial attributes and perceptions in the context of crises remains conspicuously underrepresented.

To amalgamate the extensive body of research encompassing COVID-19's implications for business, its intersection with entrepreneurial endeavours, the dynamics of crises in the entrepreneurial context, and the nuanced exploration of entrepreneurial attributes exhibited, the ensuing Figure 2 offers a conceptual model to explain the results that are explained in the following sections of this paper. This model delineates the direct

influence exerted by these attributes on the domain of entrepreneurial crisis literature. Such influence is deemed significant, given that these attributes constitute intrinsic components necessary for comprehending the fundamental characteristics, intentions, and conduct of entrepreneurs, culminating in the initiation of entrepreneurial actions. It is imperative to emphasise that the notion of entrepreneurial action stands as a central tenet pervading the entirety of entrepreneurship literature.

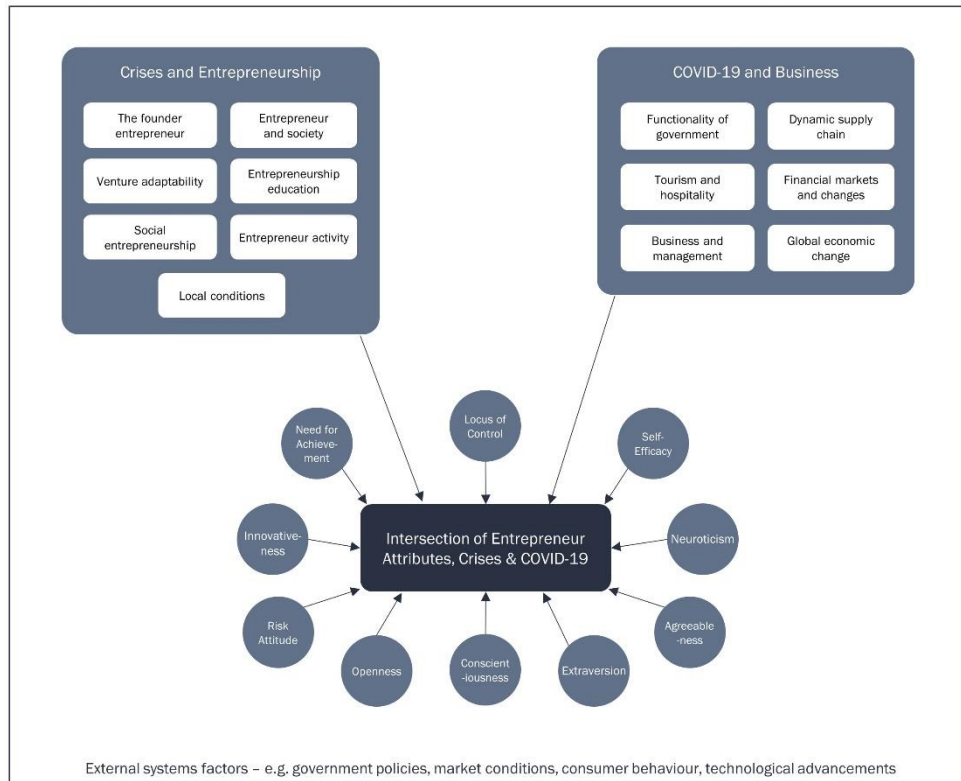


Figure 2.2: Nomothetic model of entrepreneurial crisis literature

Methodology

Paper Approach

This paper employs a comprehensive research methodology, integrating quantitative and qualitative approaches to examine entrepreneurship literature within crisis contexts, with a specific focus on entrepreneurial attributes. This study was initiated utilising snowball sampling for the synthesis of entrepreneurial attribute data. This method has been selected for its efficacy in summarising the longstanding, rich selection of data available.

The research design incorporates both systematic literature review and snowball sampling techniques, particularly pertinent when evaluating the literature on entrepreneurship during crises, such as the COVID-19 pandemic, and examining entrepreneurial attributes in this context. This combined approach facilitates a holistic understanding of the scholarly discourse. To enhance the understanding of crises and COVID-19 literature, we provide a general summary of foundational knowledge and performance analysis.

Data Selection

In the pursuit of revealing the state of literature pertaining to entrepreneurship in crises, specifically focusing on the significance of the inclusion of attribute-based investigations, the methodology employed in this paper aligns with the epistemological orientation of a theory development paper. The primary aim of this study is not to undertake an exhaustive and analytical review of the literature but rather to amass a corpus of relevant data that facilitates a comprehensive comprehension of the current state of scholarship.

To initiate this endeavour, we employed a methodological approach rooted in a snowball sampling technique (Lecy and Beatty, 2012; Parker et al., 2019)⁶. We commenced by identifying seminal works in the domain of entrepreneurship and crises, encompassing extant contributions such as those proffered by Castro and Zermeño (2020) and Ratten (2020a). Subsequently, we engaged in a systematic exploration of the relevant academic bodies of work, which incorporated i) inspecting references cited within the identified seminal works and ii) exploring papers that referenced the seminal works, thereby constructing a network of interconnected literature.

This iterative process yielded a nuanced, rich mental model of the entrepreneurship crisis literature, encompassing both historical antecedents and recent developments, with a specific focus on the evolving discourse induced by the COVID-19 pandemic. For visual clarity, an illustrative representation of an aspect of this process is delineated

⁶ Snowball sampling is a technique, traditionally utilised in qualitative, participant-based studies, whereby elements of the sample are based on referral. In an IDI study this would be through participant referrals, in a literature-based study this could be through references on extant papers or new papers referencing well-established papers in the field.

in Figure 3, revealing the interconnectedness of prior and derivative research emanating from the foundational work of Castro and Zermeño (2020).

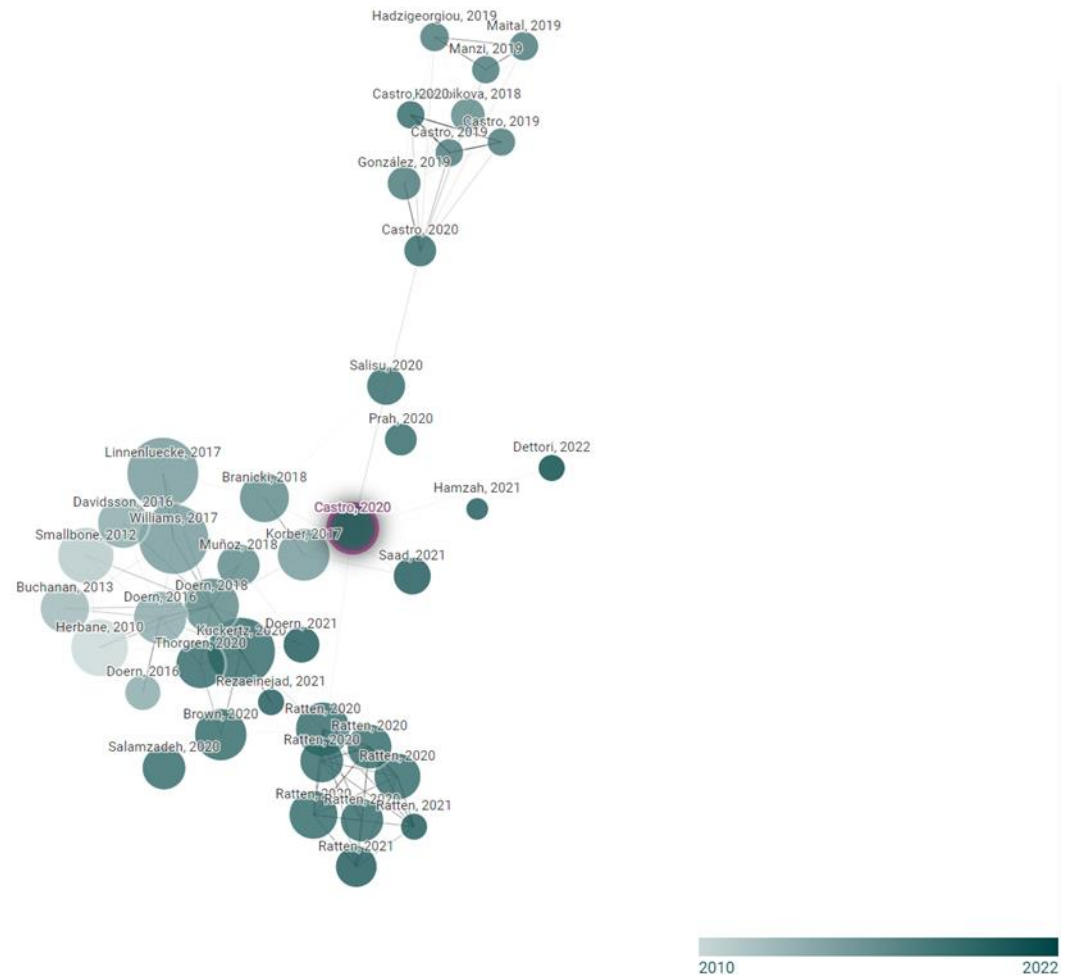


Figure 2.3: Papers connected to Castro and Zermeño (2020)

While the technique used is appropriate for a literature review paper, to ensure a more robust understanding of the literary landscape, we chose to add to this base by employing a search of the Scopus database to introduce a larger-scale, systematic literature review to this study. Scopus is a widely recognised database used to conduct systematic studies into entrepreneurship (e.g., Kimjeon and Davidsson, 2022; Wurth et al., 2022;). Out of the 361,198 documents relating to crises and the 112,387 documents relating to entrepreneurship, we found 3499 documents that related to both crises and entrepreneurship since 1963. An understanding of the scale of each search

term, prior to refinement, was employed to better evaluate the potential abundance or dearth of more pointed search terms and their frequency of appearance.

A meticulous refinement process ensued to ascertain the subset of documents explicitly relevant to COVID-19. To achieve this, we strategically crafted a list of search terms⁷ intricately aligned with the research topic, synergistically paired with keywords connected to entrepreneurship, such as crisis, epidemic, COVID-19, outbreak, coronavirus, and pandemic, a methodological approach that found effectiveness in many review papers (e.g., Alshater, 2022; Tranfield et al., 2003).

The application of these search parameters culminated in the identification of 1,219 documents published after and including 2020 that are pertinent to the subject matter. Further filtration, targeting documents within the realms of business-related fields such as Business, Management and Accounting, and Social Sciences, accompanied by the stipulation of an English language criterion, yielded a refined corpus of 948 documents. Each of these documents was subjected to a comprehensive review process, characterised by a stringent evaluation of their direct relevance to business and entrepreneurship, coupled with a direct and substantive engagement with the subject matter in a non-trivial, non-marginal way, as defined by the criteria established in Paltrinieri et al. (2019) and Zott et al. (2011). This analysis was conducted through an abstract and titled-based inspection in the first instance, followed by a full-text inspection where required.

Documents were only included in the sample when directly business or entrepreneurship-related and where COVID-19 was a direct element of the work. This was a manual process to review each article's relevancy. To determine which articles were relevant to entrepreneurial attributes, the researcher reviewed the documents and classified them as within or outside the domain based on their discussion or lack thereof, of attributes, mindsets, cognition or personality as a focus of the work. Ultimately, this discerning process resulted in the inclusion of 462 documents, while 486 documents were deemed non-relevant and consequently excluded from the sample. Of the included documents, a mere 28⁸ addressed the specific nexus between entrepreneurial attributes and COVID-19, a finding that unequivocally underscores the existing research gap and emphasises the exigency of scholarly attention in the domain of attribute-based investigations during crises.

⁷ Table 1

⁸ A record of these papers can be found in the Appendix

It is essential to acknowledge that this compilation does not purport to be exhaustive. However, it serves as a substantial indicator of the nascent nature of the research terrain, thereby setting the stage for future scholarly explorations. In light of these findings, the theoretical discussions in this paper draw upon a dual methodological approach, amalgamating insights gleaned from both the snowball technique and the systematic literature review. For further clarification, Table 1⁹, the subsequent section, provides a depiction of our search queries and data collection procedure.

⁹ Table structure utilised from Alshater et al., 2022.

Table 2.1: Query Description

Category	Limitation	Number of Refined Documents
Query outcomes before search refine ('crisis' OR 'crises')	Nil	361,198
Query outcomes before search refine ('entrepreneur' OR 'entrepreneurial' OR 'entrepreneurship')	Nil	112,387
Query outcomes before search refine ('entrepreneur' OR 'entrepreneurial' OR 'entrepreneurship' AND 'crisis' OR 'crises')	Nil	3499
Query outcomes before search refine ('entrepreneur' OR 'entrepreneurial' OR 'entrepreneurship' AND 'COVID-19' OR 'coronavirus' OR 'corona-virus' OR 'corona virus' OR 'pandemic' OR 'outbreak' OR 'COVID-19' OR 'epidemic' OR 'pandemic' OR 'crisis' OR 'crises')	Only years 2020-present	1,219
Final number refined search	Limit to the following subjects: Business, Management and Accounting, Social Sciences, Economics, Econometrics and Finance, Arts and Humanities, Psychology, Multidisciplinary Limit to English Language	948
Final number manual refinement	Included only directly relevant documents to entrepreneurship and COVID-19, addressing the content in a non-trivial, non-marginal way	462
Final number manual refinement—cognitive and personality attributes	Included only directly relevant documents to entrepreneurship, cognitive and personality attributes and COVID-19, addressing the content in a non-trivial, non-marginal way	28

Corpus Construction

To ensure replicability, the construction and refinement process, detailed below, was designed to facilitate transparency for future researchers interested in exploring similar thematic domains. Initially, the construction of the corpus began with the preparation of initial queries designed to cast a wide net and capture pertinent literature across distinct thematic areas. First, the query seeking literature pertaining to "Crises" was structured to encompass a broad spectrum of related terms, incorporating ("crisis" OR "crises"). Second, to comprehensively represent the domain of "Entrepreneurship", the query included various lexical forms, resulting in the query ("entrepreneur" OR "entrepreneurial" OR "entrepreneurship"). To amalgamate both thematic dimensions effectively, an overarching query was formulated to unify "Entrepreneurship" with "Crises", resulting in ("entrepreneur" OR "entrepreneurial" OR "entrepreneurship" AND "crisis" OR "crises"). The final query, intended to encompass literature on "Entrepreneurship and COVID-19", was created to encompass diverse facets of the pandemic, including ("entrepreneur" OR "entrepreneurial" OR "entrepreneurship" AND "COVID-19" OR "coronavirus" OR "corona-virus" OR "corona virus" OR "pandemic" OR "outbreak" OR "COVID-19" OR "epidemic" OR "pandemic" OR "crisis" OR "crises").

The initial queries yielded extensive datasets, mirroring the vast expanse of literature capturing each thematic category. Specifically, the "Crises" query produced a substantial corpus of 361,198 documents, while the "Entrepreneurship" query identified 112,387 documents. The unification of both themes in the "Entrepreneurship and COVID-19" query generated a sizeable dataset comprising 3,499 documents.

To elevate the quality and relevance of the corpus, explicit limitations and inclusion/exclusion criteria were judiciously applied. For the "Entrepreneurship and COVID-19" corpus, a temporal constraint was introduced, confining documents to the period from 2020 to the present. Furthermore, subject area restrictions were introduced, focusing on the specifically relevant fields of Business, Management and Accounting, Social Sciences, Economics, Econometrics and Finance, Arts and Humanities, Psychology, and Multidisciplinary. In order to maintain uniformity and comprehensibility, documents were retained exclusively if they were composed in the English language, bringing the total number of documents to 948. Importantly, a detailed manual refinement process was performed to curate documents that contributed substantive and direct discourse concerning entrepreneurship and COVID-19, thereby eliminating marginal or trivial references. This thorough manual refinement culminated in the identification of 462 documents that met these stringent criteria.

Expanding upon the initial manual refinement phase, the subsequent application of the Braun and Clarke thematic analysis method was instrumental in navigating the corpus of 462 documents with a precise focus on entrepreneurial attributes amidst the realms of entrepreneurship and COVID-19 (Byrne, 2022). This strategic manual refinement aimed to specifically filter and accentuate the papers that delved into the intricate dimensions of entrepreneurial attributes, distinguishing them from the broader discussions on entrepreneurship and the pandemic. The purposeful selection criteria involved an intricate exploration of themes such as "personality attribute", "personality trait", "cognitive attribute", "cognitive characteristic", "mindset factor", and analogous terms. This deliberate thematic lens ensured that the chosen documents were not merely tangential or marginally related but directly addressed entrepreneurial attributes in a non-trivial and substantive manner. This process led to a filtering down of documents, resulting in 28 directly relevant papers that were focused on entrepreneurial attributes. The comprehensive explanation of this methodology serves as a robust template for the construction and refinement of similar corpora.

This methodological approach not only highlights the existing gap in comprehensive research but also underscores the critical need for future studies to delve into the intricate dimensions of entrepreneurial attributes in the context of COVID-19. The method serves as a robust template for the refinement of similar corpora, emphasising the imperative for more nuanced and expansive investigations that directly contribute to our understanding of entrepreneurial attributes in times of crisis.

Results

Descriptive Results

Given the relatively short time frame since the emergence of COVID-19, it is important to acknowledge the inherent limitations in conducting studies on this subject. Notwithstanding these constraints, our data analysis draws from a substantial pool of 948 academic documents relating to both COVID-19 and entrepreneurship. These documents span across diverse academic fields, including Business, Management, Accounting, Social Sciences, Economics, Econometrics, Finance, Arts and Humanities, Psychology, and Multidisciplinary studies. These documents originate from a global perspective, with contributions from over 94 countries, all of which are presented in the English language.

Figure 4 offers a visual representation of the global distribution of these documents. Notably, the United Kingdom leads with 124 publications, closely followed by the United States with 116. Other prominent contributors include India with 69 publications, Spain with 56 and China with 55. However, it is significant to observe that only 33 studies have emerged from Australia. This finding underscores a notable gap in the Australian-centric research landscape, indicating a clear need for further exploration of this domain within the Australian context, given its potential for producing a thriving entrepreneurship ecosystem and better economic outcomes during crisis recovery. This gap is particularly vital during an economic challenge like COVID-19, where “entrepreneurship may well be the unsung hero during the current COVID-19 economic crisis” due to the ability of entrepreneurial initiatives to catalyse new venture creation and growth (Maritz et al., 2020).

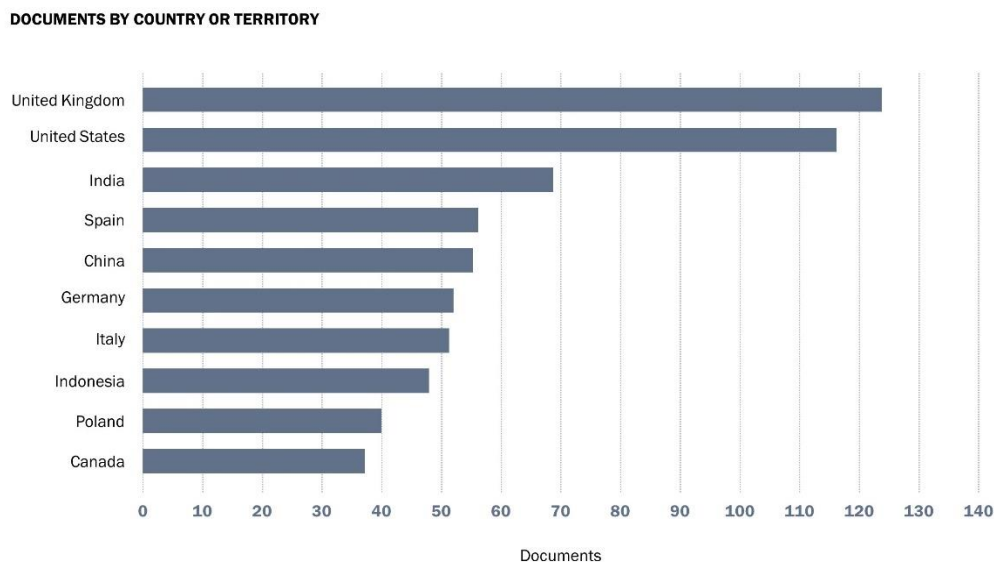


Figure 2.4: Documents by Country

Despite the vast quantity of academic institutions engaged in research related to entrepreneurship and crises, Figure 2.5 sheds light on the most prolific institutions within this domain. The University of Johannesburg stands out as a noteworthy contributor, having produced a total of ten research papers. Following closely behind, Bucharest University of Economic Studies and Universidade da Beira Interior have contributed nine and eight papers, respectively. Furthermore, both La Trobe University and King's College London have each generated eight and seven papers, respectively, while Università degli Studi di Torino has also contributed seven papers.

It is particularly notable to observe the significant research output from Melbourne-based La Trobe University, considering that only 33 papers in this field originate from Australia. This finding highlights the impressive productivity of La Trobe University in the context of entrepreneurship and crisis research, highlighting its notable contribution to the academic landscape.

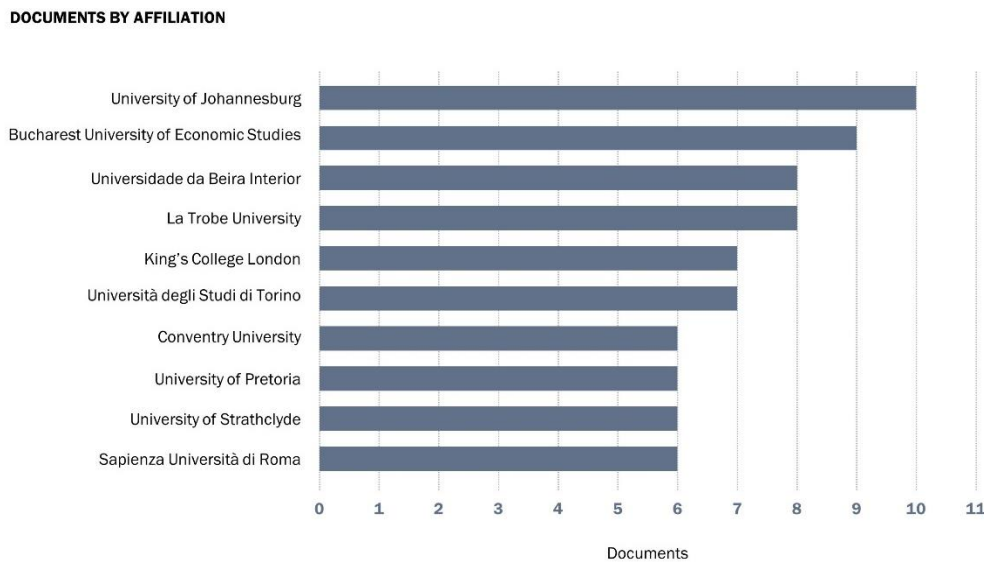


Figure 2.5: Documents by Institution

In our analysis, we have also identified the authors who have made significant contributions to the field of entrepreneurship in the context of COVID-19 from 2020 to the present.

Vanessa Ratten, affiliated with La Trobe University in Melbourne, Australia, emerges as the leading contributor with a publication count of nine articles. Following closely behind, Mário Franco, from Universidade da Beira Interior in Covilha, Portugal, has also made substantial contributions. Additionally, several other authors have each published three articles in this area, demonstrating a multifaceted and dynamic research landscape.

Furthermore, we have pinpointed the journals that have played a major role in disseminating research on this subject. Sustainability (Switzerland) stands out as the leader in publishing with 86 articles, noting that this journal typically publishes much work. It is followed by the Journal of Entrepreneurship in Emerging Economies with 17 articles, Frontiers in Psychology with 17, Journal of Business Venturing Insights with 13, and Emerald Emerging Markets Case Studies with 12.

It is worth noting that, while this particular search was focused solely on COVID-19-related studies, our initial exploration, encompassing 3499 crisis-based studies, revealed a burgeoning interest in understanding the intersection of entrepreneurialism and crises over

time. This exponential growth highlights the significance and relevance of exploring novel dimensions within this critical domain, as illustrated in Figure 2.6 below.

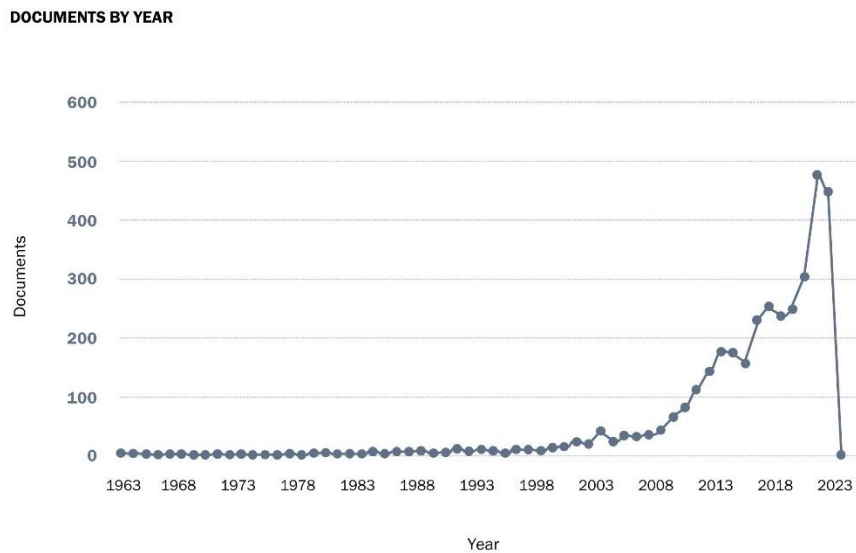


Figure 2.6: Crisis Entrepreneurship Studies Over Time

In this section, we provide a summary of the most cited papers in the area of entrepreneurship and COVID-19 since 2020. While a multitude of articles have been published, *not all have garnered significant attention or wielded substantial influence within the academic community. Out of the extensive corpus of papers, 106 papers had ten or more citations, with only 13 having 50¹⁰ or more citations.* This outcome is in alignment with expectations, considering the relatively brief timeframe within which researchers have had to collect, analyse, and disseminate findings related to the COVID-19 pandemic. Table 2.2 provides a detailed breakdown of the 23 most highly cited works in this domain.

¹⁰ Based on the papers gleaned from the systematic literature review via Scopus, we acknowledge that other papers will exist with more citations, and that different sources will record the citations of these papers differently

Table 2.2: Most cited COVID-19 and entrepreneurship papers

Authors	Title	Year	Source title	Cited by
Kuckertz A., Brändle L., Gaudig A., Hinderer S., Morales Reyes C.A., Prochotta A., Steinbrink K.M., Berger E.S.C.	Startups in times of crisis—A rapid response to the COVID-19 pandemic	2020	Journal of Business Venturing Insights	379
Giones F., Brem A., Pollack J.M., Michaelis T.L., Klyver K., Brinckmann J.	Revising entrepreneurial action in response to exogenous shocks: Considering the COVID-19 pandemic	2020	Journal of Business Venturing Insights	113
Zahra S.A.	International entrepreneurship in the post Covid world	2021	Journal of World Business	107
Ateljevic I.	Transforming the (tourism) world for good and (re)generating the potential 'new normal'	2020	Tourism Geographies	105
Brown R., Rocha A., Cowling M.	Financing entrepreneurship in times of crisis: Exploring the impact of COVID-19 on the market for entrepreneurial finance in the United Kingdom	2020	International Small Business Journal: Researching Entrepreneurship	103
Thorgren S., Williams T.A.	Staying alive during an unfolding crisis: How SMEs ward off impending disaster	2020	Journal of Business Venturing Insights	92
Bacq S., Geoghegan W., Josefy M., Stevenson R., Williams T.A.	The COVID-19 Virtual Idea Blitz: Marshaling social entrepreneurship to rapidly respond to urgent grand challenges	2020	Business Horizons	74
Portuguez Castro M., Gómez Zermeño M.G.	Being an entrepreneur post-COVID-19—resilience in times of crisis: a systematic literature review	2020	Journal of Entrepreneurship in Emerging Economies	72
Manolova T.S., Brush C.G., Edelman L.F., Elam A.	Pivoting to stay the course: How women entrepreneurs take advantage of opportunities created by the COVID-19 pandemic	2020	International Small Business Journal: Researching Entrepreneurship	68
Zhang Y., Diao X., Chen K.Z., Robinson S., Fan S.	Impact of COVID-19 on China's macroeconomy and agri-food system—an economy-wide multiplier model analysis	2020	China Agricultural Economic Review	57
Secundo G., Mele G., Vecchio P.D., Elia G., Margherita A., Ndou V.	Threat or opportunity? A case study of digital-enabled redesign of entrepreneurship education in the COVID-19 emergency	2021	Technological Forecasting and Social Change	55
Ratten V.	Coronavirus (Covid-19) and entrepreneurship: cultural, lifestyle and societal changes	2020	Journal of Entrepreneurship in Emerging Economies	52
Belitski M., Guenther C., Kritikos A.S., Thurik R.	Economic effects of the COVID-19 pandemic on entrepreneurship and small businesses	2022	Small Business Economics	51

Most Cited Papers

The most common thread across the 28 most cited studies is the recognition of the challenges faced by entrepreneurs during the crisis and the need for adaptive strategies.

Giones et al. delve into entrepreneurial action under exogenous shocks, highlighting the need for a reassessment of entrepreneurial action guidance in the post-COVID era. Their insights, grounded in business planning, frugality, and emotional support, serve as a bridge between immediate challenges and long-term resilience (Giones et al., 2020). Relatedly, Ateljevic's exploration of transformative travel and tourism presents an optimistic trajectory for future research and practices in the tourism industry. The paradigm shift towards regenerative practices signifies a positive transformation, offering a unique perspective on industry resilience (Ateljevic, 2020). Ratten delves into the cultural, lifestyle and societal changes instigated by COVID-19 and their implications for entrepreneurs, highlighting their inherent resilience. This exploration opens avenues for research at the intersection of crisis management, entrepreneurship and resilience literature, making resilience a common theme for existing research in this area (Ratten, 2020a). Additionally, Portuguese Castro and Gómez Zermelo conducted a systematic literature review, identifying resilience factors crucial for entrepreneurs post-COVID. The study emphasises attitudes, business and entrepreneur characteristics, and relationships as pivotal in fostering resilience (Castro and Zermelo, 2020). This is the only study in the top 28 most cited that lends its focus to entrepreneurial attributes.

Kuckertz et al.'s examination of startups during the pandemic reveals the vulnerabilities faced by innovative ventures. Their rapid response research emphasises the symbiotic relationship between short-term aid and long-term support within the entrepreneurial ecosystem, underscoring the necessity for nuanced policy interventions (Kuckertz et al., 2020). In parallel, Thorgren and Williams investigate how SMEs navigate impending disasters during crises, highlighting strategic responses to financial challenges. The implications for policy and practice open avenues for deeper exploration into post-crisis businesses and entrepreneurial characteristics (Thorgren and Williams, 2020). Similarly, Belitski et al.'s systematic review of the economic effects of COVID-19 on entrepreneurship and small businesses provides a foundational understanding of the pandemic's impact on small businesses, paving the way for further research and policy implications (Belitski et al., 2022).

Manolova et al.'s focus on women entrepreneurs and their pivoting strategies during the pandemic identifies business model pivots, setting the stage for gender-specific future research questions (Manolova et al., 2020). Similarly, Brown, Rocha, and Cowling focus on

the impact of COVID-19 on entrepreneurial finance in the UK, scrutinising real-time data to underscore the susceptibility of seed finance. This work underscores the need for strategic policy interventions to bolster entrepreneurial finance in times of crisis (Brown et al., 2020).

Zahra's work on international entrepreneurship post-COVID adopts a future-oriented outlook, envisioning alterations in the scope and types of entrepreneurial activities. The paper not only scrutinises the changes produced by the pandemic but also envisions the evolving role of international entrepreneurs in shaping the emerging global order (Zahra, 2020). On a broader scale, Zhang et al. provide an economic analysis of COVID-19's impact on China's macroeconomy and agri-food system. The findings underscore the need for policy support to reduce economic dependency on exports and stimulate domestic demand, particularly within the agri-food system (Zhang et al., 2020).

Bacq et al.'s case study on the COVID-19 Virtual Idea Blitz showcases how social entrepreneurship can rapidly respond to grand challenges. This spontaneous entrepreneurial endeavour, involving diverse participants globally, exemplifies the value of time-compressed virtual idea blitzes in accelerating social entrepreneurial action (Bacq et al., 2020).

Meanwhile, Secundo et al.'s case study on the digital-enabled redesign of entrepreneurship education during the COVID-19 emergency illustrates the challenges and strengths of reconfiguring entrepreneurial learning programs through digital technologies. The insights offer a valuable discussion on digital-supported entrepreneurship education, contributing to both theoretical and practical domains (Secundo et al., 2021).

Collectively, these studies contribute diverse perspectives on entrepreneurship in the context of the COVID-19 pandemic. While they offer valuable insights into the challenges and responses of entrepreneurs, it is notable that the thematic focus often centres on resilience, funding, or other general entrepreneurial aspects rather than specific entrepreneurial attributes. This gap in the current literature highlights the imperative for more research specifically addressing entrepreneurial attributes in times of crisis. This is especially important given the emphasis numerous investigations have put on the pivotal role played by various attributes in enhancing entrepreneurial performance, often elucidating their significance in explicating entrepreneurial intentions, actions and ultimate success (e.g., Bird, 1988; Borland, 1975; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000).

In the following sections, it is necessary to emphasise the intricate interconnectedness of entrepreneurs and their attributes within a broader complex system. These entrepreneurs function as integral components of a dynamic system that is profoundly influenced by and

simultaneously exerts influence upon, its surrounding context—comprising society and the economy. It is well-established in systems theory that elements within a system are not static entities but rather dynamic entities that adapt and respond to changes in their contextual boundary conditions. In the context of the COVID-19 pandemic, we can postulate that entrepreneurs, as integral parts of this broader system, are not immune to change (Von Bertalanffy, 1972). This suggests that their attributes and the presentation of these may undergo modifications in response to system disruptions, with exogenous disturbances often giving rise to emergent behaviour (Akhmet et al., 2014; Goldstein, 1999).

Review of Crises and Entrepreneurship

Having attained a comprehensive grasp of the extensive body of work related to entrepreneurship in times of crises, particularly within the context of the COVID-19 pandemic, this literature section is structured into two distinct components. First, we provide a succinct overview of the historical evolution of literature pertaining to entrepreneurship and crises. This historical perspective serves to provide a foundational understanding of the field's progression over time. Second, we synthesise contemporary literature on the ramifications of societal crises on entrepreneurship, with a recognition of the relative dearth of COVID-19-related literature, particularly in the context of entrepreneurial attributes. Furthermore, it is noted that the themes prevalent in the broader crisis literature bear relevance to the COVID-19 pandemic.

Crises in the Context of Entrepreneurship—A Chronological Overview of the Evolving Field

The temporal evolution of the literature on entrepreneurship and crises shows distinct shifts in academic interests over time, as demonstrated in Figure 5. The below summary includes the period from 2008 to 2022, encompassing the aftermath of the global financial crisis and the emergence of the COVID-19 pandemic. The delineation of these temporal phases serves as a foundational framework for understanding the dynamic nature of entrepreneurship research in the context of crises.

2008–2016: Emergence of Entrepreneurial Learning

The period from 2008 to 2016 marked a significant phase in the study of entrepreneurship and crises. Scholars during this time focused on illuminating the intricate relationship between entrepreneurship and learning, an area which sought to depict entrepreneurship as an ongoing, dynamic process deeply entwined with the acquisition of knowledge and

experience. Franco et al. (2009) contributed pioneering work in this domain, applying a typology of learning concepts across various organisational levels. Their research describes learning as a pivotal factor in shaping entrepreneurial activity. Observational data in this work provided insights into a new conceptualisation of the entrepreneur as a perpetual learner, resulting in the development of a comprehensive model of entrepreneurial learning.

Furthermore, investigations in this period extended to understanding how an individual's personal connections with entrepreneurs influenced their subsequent participation in entrepreneurial activities. Klyver et al. (2010) conducted a comprehensive study examining this phenomenon across different stages of new venture development, including discovery (intending to start a business), start-up (actively in the process of starting a business), and young (running a business for less than three months). By shedding light on the role of personal relationships in entrepreneurial activities, this research offered valuable insights into the social dynamics of entrepreneurship.

Additionally, some studies in this phase inquired into assessing the socioeconomic profiles of entrepreneurs and examining how economic recessions influenced new business creation. Rama et al. (2014), for instance, undertook an analysis of the evolution of entrepreneurship levels and the socioeconomic characteristics of entrepreneurs in the Autonomous Community of Galicia, Spain, over the period from 2007 to 2012. Their work provided a nuanced understanding of how economic downturns can impact the composition and dynamics of entrepreneurial ventures. A common theme between these studies proposes that crises can be a catalyst for entrepreneurial growth and that entrepreneurial learning can promote entrepreneurship activity.

The literature during this phase also explored the repercussions of the recession on entrepreneurship, shedding light on various aspects of entrepreneurial activities. Arrighetti et al. (2015) undertook a study to investigate the impact of a prolonged economic recession on the entrepreneurial intentions of young people, with a focus on university students. Their research distinguished between the propensity to initiate new business ventures (i.e., degree of interest in entrepreneurship) and the perceived likelihood of becoming an entrepreneur (i.e., the probability of succeeding). This differentiation contributed to a more nuanced comprehension of the multifaceted relationship between crises and entrepreneurship, emphasising the importance of individual perceptions and intentions.

2017–2019: Entrepreneurial Aspirations Amidst Global Economic Challenges

The period spanning 2017 to 2020 witnessed a continuation of research on entrepreneurship within the context of crises, with a particular emphasis on the global economic challenges of the time. As the world grappled with ongoing economic uncertainties, scholars sought to understand how entrepreneurs navigated these circumstances and how crises influenced their aspirations and attitudes. A good example of this work is Kaya (2019) as well as Conceição et al. (2021), who analysed the creation and survival of academic spin-off companies in Portugal from 2005 to 2015. These studies contributed to a deeper understanding of the challenges and opportunities presented to entrepreneurs during times of economic turmoil by documenting new venture success using a contextual lens.

Moreover, theoretical frameworks gained prominence as tools for investigating entrepreneurial behaviours and intentions. The theory of planned behaviour, which gained traction in its inception, experienced a resurgence in literary activity during this time as a significant theoretical underpinning in entrepreneurial research. Notably, Asghar et al. (2019) and Easley et al. (2017) explored the applicability of this framework to entrepreneurship. Their studies examined factors influencing entrepreneurial likelihood, with a particular focus on social influence and its impact on entrepreneurial decision-making.

2020–2021: The Dominance of COVID-19

The year 2020 brought a profound shift in research focus with the onset of the COVID-19 pandemic. This unprecedented global crisis prompted scholars to investigate the role of entrepreneurship in navigating uncertainty and adapting to new opportunities. Notably, Ratten's work (2020) exemplified this shift by discussing how the sports sector could employ entrepreneurship as a means of confronting uncertainty and capitalising on emerging prospects. Ratten goes on to provide a review of the existing literature on COVID-19 in terms of crisis management, entrepreneurship and sport. The COVID-19 pandemic introduced a unique context for entrepreneurial research, where scholars began examining the attributes of entrepreneurs within the crisis context. Matei et al. (2020), for instance, explored non-traditional attributes such as flair for business, hard work, big ideas, disruptive innovation, and other intangible characteristics that influence entrepreneurial success.

One notable area of research has centred on the role of innovative and entrepreneurial talents in driving social and economic development. Scholars like Geng et al. (2021) have explored the significance of these talents in fostering resilience and entrepreneurial progress amidst crises. Moreover, research conducted by Wang et al. (2021) has investigated the

influence of an entrepreneurial spirit on college students' entrepreneurial abilities and values. These studies highlight the evolving nature of entrepreneurial research, with a renewed emphasis on cultivating entrepreneurial attributes and capabilities

2022–Present: Entrepreneurial Resilience in a Post-Pandemic Reality

The most recent phase of the study, extending from 2022 to the present, has been significantly shaped by a post-COVID-19 reality. Research during this period has shown a heightened focus on entrepreneurial education and learning, and social entrepreneurship, all while aiming to understand how entrepreneurs have adapted to the challenges posed by the pandemic.

Entrepreneurial education has emerged as a pivotal area of inquiry during this phase. Chu et al. (2022) conducted a comprehensive study involving 46 representative startups across diverse industries, including financial technology, biotechnology, education, and cultural tourism areas in the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) and Southeast Asia (SEA). Their research aimed to observe the factors that contribute to building effective entrepreneurship education systems. Additionally, Boubker et al. (2022) proposed a practical approach to teaching entrepreneurship based on experiential learning, emphasizing the importance of learning-by-doing.

While research on entrepreneurial attributes remains limited, there is a discernible resurgence of interest in this area. Peljko et al. (2022a) focused on attributes such as entrepreneurial openness and creativity, exploring their intricate relationships with business growth. Cao et al. (2022) explored the entrepreneurial attributes that influence the entrepreneurial intentions of young entrepreneurs. Furthermore, Peljko et al. (2022b) provided empirical testimony regarding the associations between entrepreneurial curiosity, innovativeness, and firm growth, as well as presenting advanced cross-nationally analogous measurement instruments of entrepreneurial curiosity and innovativeness. Collectively, these studies underscore the growing importance of investigating entrepreneurial attributes, particularly within the dynamic context of the COVID-19 pandemic.

The Influence of Crises on Entrepreneurship—A Contemporary Review

In the contemporary landscape of entrepreneurship research, the interplay between crises and entrepreneurial activities has garnered substantial attention. This overview offers a thorough examination of recent literature, shedding light on various dimensions of this dynamic relationship. The following sections delve into diverse aspects, including the

adaptability of ventures, the role of social entrepreneurship, community resilience, local conditions and individual attributes of founder entrepreneurs.

Dynamic Capabilities and Firm Performance in Crisis

One prevalent theme in recent literature pertains to the impact of crises on entrepreneurship, particularly concerning their consequences for organisational performance and adaptation. Dynamic capabilities¹¹, a central concept in this discourse, encompass the ability to identify novel opportunities and rapidly integrate resources. Researchers have highlighted the significance of dynamic capabilities in enhancing firm performance during periods of heightened volatility, such as natural disaster recovery (Battisti and Deakins, 2017). These capabilities have been closely associated with positive outcomes for larger firms, which often possess more substantial resources. However, a critical insight emerges, suggesting that smaller enterprises may face challenges in deploying dynamic capabilities effectively due to resource constraints (Harries et al., 2018).

Moreover, research findings indicate that the adaptability of larger firms during crises may not solely stem from dynamic capabilities; sustainable renewal and innovation also play pivotal roles (Makkonen et al., 2014). In contrast, smaller enterprises may leverage adaptive innovation strategies effectively (Chrysochoidis et al., 2016). Despite this, it is clear that SMEs encounter difficulties in applying dynamic capabilities during crises, even though their role in society, through the provision of goods and services, is of paramount importance, and they may be more impacted by social decline (Doern et al., 2019).

Social Entrepreneurship as a Response to Crises

Another prominent facet of recent organisational research focuses on crises as catalysts for the emergence of social entrepreneurship. Some research has revealed that crises often act as salient triggers for action among social entrepreneurs and social ventures, although the effectiveness of such responses can vary depending on regional disparities and socioeconomic factors (Dutta, 2019). It is noteworthy that social entrepreneurship in certain regions relies on non-monetary exchanges and social currencies, which can limit its efficacy during crises (Molina et al., 2018). Conversely, social entrepreneurship has demonstrated its potential as a tool for societal recovery and regeneration during times of crisis (Kreitmeyer, 2017).

¹¹ A firm's ability to pivot, "integrate, build, and reconfigure internal and external competences" in changing environments (Teece et al., 1997).

Venture Adaptability in Crisis Contexts

Within the organisational-focused crisis literature, a significant body of work explores the adaptability of ventures, particularly in seizing growth opportunities arising from exogenous shocks. These investigations delve into the internal and external factors that shape the adaptability of both small and large firms (Chakrabarti, 2015). Research findings suggest that ventures, especially SMEs with limited slack resources, face substantial challenges in harnessing growth opportunities amidst crises (Buyl et al., 2019). Paradoxically, the adaptability of large firms during crises often hinges on the availability of slack resources, which facilitate SME acquisitions and expansion (Wenzel et al., 2020). These studies underscore the organisational disadvantages confronted by SMEs during crises.

Entrepreneurship's Role in Societal Recovery

The impact of entrepreneurship on society during and after crises has been a central focus of several studies. Specifically, the post-crisis rebuilding phase has garnered significant attention. Research highlights the pivotal role played by local entrepreneurs in facilitating community resilience through founding mindsets and resourcefulness (Williams and Shepherd, 2016). Interestingly, resilience, within this context, is conceptualised as a dynamic 'process' to be undertaken rather than a static attribute (Fisher et al., 2019). Community resilience often arises from the development of community-based enterprises, fostering sustainable local development and driving significant value creation and innovation through mass participation and the utilisation of available community technologies (McNamara et al., 2018; Peredo and Chrisman, 2006; Wang et al., 2014).

Local Conditions and Post-Crisis Recovery

Another dimension of research explores the interplay between local conditions and post-crisis recovery at the societal level. This line of inquiry predominantly focuses on economically developing communities and their existing ecosystems. Some studies suggest that the growth and recovery of ecosystems following exogenous shocks can be advanced by influential community 'champions' who employ holistic approaches, including collaboration, narrative building, and cultural resource investment (Roundy, 2019; 2020). Additionally, research findings indicate that in high-unemployment communities, including those in developed nations, crises can stimulate an increase in entrepreneurship rates, thereby contributing to post-crisis community recovery (Fairlie, 2013; Roman and Rusu, 2018). Consequently, this surge in entrepreneurial activities has led to a burgeoning body of research concerning the establishment and cultivation of more connected entrepreneurial

ecosystems as a crisis management strategy, emphasising the pivotal role of interconnectedness in providing essential resources and infrastructure for growth (Mason and Hruskova, 2021; Rashid and Ratten, 2021; Vogel, 2013). However, the exploration of local conditions during crises remains limited in the context of highly developed entrepreneurship hubs such as Silicon Valley, presenting opportunities for further research to bridge this gap.

Founder Entrepreneurial Attributes and Their Evolution During Crises

A subset of studies shifts the focus from organisations to founder entrepreneurs, with a specific focus on the attributes that drive them during crises. While the number of studies in this area is limited, their impact is substantial. Researchers have primarily concentrated on the entrepreneurial attribute of self-efficacy. Some studies suggest that crises can nurture self-efficacy in individuals, leading to heightened entrepreneurial intentions (Bullough et al., 2014; Hutasuhut, 2018; Renko et al., 2021). Entrepreneurial self-efficacy has been identified as a defence mechanism against disasters, mitigating the negative effects of crises (Miles et al., 2016). This line of research indicates that self-efficacy is cultivated through exposure to adversity, followed by positive adaptation to these challenges. Consequently, crises may serve as catalysts for the development of self-efficacy, resulting in improved entrepreneurial intentions and outcomes (Bernard and Barbosa, 2016; Hayward et al., 2010; Sharma and Rautela, 2021). However, it is important to note that critical gaps remain in this field, necessitating further research to gain a richer, experiential understanding of how entrepreneurs and small businesses learn from crises, manage barriers to learning, and incorporate change management (Doern et al., 2019).

Entrepreneur Attribute and COVID-19 Papers

This discussion distils insights from 28 empirical papers, categorising them into three overarching themes: Psychological Foundations of Entrepreneurship, Adaptive Strategies and Crisis Management, and Mindful Entrepreneurship. These studies illuminate findings around the relationship between entrepreneurial attributes and factors crucial for navigating the complexities of COVID-19.

Psychological Foundations of Entrepreneurship

Alshebami's study in Saudi Arabia explores the psychological features influencing small entrepreneurs during adverse times. It emphasises the positive relationship between self-efficacy, internal locus of control and entrepreneurial intention. The findings underscore the moderating role of entrepreneurial resilience during crises, highlighting the importance of

psychological factors in fostering entrepreneurial success during challenging times (Alshebami, 2022). Shifting to Vietnam, Duong et al. delve into the cognitive processes of entrepreneurship among higher education students. The study identifies the significance of perceived behavioural control and entrepreneurial intention, with COVID-19-related distress negatively moderating the entrepreneurial attitude–intention link. This research highlights the need to address psychological factors for promoting entrepreneurship among students during global crises (Duong et al., 2022). Investigating a small entrepreneurial family firm in Brazil, Amaral and Da Rocha employ a process approach to study resilience during different stages of the COVID-19 pandemic. The findings reveal manifestations of organisational resilience in anticipation, coping and adaptation, highlighting the multifaceted nature of resilience and the importance of psychological capacities in navigating crises (Amaral and Da Rocha, 2022).

Adaptive Strategies and Crisis Management

Allison et al.'s unique perspective examines language-based cues in crowdfunding appeals during the pandemic, focusing on the identifiable victim effect. The study reveals associations between language-based cues of entrepreneurs' personality traits and public support, accentuating the role of language in influencing donation effects, particularly when appeals highlight the pandemic's impact on businesses (Allison et al., 2022). Fares et al.'s qualitative study investigates entrepreneurship resilience capabilities during a multitude of crises, including the COVID-19 pandemic. Categorising capabilities into routine, dynamic, and ad hoc, the study identifies strategic activities deployed by firms to achieve resilience. This approach offers a toolbox for entrepreneurs and policymakers, emphasising adaptive strategies in navigating complex challenges (Fares et al., 2022).

Mindful Entrepreneurship

Examining Chinese SMEs during the COVID-19 pandemic, Liu et al. explore the role of entrepreneurial mindfulness and resilience in influencing organisational resilience. The study establishes a positive association between entrepreneurial mindfulness and organisational resilience, with entrepreneurial resilience mediating this relationship, highlighting the importance of individual entrepreneurial attributes (Liu et al., 2022). Addressing the resilience and transformation of Thai tourism SMEs during and post-COVID-19, Pongtanalert and Assarut emphasise the utilisation of bonding and bridging social capital. The study highlights the entrepreneur's mindset as crucial in leveraging social capital and enhancing adaptive capacity for resilience and transformation (Pongtanalert and Assarut, 2022). Shifting focus to Indonesia, Widjaja et al. explore the role of e-learning in entrepreneurship

education. The study underscores the link between entrepreneurship education, self-efficacy, and intention, emphasising the importance of lecturer competence and facilitating conditions in promoting entrepreneurial thought and mindset among students (Widjaja et al., 2022).

These findings reveal the profound impact of entrepreneurial attributes on performance, intentions, and actions as related to COVID-19, albeit through a small sample. These findings are unsurprising, given the previous work on entrepreneurial attributes and crises more generally (Bird, 1988; Borland, 1975; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000). However, a notable gap persists in the understanding of how these attributes navigate and influence entrepreneurial ventures during COVID-19 more deeply, particularly evident in the scarcity of research addressing the repercussions of COVID-19 on entrepreneurs and SMEs. As highlighted by Castro and Zermeño (2020), individual attributes significantly contribute to the resilience of SMEs post-crisis. This observation underscores the imperative for future research endeavours to delve deeper into the intricacies of entrepreneurial attributes in the context of crises, such as the unprecedented challenges posed by the COVID-19 pandemic. A comprehensive understanding of these attributes during crises is not merely an academic pursuit; it stands as a cornerstone for informed policymaking and strategic interventions aimed at fostering resilience and recovery in the aftermath of unprecedented disruptions.

Moreover, previous undertakings in attribute-based research have sparked debates around the significance and applicability of this field concerning entrepreneurs. Some arguments assert that attribute-based studies tend to be overly descriptive and open-ended, thus yielding results that lack statistical relevance (Gartner, 1988; Low and MacMillan, 1988). However, contrasting perspectives maintain that leveraging existing attributes can lead to the continual generation of innovative insights, particularly when investigating success-related factors, such as those pertaining to business planning, performance, or innovation (Rauch, 2014). As Rauch (2014) observes, "more research is required to unfold the process dynamics of personality traits. This issue needs to be explored with regard to the causality of effects, changes in personality characteristics, and changing opportunities and threats that require changing decision behaviour by the entrepreneur". Considering these reflections, it becomes evident that crises, exemplified by the profound exogenous shock of the COVID-19 pandemic, present an opportune juncture to rekindle the exploration of entrepreneurial attributes. The inherent disruptions and challenges introduced by a crisis of this magnitude emphasise the relevance and urgency of investigating the dynamics of these attributes within the entrepreneurial context.

Discussion and Future Directions

Model

The nomothetic model depicted in Figure 2.2 represents a significant academic contribution. This model serves as a synthesised framework that harmonises a broad spectrum of research pertaining to the ramifications of COVID-19 on business, the intricate interaction between the pandemic and entrepreneurial activities and the dynamics of crises within the entrepreneurial sphere. This approach is layered with a nuanced examination of entrepreneurial attributes, of which work relating to crises in this area is lacking despite the clear influence of attributes on entrepreneurial activity. It effectively bridges these previously siloed domains, providing a comprehensive lens through which to view the intricate relationships among these multifaceted elements. In the academic discourse, this holistic approach extends the boundaries of knowledge, thereby offering valuable insights that hold promise for shaping future research endeavours in this dynamic field. It underscores the need for continued exploration and investigation of the multifaceted relationships within this model, providing a foundation for advancing our understanding of entrepreneurship amid crises and its associated implications.

Entrepreneurial Attributes

Recent entrepreneurial attribute research predominantly focuses on well-established factors, including the Big-5 Model, self-efficacy, innovativeness, locus of control and the need for achievement. These attributes have consistently been recontextualised within entrepreneurship literature, primarily viewed as facets of 'personality.' Their role in shaping entrepreneurial success, decision-making, and navigating complex and unpredictable situations has been a focal point. These attributes often lack innovative findings, and their efficacy is highly contingent on specific contextual and environmental conditions.

While the Big-5 Model has gained prominence, its application within entrepreneurship literature shows a lack of consistency in outcomes. ESE has garnered substantial attention, influencing entrepreneurial intention and motivation, with innovativeness, LOC, and the need for achievement also being prevalent. Nevertheless, research on risk attitude in entrepreneurship is relatively underexplored. It is crucial to consider a broader spectrum of variables, especially in the context of crises, to understand better the impact on solo entrepreneurs or SMEs. Phenomenological and perception-based approaches remain underutilised despite their potential for a deeper understanding. Figure 2.2 demonstrates the

likely relevance of these attributes to the entrepreneurial crisis literature, emphasising their central role in entrepreneurial actions.

Crises in the Context of Entrepreneurship—A Chronological Overview of the Evolving Field

The chronological overview of entrepreneurship in the context of crises spanning from 2008 to 2023 reveals a dynamic evolution in research themes and scholarly interests. In the initial phase (2008–2016), emphasis was placed on the role of entrepreneurial learning, personal connections, socioeconomic profiles and the impact of economic recessions on entrepreneurship. The subsequent phase (2017–2020) delved into how entrepreneurs coped with global economic challenges, integrating theoretical frameworks like the theory of planned behaviour. The onset of the COVID-19 pandemic in 2020 marked a turning point, leading to the exploration of entrepreneurship within this unique crisis context, especially focusing on the attributes of entrepreneurs. The most recent phase (2021–present) highlights a renewed interest in entrepreneurial education, social entrepreneurship and the study of entrepreneurial attributes. This evolution signals a substantial expansion in the research landscape, with an increasing emphasis on understanding the role of entrepreneurial attributes in the context of crises, particularly in the ongoing pandemic.

The Influence of Crises on Entrepreneurship—A Contemporary Review

In the contemporary landscape of entrepreneurship research, there is a notable focus on the intricate relationship between crises and entrepreneurial activities. Recent literature has explored various dimensions of this dynamic relationship, spanning dynamic capabilities and firm performance during crises. Researchers have delved into the role of social entrepreneurship as a response to crises, investigating the adaptability of ventures and seizing growth opportunities. Entrepreneurship's role in societal recovery, particularly in the post-crisis rebuilding phase, has garnered substantial attention, emphasising the pivotal role of local entrepreneurs in community resilience. Additionally, there is a growing body of research examining the influence of local conditions on post-crisis recovery, especially in economically developing communities and entrepreneurial ecosystems. Lastly, studies have shifted the focus to founder entrepreneurial attributes, particularly self-efficacy, and how they evolve during crises, showing that adversity can nurture self-efficacy and lead to heightened entrepreneurial intentions. However, the need for further research to gain a deeper understanding of how entrepreneurs learn from crises and manage barriers to learning is

evident. This comprehensive review of contemporary research underscores the evolving landscape of entrepreneurship in the context of crises and the multifaceted aspects that require ongoing exploration.

Future Directions

In the dynamic landscape of entrepreneurship research, the pursuit of comprehensive directions for future investigations is imperative. Considering the existing literature and the conspicuous research gaps in the realm of entrepreneurial attributes, particularly within crisis contexts such as the unprecedented COVID-19 pandemic, this section provides a roadmap for future inquiry. This roadmap offers scholars a structured and multifaceted framework to navigate the intricate terrain of entrepreneurship research.

Entrepreneurial Attributes in the Context of Crises

A pressing avenue for future research is the exploration of entrepreneurial attributes within the context of crises. While each entrepreneurial journey is inherently unique, beneath the surface lie latent patterns of attributes, intentions and behavioural manifestations. To advance our comprehension of these latent patterns and to forge empirical connections between entrepreneurs and their experiences in crisis contexts, future scholars must explore this area further. This body of work entails an exhaustive exploration of the intricate relationships between entrepreneurial attributes and entrepreneurial actions during periods of crises. The influence of entrepreneurial attributes on entrepreneurial performance and intention during crises remains nebulous and ripe for further investigation. Although some expectations regarding the relevance of these attributes during crisis response exist, the current literature falls short in offering explicit insights into which attributes carry heightened salience and whether latent attributes have yet to be unveiled. As mentioned above, the context of the COVID-19 pandemic has allowed various scholars to uncover novel entrepreneurial attributes and new insights into existing attributes such as creativity, innovativeness and curiosity (Cao et al., 2022; Peljko et al., 2022c). Consequently, future research must ardently strive to unearth the nuanced interplay between entrepreneurial attributes and entrepreneurial responses during crises, unravelling their multifaceted and context-specific influence.

Entrepreneur Cognitive Attributes in the Context of the COVID-19 Pandemic

The epochal occurrence of the COVID-19 pandemic demands rigorous and comprehensive investigation into the presentation and prevalence of entrepreneurial attributes during this

unparalleled period. The extant body of research pertaining to entrepreneurial attributes within the context of this global crisis is conspicuously scarce, as is expected, given the length of time available to produce research outputs. Therefore, it is not only opportune but also imperative that forthcoming research endeavours are meticulously designed to bridge this substantial gap. The unique and unprecedented nature of the COVID-19 pandemic underscores the necessity for novel insights that reveal its varied impact on entrepreneurial attributes. Future research must ardently focus on unravelling the pandemic's influence on these attributes, shedding light on any discernible shifts or adaptations that may have transpired in response to the exigencies of the pandemic milieu. This research highlights the importance of recording entrepreneurial voices during this time to compare and contrast these attributes and experiences to future contexts. The exceptional nature of this crisis necessitates an empirical explanation of how entrepreneurial attributes may have evolved or adapted during its tumultuous unfolding. Future investigations should be poised to explore these attributes in the distinctive context of the COVID-19 pandemic, revealing the potential transformation and adaptation that this crisis may have propagated.

Methodological Diversity in Cognitive Attribute Research

Methodological diversity, constituting the bedrock of sound research, demands heightened consideration within the domain of entrepreneurial attribute research. Contemporary research in this domain predominantly relies on quantitative surveys as the primary mode of inquiry and assessment. While quantitative inquiry is undeniably valuable, its limitations in capturing the rich and multifaceted tapestry of entrepreneurial attributes are evident. To comprehensively unravel the practical nuances of these attributes, particularly in the unprecedented context of crises, future research must champion methodological pluralism. This methodological diversification should manifest as an ardent acceptance of meticulously designed qualitative methodologies. Qualitative research methodologies offer an uncharted realm that holds the promise of capturing the intricate dynamics underpinning entrepreneurial attributes. These methodologies transcend traditional analysis, delving into the domain of underlying behaviours and actions. By adopting a qualitative lens, future scholars can uncover how these attributes are harnessed, consequently facilitating not only an enhanced understanding of these attributes but also their implications for entrepreneurial identification and performance. Ultimately, this methodological pluralism holds the potential to foster nuanced insights into the role of entrepreneurial attributes, especially during periods of crises, where entrepreneurs wield a profound impact on economic redevelopment and societal resilience.

In sum, the trajectory of entrepreneurship research is ready for a transformational shift through the pursuit of comprehensive and in-depth inquiries into entrepreneurial attributes. The unique context of crises, notably exemplified by the COVID-19 pandemic, requires scholars to venture into unexplored domains. Through methodological diversity, meticulous exploration and nuanced investigation, scholars can unravel the intricate facets of entrepreneurial responses to crises, thereby enriching our understanding of these phenomena and their broader implications for economic development and societal resilience. This future research may illuminate unexplored domains of entrepreneurship research, enriching our scholarly discourse and contributing to the construction of knowledge in this multifaceted field.

Conclusion and Implications

In this paper, we elevate the discourse in entrepreneurship scholarship by focusing on the pivotal role that entrepreneurs play in steering economic recovery, especially in challenging circumstances exemplified by the COVID-19 pandemic. Our work extends the foundational research conducted by prior scholars (e.g., Chakrabarti, 2015; Kreitmeyer, 2017; Miles et al., 2016; Roman and Rusu, 2018) by providing a review of the literature and offering a comprehensive model that encapsulates the nuanced dynamics of entrepreneurship amidst the COVID-19 crisis. This model not only enhances our understanding of the field but also paves the way for prospective investigations in this critical domain. This model also considers the current work on entrepreneurship and COVID-19 through an understanding gained by using snowball sampling gleaned from Alshater's (2022) work.

Furthermore, this study identifies and emphasises the pressing need for additional research in this space, with a specific emphasis on the exploration of entrepreneurial attributes during crises. This paper reveals that previous studies are lacking in their focus on the relationship between entrepreneurial attributes and crises, highlighting the necessity to understand how and why entrepreneurs engage with these attributes. We extend the burgeoning literature on entrepreneurship in crises, the role of the entrepreneur in rebuilding the economy and how some ventures succeed or fail in crises by providing a rich summary of existing data to inform future work in the area better. By defining these promising areas of inquiry, this paper outlines a concrete roadmap for future research. It serves as a catalyst for the pursuit of studies that hold immense potential to significantly impact our understanding of the social and economic challenges brought about by the pandemic.

As we navigate the complex and ever-evolving landscape of global economics, entrepreneurship emerges as a cornerstone of resilience and recovery, particularly in the face of crises like COVID-19. This research empowers scholars, policymakers, and practitioners with valuable insights and a well-structured model that can guide their efforts. In this dynamic commercial landscape, our work not only contributes to the academic discourse but also illuminates the path towards harnessing the full potential of entrepreneurial attributes for the betterment of society and the economy.

Chapter Three—Entrepreneurial Attributes Amidst Adversity: An In-depth Examination of Attribute Variations During the COVID-19 Crisis

Abstract

In the realm of entrepreneurship research, extensive attention has been dedicated to investigating the attributes of entrepreneurs. However, there is a dearth of research concerning the manifestation and operation of these attributes in the unique context of the COVID-19 crisis. Addressing this gap is imperative, as entrepreneurial activity and the initiation of new ventures are recognised for their substantial influence on economic and social recovery in the aftermath of crises.

This study has two primary objectives. First, to explore the extent to which current conceptualisations of entrepreneurial attributes are reflective of how entrepreneurs understand their own actions, thoughts and behaviours. Second, to understand the firsthand experiences of entrepreneurs with a view to uncovering and exploring novel attributes, providing fresh insights into the experiential intricacies of entrepreneurial attributes, particularly through the exploration of lived experiences, and particularly within the context of the crisis.

This research employs a phenomenological approach to investigate the experiences of 18 founder entrepreneurs directly impacted by the social and economic upheaval brought on by the COVID-19 crisis in 2020 and 2021. The study introduces notable contributions to the literature on entrepreneurship, crisis, and entrepreneurial attributes. It presents the concept of "Bullshit Praxis" as a novel attribute in the entrepreneurial context, answering the call for a richer understanding of the experiences of founder entrepreneurs during COVID-19 (Doern, 2016; Ratten, 2020a). Additionally, the study identifies Pro-Ethical Self-Assessment, Dissatisfaction Mindset, and Curiosity as attributes present in entrepreneurial speech in those who have achieved self-reported revenue stabilisation and growth despite the challenges presented by the COVID-19 pandemic.

These findings expand upon the existing attributes explored in entrepreneurship literature and underscore the urgency for further exploration into the motivations and mechanisms

underlying entrepreneurs' engagement with these attributes. This paper also presents a model highlighting the attributes of founder entrepreneurs that may contribute to post-crisis business recovery. These insights hold paramount significance for both researchers and entrepreneurs seeking to comprehend and employ effective strategies for economic resurgence following the pandemic-related crisis.

Keywords

entrepreneurship, crisis, qualitative, COVID-19, cognitive attributes, personality

Introduction

The conclusion of 2019 witnessed the emergence of a respiratory ailment originating in Wuhan, China, subsequently identified in human cells as a novel coronavirus closely related to SARS-CoV (Wu et al., 2020). The swift global proliferation of COVID-19 led to a staggering number of fatalities within the initial months of its recognition, prompting the World Health Organization to declare a pandemic on the 12th of March 2020 (Ciotti et al., 2020). While this crisis introduced profound uncertainties, it concurrently provided entrepreneurs with opportunities for innovation within the sphere of ambiguity, given their inherent agility. However, despite the considerable implications of COVID-19, our understanding of how this pandemic has and will continue to impact entrepreneurs and businesses remains in its infancy (Ratten, 2020a), even though the overarching trajectory of business sales indicates a decline (Fairlee and Fossen, 2022). Notably, while crises and exogenous events have been subjects of extensive study over the years, the COVID-19 pandemic, with its distinct economic and social ramifications, provides a compelling vantage point for the examination of entrepreneurial attributes and their influence on the experiences of individuals during profoundly uncertain periods. For a more comprehensive exposition of the ramifications of the COVID-19 crisis in a business context, please refer to Donthu and Gustafsson (2020) and Alshater et al. (2022).

Extant entrepreneurial attribute work tends to recurrently reinterpret established attributes, employing analogous survey-based quantitative methodologies to gauge the prevalence and frequency of recognised attributes. This pattern endures even within the context of social and economic crises, which serves as the contextual backdrop for this study. Considering these reflections, it becomes evident that crises, exemplified by the profound exogenous shock of the COVID-19 pandemic, present an opportune juncture to rekindle the exploration of entrepreneurial attributes. The inherent disruptions and challenges introduced by a crisis

of this magnitude emphasise the relevance and urgency of investigating the dynamics of these attributes within the entrepreneurial context. While scholars may harbour expectations regarding the attributes likely to be prevalent among entrepreneurs adept at navigating crises, the existing literature offers scant insights into the attributes of primary salience. Furthermore, the extent to which there may be latent attributes yet to be identified remains a subject of considerable ambiguity.

In the contemporary landscape of research on entrepreneurial attributes, a notable void exists concerning the generation of innovative, attribute-level insights. Recent studies have predominantly concentrated on the adaptation of existing entrepreneurial attribute models, exemplified by the Big-5 framework, often tailored to specific subsets of entrepreneurs. Such research has explored domains like social entrepreneurship (Bernardino et al., 2018), nascent entrepreneurship (Muñoz-Bullón et al., 2015) or serial entrepreneurship (Brem, 2008). While these endeavours undoubtedly enrich our understanding of distinct entrepreneurial sectors and ecosystems, they are somewhat limited in their capacity to deliver the holistic comprehension required to address critical concerns, particularly those related to societal and economic revival in the aftermath of crises. For a profound insight into the recovery of SMEs, an imperative need arises to broaden the horizons of attribute-focused research. Unfortunately, the trajectory of recent studies in the realm of entrepreneurial attributes has been somewhat narrow, thereby restricting the exploration of the nuanced impact of crises on founder entrepreneurs and resulting in substantial knowledge gaps (Doern, 2016).

Moreover, a conspicuous underutilisation of phenomenological approaches is evident in entrepreneurial attribute research. This underrepresentation is concerning because phenomenological data collection methods offer the potential for deeper and more comprehensive insights compared to the conventional, often detached methodologies commonly employed in the field, including surveys and meta-analyses (Raco and Tanod, 2014). The exclusive reliance on traditional approaches tends to yield recurrent research outcomes, contributing limited substantive depth to practical entrepreneurship (Neergaard and Uihøi, 2007).

Despite being somewhat at odds with a significant portion of the established entrepreneurship literature, it is essential to acknowledge that perception-based research has its niche within specific domains of entrepreneurial attribute exploration. This notion is particularly evident in studies investigating success factors, as exemplified by research into female entrepreneurs (Rieger, 2012), regional entrepreneurs like those in Pakistan (Nisar et al., 2020) or inquiries into lived experiences (Bann, 2009). Nonetheless, the application of

perception-based research to comprehend and address entrepreneurial attributes and perceptions amidst crises remains conspicuously underrepresented, thus creating a crucial gap in the existing academic discourse.

Within the framework outlined, this study harbours two principal objectives. The first objective aims to explore the extent to which current conceptualisations of entrepreneurial attributes are reflective of how entrepreneurs understand their own actions, thoughts and behaviours by employing a qualitative phenomenographic research paradigm. This method entails a comprehensive exploration of the cognitive intricacies, emotional nuances and contextual subtleties that underlie and characterise entrepreneurial personas by leveraging qualitative methodologies, notably through in-depth interviews. The second objective of this paper is to understand the firsthand experiences of entrepreneurs with a view to uncover and explore novel attributes. Rooted in phenomenographic approaches designed to unveil individuals' experiential landscapes, this objective strives to illuminate the unexplored facets of entrepreneurial personalities. By exploring the lived experiences of entrepreneurs, this study aspires to unearth dimensions that may have remained concealed within the precincts of conventional quantitative research theories due to their defined and directed approaches. These objectives and the following research process act to extend Doern's (2016) research process by capturing the experiences of entrepreneurs during crises. As such, we answer a call to offer a richer understanding of the experiences of founder entrepreneurs during COVID-19 (Ratten, 2020a).

In pursuit of the research objectives, this paper has undertaken an exploratory phenomenological study encompassing a cohort of 18 founder entrepreneurs who experienced direct ramifications of the COVID-19 pandemic in the years 2020 and 2021. These entrepreneurs were primarily situated in Sydney, Australia, and engaged in the same business ventures both before and during the crisis period. Remarkably, despite the inevitable challenges posed by the pandemic, most participants reported either business stability or revenue growth during this tumultuous period. The research methodology employed in this study centres around comprehensive long-form qualitative semi-structured interviews, facilitating the creation of intricate narratives that delve into the firsthand experiences of these entrepreneurs, as expressed through their discourse.

This paper embraces an abductive approach to theory development, integrating grounded theory coding and rigorous analysis of the interview transcriptions provided by the participants. The study has revealed the presence of numerous entrepreneurial attributes that align with previous literature in the domain, as well as new findings about their impact on and manifestations within entrepreneurs facing adversity. Furthermore, it has uncovered

fresh insights within the relatively underexplored domain of Curiosity. Most notably, this research has unveiled the existence of three previously uncharted attributes inherent to entrepreneurs: Bullshit Praxis, Pro-Ethical Self-Assessment and Dissatisfaction Mindset.

This paper makes two notable contributions to the field of entrepreneurship research. First, to the best of the author's knowledge, this study is the first to identify and theorise the presence of Pro-Ethical Self-Assessment and Dissatisfaction Mindset in entrepreneurial discourse, in conjunction with the identification of Bullshit Praxis and novel insights on Curiosity. These findings extend the work of Kerr (2018) and other scholars who have explored a range of attributes related to entrepreneurs, such as the Big-5 Model, Need for Achievement, Locus of Control, Self-Efficacy, Innovativeness, and Risk Attitude (e.g., Bird, 1988; Borland, 1975; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000). Notably, even in the face of the unavoidable challenges presented by the pandemic, the majority of participants indicated either sustained business stability or an increase in revenue amid this tumultuous period. The presence of the new attributes may have impacted entrepreneurial success during this time.

Second, this thesis pioneers the conceptualisation of "Bullshit Praxis" as a previously uncharted attribute inherent to entrepreneurs. Bullshit Praxis is defined as the transformation of an internal bullshit concept into an unconscious behavioural action in which entrepreneurs engage. It operates as an implicit praxis, deeply embedded in the entrepreneurs' psyche before finding expression in their actions, offering a more profound understanding of how entrepreneurs interact with this distinctive attribute. This finding extends the work of philosophy researchers who have explained Bullshit in other domains. The literature in philosophy has established the existence of Bullshit as a concept and a theoretical practice people unconsciously undertake (Cohen, 2002; Frankfurt, 2009), and organisational scholars have suggested Bullshit may be present in "conceptual" entrepreneurs to enhance image (Spicer, 2020). These contributions deepen our understanding of entrepreneurs and emphasise the necessity for further exploration in the field. Notably, we reveal that previous studies offer an incomplete perspective, both in terms of the range of cognitive and personality attributes considered and the imperative to investigate how and why entrepreneurs engage with these attributes. These limitations are particularly relevant, given the economic context contributing to the discourse literature on entrepreneurship in crises, the role of the entrepreneur in rebuilding the economy and how some ventures succeed or fail in crises (e.g., Chakrabarti, 2015; Kreitmeyer, 2017; Miles et al., 2016; Roman and Rusu, 2018).

This paper will commence with a background section, followed by an exposition of the research methodology employed in this study. Subsequently, it will proceed to the presentation and in-depth discussion of the research findings. Finally, the paper will culminate with a comprehensive discussion, along with a consideration of the implications and constraints inherent in the work.

Background

The area of research dedicated to exploring the personality attributes of entrepreneurs is both extensive and multifaceted¹². This research delves into various facets of cognition, mindset and behaviour, which are often the focal points of investigation in the field of entrepreneurship attributes. Typically, these attributes are studied individually or, occasionally, in a more integrated manner. However, it is worth noting that cognitive attributes and personality traits are the primary focus, with the two terms sometimes used interchangeably.

Cognitive attributes have been well-defined in previous scholarly works. Grégoire et al. (2011), for example, provide a comprehensive perspective. They encompass "Mentalism", which involves a concentrated examination of individuals' mental representations, encompassing their perceptions of others, events, contexts, and various mental states and constructs. This idea also includes "a process orientation", emphasising the study of how these mental representations and constructs develop, transform, and are used in various entrepreneurial processes. Finally, it involves "the operation of cognitive dynamics across different levels of analysis". Essentially, cognitive attributes refer to the dynamic mental states and constructs that intricately intertwine with the entrepreneurial process.

In a similar vein, the fundamental characteristics of personality attributes or traits have been meticulously articulated. McCrae and Costa (1997), for instance, describe personality traits as "relatively enduring styles of thinking, feeling, and acting". This definition underscores the comprehensive nature of personality, which encompasses both cognitive aspects and behavioural dimensions, thereby contributing to a holistic understanding of the entrepreneurial mindset.

To facilitate a clear and coherent discussion within the context of this paper, we will use the overarching term "entrepreneurial attribute". This term is substantiated by the inherent

¹² Although this study refrains from an exhaustive exploration of environmental determinants, we recognise their influence on entrepreneurial attributes, intentions and behaviours.

interconnectedness and mutual influence observed among mindset factors, cognitive attributes and personality traits within the entrepreneurial context. By consolidating these diverse dimensions under a singular conceptual framework, the term serves to encapsulate the interdependencies present in the psychological makeup of entrepreneurs. This strategic conceptual agglomeration is justified as it facilitates a more concise and unified discussion, allowing for a clearer exploration of the intricate psychological dynamics inherent to entrepreneurship.

The realm of entrepreneurial attributes in recent scholarly discourse has exhibited a noticeable trend characterised by a propensity to revisit a well-established set of factors. Research endeavours involving the collection and analysis of data pertaining to these attributes typically cluster around four primary categories, emphasising the Big-5 Model, self-efficacy, innovativeness, locus of control and the need for achievement, as delineated in Kerr, Kerr and Xu's (2018) comprehensive entrepreneurship model. These attributes play a vital role in shaping entrepreneurial success (Leblanc, 2017) and serve as heuristic guides in decision-making, particularly in the face of novel and intricate business situations (Jiang et al., 2017). While entrepreneurial attributes primarily delve into the cognitive landscapes of entrepreneurs, the materialisation of these attributes through observable behaviours serves as a robust indicator of their existence and practical relevance. The following section will discuss the most frequently utilised models for attribute analysis and measurement in an entrepreneurial context.

Big-5 Model:

The Big-5 Model, also known as the OCEAN model, serves as a widely acknowledged framework for assessing entrepreneurial attributes, encompassing the dimensions of openness, conscientiousness, extraversion, agreeableness and neuroticism (McCrae and John, 1992). Originally conceived to elucidate the relationship between cognitive and academic behaviours, this model has garnered substantial attention in entrepreneurship research owing to its application in discerning individual traits relevant to entrepreneurial endeavours. Noteworthy is its adoption beyond its initial scope, exemplified by studies that strive for a nuanced understanding of specific entrepreneurial attributes correlated with the Big-5 framework (Antoncic et al., 2015; Gao et al., 2020; Slavec et al., 2017). Its broader utilisation extends across various research contexts, including examinations of entrepreneurial success, crisis scenarios and gender roles in entrepreneurship (Cameron et al., 2018; Ward et al., 2019; Şahin et al., 2019).

Despite its prominence, the application of the Big-5 Model in entrepreneurial research encounters challenges marked by inconsistent findings (Kerr et al., 2018). In seeking to differentiate between entrepreneurs and managers or the general working population, studies often yield incongruent results, leading to the observation of "no strong pattern of significant results" (Kerr et al., 2018). The influence of the Big-5 Model extends to career choices, particularly in the decision to pursue entrepreneurship as a career path (Kerr, Kerr and Xu, 2018). Moreover, investigations into diverse regional populations, spanning emerging economies like Nigeria or Kenya and established entrepreneurial ecosystems like Tel Aviv or Silicon Valley, have often produced similar results, indicating a certain universality in the manifestation of entrepreneurial attributes across diverse contexts (Maina and Nyambura, 2019; Owoseni, 2014; Röhl, 2019; Suzuki et al., 2002). However, the recurrent nature of such studies has led to a dearth of innovative findings and a tendency to abandon this avenue of study due to diminishing returns in terms of novel insights.

Entrepreneurial Self-Efficacy (ESE):

ESE, defined as individuals' beliefs in their capability to exert influence over events and exercise control in their lives, has emerged as a pivotal determinant influencing entrepreneurial intentions and motivation. This construct plays a crucial role in shaping the foundation for entrepreneurial actions, serving as a precursor to the realisation of entrepreneurial endeavours (Bird, 1988; McGee et al., 2009). The concept of self-efficacy, rooted in an individual's belief in their capacity to exert a positive influence and exercise control over events in their lives (Chen et al., 1998; Wood and Bandura, 1989), has been instrumental in understanding entrepreneurial behaviour.

Research on ESE has extended beyond its foundational role and delved into the nuanced measurement of this construct across diverse contextual domains, emphasising its significance in times of crises and exogenous shocks (Elliott et al., 2020). The multifaceted nature of entrepreneurial actions necessitates a comprehensive examination of the impact of ESE on entrepreneurial intentions and behaviours across varied scenarios. Notably, ESE remains a prominent attribute examined in the context of crises, with the COVID-19 pandemic being a contemporary illustration of such challenges. The continued exploration of ESE in novel and evolving contexts reaffirms its relevance in understanding and predicting entrepreneurial responses to unprecedented situations.

Innovativeness:

Innovativeness, often conceptually linked with ESE, is acknowledged as an independent attribute within the entrepreneurial landscape. However, it can also be discussed as a firm-level construct. While it is frequently considered a measure situationally pertinent to ESE, research underscores its distinct identity as a crucial facet of entrepreneurial behaviour. The relationship between innovativeness and ESE has been explored, revealing a notable positive correlation, particularly among SME founder entrepreneurs (Kumar and Uz Kurt, 2011; Kerr et al., 2018). Broadly defined, innovativeness encapsulates how individuals respond to novelty, encompassing a diverse spectrum of novel concepts such as economic conditions and technological advancements (Goldsmith and Foxall, 2003).

The significance of innovativeness extends beyond conceptualisation, with empirical evidence demonstrating its positive impact on business performance, especially in the context of SMEs (Al-Ansari et al., 2013; Hult et al., 2004). Research in this domain often centres around the measurement of innovativeness as an attribute of entrepreneurship, with a particular focus on corporate entrepreneurship, where entrepreneurial orientation and corporate structure may influence innovativeness (Kreiser and Davis, 2012). Despite these efforts, there remains a notable gap in the literature, specifically in the examination of innovativeness within the context of SMEs and solo founder entrepreneurs. This gap calls for nuanced research within these less complex entrepreneurial settings to enhance our understanding of the role and impact of innovativeness in fostering favourable entrepreneurial outcomes.

Locus of Control (LOC):

LOC occupies a prominent place in studies exploring entrepreneurial attributes, primarily due to its prevalence among entrepreneurial populations (Levine and Rubenstein, 2017; Kerr et al., 2018). LOC in the context of entrepreneurship attribute research is linked to the impact of internal LOC on entrepreneurial outcomes. Internal LOC denotes an individual's belief in their capacity to influence or control outcomes through personal effort, contrasting with the idea that outcomes are controlled by external forces (Rotter, 1954). Internal LOC has shown a discernible correlation with entrepreneurial intentions, especially among student populations (Brockhaus, 1975). Additionally, it has been explored in the context of entrepreneurship education, suggesting that educational interventions may nurture an internal LOC alongside a need for achievement, thereby fostering more favourable entrepreneurial outcomes (Hansemark, 1998). However, there has been a recognised dearth of contextual elements in studies on LOC attributes (Home, 2011).

Need for Achievement:

The attribute known as the Need for Achievement often intersects with LOC in the literature on entrepreneurial attributes. It is commonly defined as an individual's intrinsic desire for success, excellence and self-improvement (Borland, 1975). Several theories posit that a high Need for Achievement is a predictive factor for choosing entrepreneurship as a career path (Kerr et al., 2018). Nevertheless, it is vital to recognise that the prevalence and levels of the Need for Achievement exhibit variation across different contexts. Swiss entrepreneurs, for instance, have been observed to exhibit a higher Need for Achievement compared to their counterparts in the United Kingdom (Mueller and Thomas, 2001). This area of research is acknowledged for its inconclusive findings and a necessity for further exploration, particularly longitudinal analysis, to assess its predictive validity in the context of entrepreneurial activities (Hansemark, 2003).

Risk Attitude:

While the role of risk attitude in entrepreneurship is acknowledged, it has been relatively underexplored compared to the other attributes mentioned above. Some studies suggest that individuals with a disposition towards risk aversion are less inclined to pursue entrepreneurial ventures and are more inclined towards conventional employment paths (Kanbur, 1979; Kihlstrom and Laffont, 1979). Conversely, a decrease in risk aversion has been associated with a heightened inclination to initiate new businesses and amass wealth (Cressy, 2000; Kan and Tsai, 2006). However, research in this domain frequently concludes that heightened risk aversion deters individuals from venturing into entrepreneurship (Cramer et al., 2002). This underexplored attribute offers a promising avenue for further investigation. In particular, it provides an opportunity to investigate whether entrepreneurs' risk attitudes remain stable or undergo variations in response to societal and economic crises.

In the current landscape of entrepreneurial attribute research, there is a conspicuous deficiency in the generation of novel, attribute-level insight. Rather, recent studies have tended to engage in the recontextualisation of existing entrepreneurial attribute models, such as the Big-5 framework, with a focus on specific subgroups of entrepreneurs. Extant work tends to recurrently reinterpret established attributes, employing analogous survey-based quantitative methodologies to gauge the prevalence and frequency of recognised attributes. Examples include research focused on social entrepreneurs (e.g., Bernardino et al., 2018), nascent entrepreneurs (e.g., Muñoz-Bullón et al., 2015), or serial entrepreneurs (e.g., Brem, 2008). While these investigations provide valuable insights into the analysis of particular sectors or entrepreneurial ecosystems, they fall short of furnishing the comprehensive understanding essential for addressing more pressing concerns, such as the revival of

societies and economies in the wake of crises. There is an imperative need to broaden the scope of attribute-based research to gain a deeper insight into the recovery of SMEs. Regrettably, only a limited number of studies have adopted a more expansive approach to entrepreneurial attribute research in recent years. This has resulted in an inadequate exploration of the nuanced impact of crises on founder entrepreneurs, thereby leaving substantial gaps in our understanding (Doern, 2016).

Furthermore, it is important to note the limited use of less conventional phenomenological approaches in the domain of entrepreneurial attribute research. The underutilisation of such methodologies is a noteworthy concern, as phenomenological data collection has the potential to provide a deeper, more comprehensive understanding of a situation when compared to more traditional, detached approaches commonly employed in entrepreneurial attribute research, such as surveys and meta-analyses (Raco and Tanod, 2014). Relying on traditional methods may result in replicating similar research outcomes, adding little substantive depth to real-world business practice (Neergaard and Ulhøi, 2007).

It is crucial to acknowledge that perception-based research, although somewhat at odds with a substantial portion of the published entrepreneurship literature, does have its place in specific domains of entrepreneurial attribute exploration. This is particularly evident in investigations focused on success factors, as observed in studies of female entrepreneurs (Rieger, 2012), regional entrepreneurs, such as those in Pakistan (Nisar et al., 2020), or inquiries into lived experiences (Bann, 2009). However, the application of perception-based research to comprehend and address entrepreneurial attributes and perceptions in the context of crises remains conspicuously underrepresented.

Research Method

Research Context

The choice of Sydney, Australia, as the focal locational context for this study is rooted in its historical track record of exhibiting a stable business growth rate of 2.7% prior to the crisis (ABS, 2023a). This particular location displays potential for future prosperity, as evidenced by its consistent business entry rate of 15.4%, surpassing the exit rate of 12.7% during the same period (ABS, 2023b). The allure of studying this context was further accentuated by its position as an established, contained innovation ecosystem with traditionally consistent levels of SME growth over time (Chan et al., 2023). Significantly, 44% of Australian businesses are categorised as 'innovation-active' (ABS, 2023a). The economic milieu of

Sydney's business ecosystem is notably characterised by stability, in line with the aforementioned 2.7% growth rates (ABS, 2023a). Therefore, it became an intriguing proposition to explore the responses of founders operating within such a framework when confronted with a level of social and economic instability hitherto uncharted within this context.

Research Approach

Despite significant research into crises and entrepreneurship attributes independently, there is an absence of research that provides detailed accounts of the experiences of entrepreneurs during COVID-19 in relation to their attributes. Given that an important element of this study is to explore the entrepreneurial attributes present in entrepreneurs during a time of social and economic crisis, we took an abductive, qualitative, phenomenological approach, a well-established strategy formerly used to understand the experiences of entrepreneurs concerning crises (Doern, 2016), entrepreneurial risk, learning and business failure (Berglund and Hellström, 2002; Cope, 2011 via Doern 2016). This approach allowed us to include extant literature on entrepreneurial attributes while simultaneously casting a wider net for stories through which to identify attributes rather than focusing solely on a prescriptive list. Cope outlines that “the aim of phenomenology is to bring out the ‘essences’ of experiences or appearances (phenomena), to describe their underlying ‘reason’” (Cope, 2005). Arguably, this is the most effective approach to achieve our research objective, with the interpretation of the research being “the process of pursuing understanding through the construction of other people’s constructions” (Doern, 2016).

Research Sample

The sample for this study was composed of 18 founder entrepreneurs in Sydney who had been conducting business throughout the COVID-19 pandemic. For this research, we define a founding entrepreneur as someone who has i) created their own business (with or without a cofounder), ii) continues to work full-time in an executive or managerial capacity, and iii) continues to add value to their business through their own tangible action and/or resource management¹³. All participants interviewed qualified as founding entrepreneurs for this study. We used criterion-based purposive sampling to choose established businesses that are more than a year old to allow for a better indication of venture momentum within this study (Palinkas et al., 2015). We chose founders who were Sydney-based to provide a

¹³ Other types could include investor entrepreneurs, intrapreneurs, entrepreneurs who joined an existing start-up etc.

consistent baseline for home economic conditions and opportunities available. Founders were the only entrepreneur type used as our focus for this study is on perspectives of the founder entrepreneur and their impact on venture survival.

As is necessary for effective phenomenological study, purposive sampling was initially used to gather participants who had undertaken the experiences required for this research and who would be willing and able to communicate these experiences effectively (Padilla-Díaz, 2015). The inclusion criteria encompassed participants who were current founders of their venture, with Sydney being their business base, and confirming that the business had been operating during the COVID-19 economic and social conditions. Founder entrepreneurs were identified by their online presence and through referrals. Our selection process included canvassing public social channels such as Google and LinkedIn for suitable candidates and contacting potential participants via their public details to gauge interest. We used these platforms as (i) contact was less likely to feel like an invasion of privacy, being that all details were publicly supplied with the individuals themselves, and (ii) it made it easier to gauge the individuals' locations, business status and role in the venture. Interestingly, the utilisation of LinkedIn allowed us to find many suitable candidates due to the connections automatically suggested by the platform. The participants that were identified satisfied the initially prescribed criteria, with the additional factor of being interested in participating and contributing to knowledge in the field.

Participants founded businesses in a variety of industries, including employment, cybersecurity, consulting, compliance, data, education, employment, finance, technology, marketing, hospitality and food. Consistent with current work on entrepreneur demographics, over 80% of the sample were male and had an average age of approximately 40 years old, which was expected, given that this was consistent with research in the area with the average age of a founder entrepreneur was found to be 35–44 years old (Parker, 2009). The notable homogeneity within the sampled group can be viewed through the lens of a deliberate research strategy employed in various studies within the field of entrepreneurship. Many scholars have advocated for more homogenous samples in research endeavours to isolate the specific attributes or factors under investigation effectively. This approach has been recognised as valuable in minimising potential confounding variables that may emerge from diverse participant demographics. By focusing on a relatively uniform demographic group, this study gains the advantage of a reduced likelihood of extraneous factors influencing the results.

Intriguingly, only three participants had undertaken entrepreneurship education programs, although nine had a family background in entrepreneurship. Additionally, 13 participants had

previous entrepreneurship experience. The sample included a mix of SMEs and larger organisations, some of which have participated in capital raises up to the value of approximately \$51m. The variation in industry and size allowed for a richer collective of data from which to glean insights. Additionally, there was a variation in reported financial contributions from government programs set up to aid businesses during the crisis. Some members of the sample reported receiving financial support. However, it is beyond the scope of this work to determine exactly how many actually did, noting that participants were in their right not to answer this question, and many chose not to respond.

Interviewees helped provide further referrals for the identification of additional participants through their own interconnected networks of founders. This snowball sampling method (Palinkas et al., 2015) allowed us to interview additional founder entrepreneurs who could contribute to the sample and assist in clarifying the emerging understanding being collected. As with many other phenomenological studies, the sample was small to allow for a richer level of understanding, analysis and theoretical generalisation (Doern, 2016; Eisenhardt and Graebner, 2007; Hycner, 1985). Consistent with other phenomenographic studies, where using 10–20 participants is the norm (Salaz et al., 2018), we chose to include a small pool of participants to ensure rich data we adequately recognised. This method is a very common stopping point in qualitative interview-based studies, where all potential categories of experience have ceased to provide variation (Yin, 2015). Despite the curated sample size, over 200 potential participants were screened for this project. It was challenging to recruit the sample, not only due to the delicate nature of the topic of research but also due to the inherent practical challenges faced in this domain. Identifying the entrepreneur and then gaining their trust, with busy schedules, has been found to lead to entrepreneurs often declining to participate in academic interviews or surveys (Hannafey, 2003). Despite this challenge, saturation was reached at approximately n=11 interviews, and the following seven interviews confirmed the initial data collected.

Table 3.1: Demographics of participants

Participant Code	Business Industry	Business Age (approx. in years)	Business Size (approx. no employees)	COVID Revenue Impact (Self-reported)	FE Age (approx. in years)	FE Gender	FE Previous Business Experience	FE Formal Entrepreneurship Education Experience	FE Entrepreneurial Family Background	FE Solo Founder
FE1	Employment	7	25	S	35	M	N	Y	N	N
FE2	Cybersecurity	7	200+	I	40	M	Y	N	Y	N
FE3	Consulting	7.5	4	I	45	F	N	N	N	Y
FE4	Compliance	4	2	D	55	M	N	N	N	Y
FE5	Data	3	10	S	30	M	Y	N	N	Y
FE6	Education	4	15	I	50	M	Y	N	N	N
FE7	Employment	10	50	I	40	M	Y	N	Y	N
FE8	Education	4	15	I	35	M	Y	N	N	Y
FE9	Finance	2	55	I	40	M	N	Y	Y	N
FE10	Technology	3	30	U	40	M	Y	Y	U	N
FE11	Marketing	6	80	I	45	M	Y	N	N	N
FE12	Finance	2	55	I	45	M	Y	N	Y	N
FE13	Finance	13	45	I	40	M	Y	N	Y	N
FE14a	Hospitality	6.5	60	S	40	M	Y	N	Y	N
FE14b	Hospitality	6.5	60	S	40	F	Y	N	Y	N
FE15	Food	7.5	10	S	30	F	N	N	Y	Y
FE16	Education	6	100–150	I	35	M	Y	N	Y	N
FE17	Education	7.5	8	I	50	M	Y	N	N	N

Founder entrepreneur (FE) Male (M) Female (F) Yes (Y) No (N) Increase (I) Stable (S) Decrease (D) Unknown (U)

Data Collection

In-depth, semi-structured interviews with founder entrepreneurs began in December 2020, one full year after the beginning of the crisis, allowing for the true impact of uncertainty and economic change to be felt. Interviews were completed in the duration of a 4-month period up to the end of March 2021. During the period of data collection, the research landscape was profoundly influenced by the exigencies of the COVID-19 pandemic, which prompted a series of stringent measures in Australia. Mandates enforcing the universal use of masks were implemented to mitigate the transmission of the virus, reflecting a nationwide commitment to public health and safety. Concurrently, the imposition of lockdowns necessitated that individuals remain confined to their homes, engendering a transformative impact on daily life and interpersonal interactions. The impacts of these restrictions likely permeated the experiences of the study participants, introducing a contextual layer that impacts the nuances of their responses. Such contextual factors, representative of the unprecedented challenges posed by the pandemic, merit thorough consideration in the analysis, offering a comprehensive understanding of the dynamics that shaped the participants' perspectives and experiences during the time of inquiry. Collecting data while the impacts of the crisis were still presenting themselves allowed for greater understanding of rich experience, meaning that long-term memories would not have to be relied on leading to more accurate results, mitigating the challenge that recall-bias would have posed (Coughlin, 1990). The audio-recorded and transcribed interviews lasted for between 40 minutes and two hours each.

Prior reviewing of the literature allowed for interview questions to be based on theoretical, archival data synthesis. Questions were based around broader topics, followed by sub-questions with allowance for unique insights that had the potential to reveal themselves as a result of the initial trigger questions. Initial topics included questioning around getting to know the participant (e.g., "What has been your experience with entrepreneurship growing up and throughout your life?"), success (e.g., "What is success to you, in the context of your business and entrepreneurship journey?"), crisis (e.g., "To what extent is the current COVID-19 economic and social crisis affecting your business?"), marketing activities (e.g., "Have your marketing strategies changed as a result of this crisis"), and other practices (e.g., "Are there any other things which we have not covered which you changed as a result of the current economic crisis or which you think would be related to the themes we have been discussing?"). Sub-questions and probe questions were included to gather as much rich data as possible but were reserved for when it was naturally appropriate and were not included in all interviews. These probing questions reduced the risk of potential for varying

understandings of the questions between participants as well reducing the risk of perceived ambiguity within answers by allowing participants to clarify the phenomena in their own ways (Barriball and While, 1994).

Data Analysis

This study combines archival data and interviews to achieve insightful, qualitative results with the aim to better understand the experiences of founder entrepreneurs. Literature on entrepreneurship, entrepreneurial attributes, exogenous shocks and entrepreneurial operation (economically, socially, personally and commercially) in crises were all examined to inform the interview data analysis, found in Chapter Two of this thesis. Hence, the interview transcripts were examined for evidence of previously known entrepreneurial attributes. The attributes that were used for the analysis were based on Kerr, Kerr and Xu's (2018) thorough review of the literature to date. Therefore, the attributes utilised in this study were: agreeableness, conscientiousness, extraversion, neuroticism, openness (OCEAN OR Big-5), innovativeness, locus of control, need for achievement, risk attitude and self-efficacy. The use of these particular attributes echoes the academic standard of current attribute-based entrepreneurial academic work.

Each of these attributes have measurement tools associated that have been previously useful in gauging their association with entrepreneurial activity in various contexts. The OCEAN factors are typically measured using various 4–7 point Likert-scale questionnaires based on the contextual needs of the respective study (Macdonald et al., 2008; Rogers et al., 2006; Turiano, 2013; Vernon et al., 2008). Ten-Item Personality Inventory (TIPI) scales are also often utilised when a short-form approach is favoured (Brumbaugh et al., 2013; Mead et al., 2021; Quintelier, 2014; Robinson, 2009). Entrepreneurial Self-efficacy is most widely measured using Chen's (1998) 22-item multidimensional measure with items derived from previous literature (Newman et al., 2019). There is no uniform measure for innovativeness in entrepreneurship, despite many suggestions for measurement over the years (Hurt et al., 1977; Kerr et al., 2018). Locus of control has an absence of an entrepreneurship-specific measurement scale with Rotter's 1966 scale most utilised in this area (Schjoedt and Shaver, 2012). Need for achievement is often studied alongside locus of control, but often, a Thematic Apperception Test is used to measure this attribute (Hansemark, 1998). Risk Attitude is often measured using 7-point Likert scales of psychometric scales for risk propensity and risk perception (Willebrands et al., 2012). While these tools have been noted, their purposes are far too granular and impersonal for research work like this study, with many approaches being detailed survey or questionnaire-based

which work to define and quantify rather than to deeply understand. As deep understanding is the purpose of this phenomenological work, the tools became unhelpful and unusable. For this reason, the approach to coding the interview transcripts did lend itself to a more traditionally phenomenological, theme-based analysis of data with an emphasis on “the lived experience of people involved, or who were involved, with the issue that is being researched” (Groenewald, 2004) in order to understand and decode the way ordinary members of society attend to their everyday lives (Gubrium and Holstein, 2000) using grounded theory analysis.

There is a reluctance among phenomenological researchers to prescribe specific techniques of data collection, analysis and communication (Groenewald, 2004; Holloway, 1997). Groenewald quotes Hycner (1999) in their work when explaining that, “[t]here is an appropriate reluctance on the part of phenomenologists to focus too much on specific steps” as imposing the prescription of certain techniques would, “do a great injustice to the integrity of that phenomenon”. Phenomenological researchers have been compared to painters or poets in that they laboriously practice their artform of sharing knowledge in individual, creative ways (Vandenberg, 1997). With this in mind, an adaptive approach was taken to data analysis. We began by reading each transcript twice each to ensure accuracy. We then identified attributes based on those discussed previously from the literature. The phenomenological approach allowed for emergent attributes to also be noted. Any emergent nodes were re-processed to determine whether any common groupings existed that were absent in the existing literature. This allowed for a final list of attributes to be created, which is important for the description of the phenomenon (Fereday and Muir-Cochrane, 2006).

Thematic coding is a credible phenomenological method for data analysis, particularly for in-depth interviewing (Flynn and Korcusk, 2018). Our approach has been adapted from Colaizzi (1978) who believed that successful phenomenological research would, “accurately describe the chosen phenomena as seen through the eyes of study participants” (Phillips-Pula et al., 2011) through the use of dialogue and asking the right questions to elicit accurate descriptions of experience. Colaizzi’s approach has been utilised countless times in phenomenological, health sciences studies, despite not often being used in entrepreneurship research (Morrow et al., 2015; Sanders, 2003; Shosha, 2012; Wirihana et al., 2018). Colaizzi outlines a multi-step process for successful phenomenological research. An adapted version of this process is what has been utilised in this study. The process undertaken is as follows: transcripts were read and re-read to ensure great understanding, significant statements were extracted in the form of quotes, attributes were identified and clustered based on significant statements and prior literature review, meanings and contextual translations were generated

from the attributes and new attribute findings have been incorporated. For lesser known attributes, we provide further description in the findings section on how each attribute was coded. These attributes were expressed in a number of ways, including explicitly through speech such as, “I think this is a way of being inherent in entrepreneurs”, or more covertly through deconstruction of comments such as “I took apart electronic devices as a child and rebuilt them in my spare time” which could be translated into the attribute of Curiosity through the communication of a past behaviour.

To ensure the validity of this approach, this paper utilises a Gioia Grounded Theory approach, knowing that “people know what they are trying to do and can explain their thoughts, intentions, and actions”, meaning that a thoughtful and precise translation of participants’ discourse in their own words ultimately leads to accurate findings (Gioia et al., 2013). Data was collected and abductively analysed where themes were delineated using an initial open coding process where similar concepts were grouped using descriptive labelling (Corley and Gioia, 2004). Axial coding was then undertaken next to deduce relationship between descriptions to later lead to an overarching higher-order theme. Due to the abductive nature of this enquiry, existing themes were straightforward to code for, whereby little axial coding was necessary. However, the emergent themes found in this paper required a greater depth of coding rigour to accurately deduce the core selective code each attribute was later labelled with. A consolidated account of the coding structure used can be found in Figure 3.2. The Grounded Theory process, along with Colaizzi’s thematic approach to phenomenological data coding have provided a strong base for this work. A visual summary of this process can be found in Figure 3.1.

A step that Colaizzi uses that has been excluded from this work is to generate definitions of each attribute. While attributes will be described and analysed in the findings section, making note of what they mean within the context of this study, definitions are already in existence as the literature on entrepreneurial attributes definition is exhaustive. Re-defining these existing attributes would not provide a significant contribution. Additionally, Colaizzi’s step of validating new descriptions with participants has been omitted for the same reason: academic consensus already exists. Coding was conducted by hand using NVIVO analysis software to allow for notetaking and easier node associations to be developed and moved where needed. This was necessary as accounts were often very long and streams of thought tended to start and finish in unanticipated places.

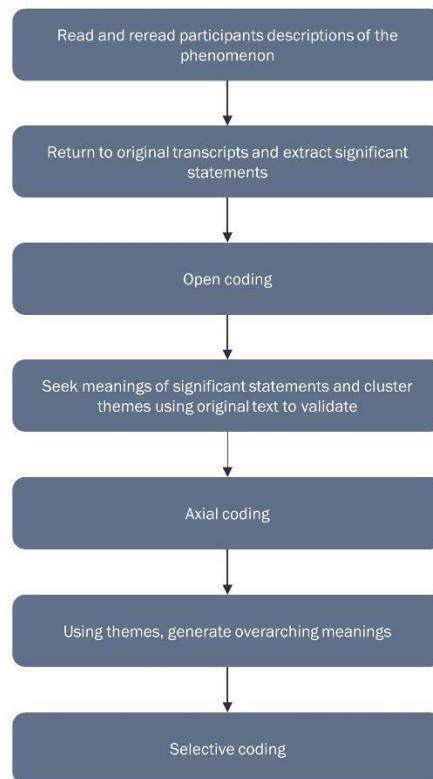


Figure 3.1: Coding structure based on Phillips-Pula et al., 2011; Colaizzi 1978; and Corley and Gioia, 2004.

Findings

To further delineate the process of understanding the entrepreneurial experience, in-depth interviews with entrepreneurs present a valuable opportunity to decipher their attributes shaping their entrepreneurial behaviour. A comprehensive content analysis can unveil these attributes, discerned from the entrepreneurs' verbal descriptions. Entrepreneurs often reveal their cognitive facets through their articulations, shedding light on their intricate psychological makeup. For instance, expressions of a preference for networking events, actively seeking collaborations and thriving on social interactions may signify high levels of extraversion. When entrepreneurs emphasise meticulous planning, precision and strict adherence to schedules in their descriptions, it points to a conscientious disposition. Alternatively, the use of terms like "feeling anxious", "fearing the unknown", or "experiencing stress" may indicate higher levels of neuroticism. Entrepreneurs who frequently articulate their eagerness to explore uncharted territories, experiment with novel solutions and embrace change demonstrate characteristics aligned with openness. When discussing the absence of

agreeableness, entrepreneurs may employ expressions such as "challenging decisions", "assertive choices" or "prioritising business interests over cooperation". This suggests a tendency to prioritise personal or business objectives over harmonious relationships or agreeable interactions with others. The presence of phrases such as "comfortable with uncertainty", "drawn to challenges" or "welcoming risk" reflects an open and risk attitude. Moreover, discussions featuring inventive concepts, pioneering approaches and a penchant for exploring original ideas are indicative of innovativeness. When entrepreneurs articulate an unrelenting drive for surpassing goals, seeking personal accomplishments and striving for success, it unveils a strong need for achievement. Expressions of unwavering self-assurance, belief in one's capabilities and an unyielding commitment to overcoming challenges convey high self-efficacy levels. Entrepreneurs describing their control over outcomes, attributing success to their actions and emphasising personal influence exhibit an internal locus of control. Furthermore, expressions of curiosity, an eagerness to learn and a perpetual quest for knowledge reveal a curious disposition. When entrepreneurs speak of ethical values, moral principles and a commitment to socially responsible actions, it showcases pro-ethical self-assessment. Moreover, frequent expressions of discontent, dissatisfaction with the status quo and an unyielding desire for improvement epitomise a Dissatisfaction Mindset. Phrases like "results-driven at any cost", "the ends justify the means" or "flexible ethics" might signal a focus on outcomes that sometimes transcend conventional ethical boundaries and point towards Bullshit Praxis.

The coding structure and language utilised in this study to produce a nuanced understanding of the entrepreneurial experience can be found in Table 2 and Figure 2 respectively.

Table 3.2: Example of Attribute Representations in Verbal Articulation

Attribute	Example of Typical Definitions/Words/Meanings/Descriptions/Actions	Verbal Articulation Example
Extraversion	Active, Energetic, Outgoing, Assertive, Positive (McCrae and John, 1992)	"Thriving in social settings", "seeking collaboration"
Conscientiousness	Organised, Thorough, Productive, Self-Disciplined (McCrae and John, 1992)	"Meticulous planning", "strict adherence to schedules"
Neuroticism	Anxious, Worrying, Self-Conscious, Hostile (McCrae and John, 1992)	"Feeling anxious", "fearing the unknown" ¹⁴
Openness	Insightful, Introspective, Ideas (McCrae and John, 1992)	"Eager to explore uncharted territories", "embracing change"
Agreeableness (lack of)	Forgiving, Sympathetic, Altruistic, Compliant (McCrae and John, 1992)	"Challenging decisions", "assertive choices", "prioritising business interests over cooperation"
Risk Attitude	Likelihood to engage in risky activities, high to low, domains such as financial decisions, health, recreational, ethical and social (Weber et al., 2002)	"Comfortable with uncertainty", "welcoming risk"
Innovativeness	Interest in new things, including their creation, adoption and situational effects of doing so (Midgley and Dowling, 1978)	"Inventive concepts", "pioneering approaches"
Need for Achievement	Intense, prolonged, repeated efforts to accomplish something difficult and determination to win (Murray, 1938)	"Drive for surpassing goals", "striving for success"
Self-Efficacy	Individual belief in their own capacity to act in ways necessary to achieve outcomes (Bandura, 1982)	"Unwavering self-assurance", "belief in capabilities"
Locus of Control	Belief that internal, rather than external, forces have control over outcomes in individuals' lives (Rotter, 1954)	"Emphasising personal influence", "controlling outcomes"
Curiosity	Emergent—discussed in findings and discussion sections	"Eagerness to learn", "perpetual quest for knowledge"
Pro-Ethical Self-Assessment	Emergent—discussed in findings and discussion sections	"Commitment to socially responsible actions"
Dissatisfaction Mindset	Emergent—discussed in findings and discussion sections	"Desire for improvement", "dissatisfaction with status quo"
Bullshit Praxis	Emergent—discussed in findings and discussion sections	"Results-driven at any cost", "flexible ethics"

¹⁴ This attribute pertains to instances wherein founder entrepreneurs exhibited heightened anxiety or challenges in coping. This attribute may be intricately linked to shifts in mental health and the profound impact of the COVID-19 crisis on psychological wellbeing, a complex yet crucial area of investigation. This topic merits further exploration, albeit beyond the present thesis's scope.

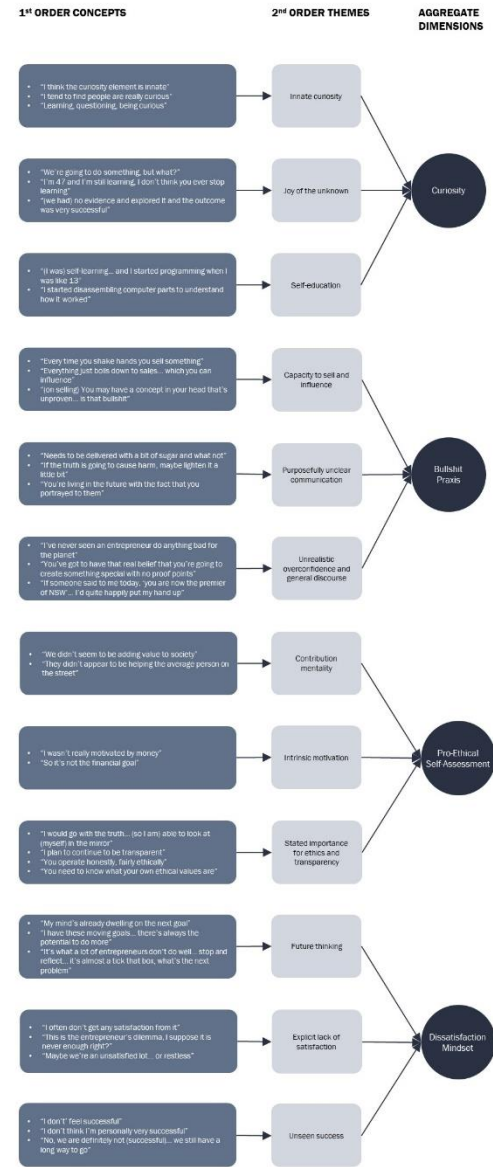
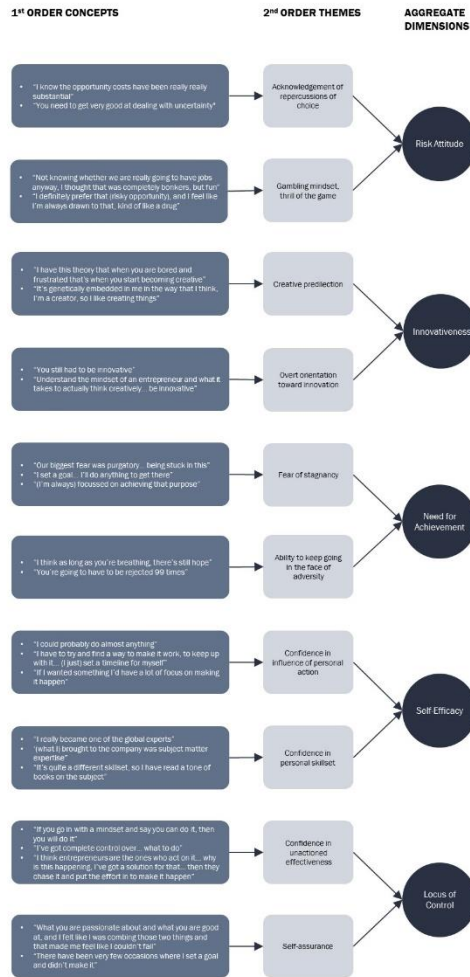
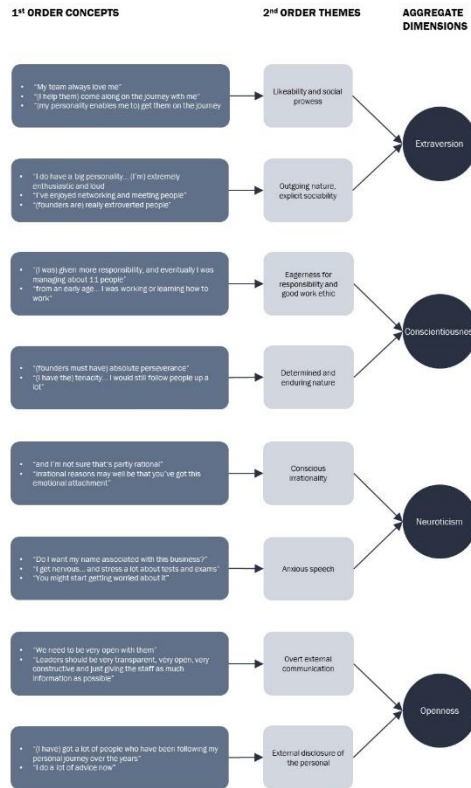


Figure 3.2: Coding data structure

The interview transcript data has been organised according to specific attributes, facilitating the examination of the research questions delineated earlier. Presented below is a table encompassing all attributes discussed in this study, along with the percentage of interviews in which they were featured. This tabulation serves to gauge the relative salience of each attribute. A more detailed discussion of these findings can be found in the Discussion section. This section begins by discussing the least prevalent traditional entrepreneurial attributes, progressing to the most prevalent. It then discusses the novel attributes that the research produced.

Table 3.3: Amount of interviews featuring each attribute

Attribute	Percentage of interviews identified as being present in (rounded)
Need for Achievement	94%
Self-efficacy	82%
Innovativeness	82%
Curiosity	82%
Bullshit Praxis	82%
Risk Attitude	76%
Pro-Ethical Self-Assessment	71%
Dissatisfaction Mindset	71%
Locus of Control	65%
Openness	35%
Extraversion	29%
Conscientiousness	24%
Neuroticism	18%
Agreeableness	0%

The majority of participants, despite acknowledging the pandemic's existence, did not cast it in a negative light. Instead, they perceived the crisis as an opportunity for growth and expansion. This view may be related to a typical entrepreneurial attribute and is discussed in the following sections. Consequently, many participants did not regard COVID-19 as a crisis at all. As such, some attributes were explicitly evident when discussing the COVID-19 crisis, while others did not show an explicit link. As such, in Figure 3.3 we provide an updated model of entrepreneurial attributes that present through interviews during the COVID-19 crisis. We include the attributes which were presented most frequently during the interviews on the left, in order to least frequently as the model moves towards the right. In this case, the order is: Need for Achievement, Self-Efficacy, Innovativeness, Curiosity, Bullshit Praxis, Risk Attitude, Pro-Ethical Self-Assessment, Dissatisfaction Mindset, Locus of Control, Openness, Extraversion, Conscientiousness, Neuroticism and Disagreeableness. On the top of the model, the crisis is represented. We have indicated the possible connection of each attribute with the crisis, as denoted in the interviews. High likelihood of association is in the colour green, with a solid arrow. Medium likelihood of association is in the colour blue, with a dotted arrow. Low likelihood of association is in red.

Association was determined through a cross-tabulation of codes, in the same method of analysis and described in the methods section, where attributes were marked when discussed or when they emerged in the context of direct crisis discussion as well as crisis mitigation strategies. Attributes referencing crises or COVID-19 in under 20% of the sample, as compared to the total sample referencing the attribute, were labelled low possibility of association. Attributes referencing crises or COVID-19 over 20% of the sample were labelled medium possibility of association. Attributes referencing crises or COVID-19 over 50% of the sample were labelled high possibility of association.

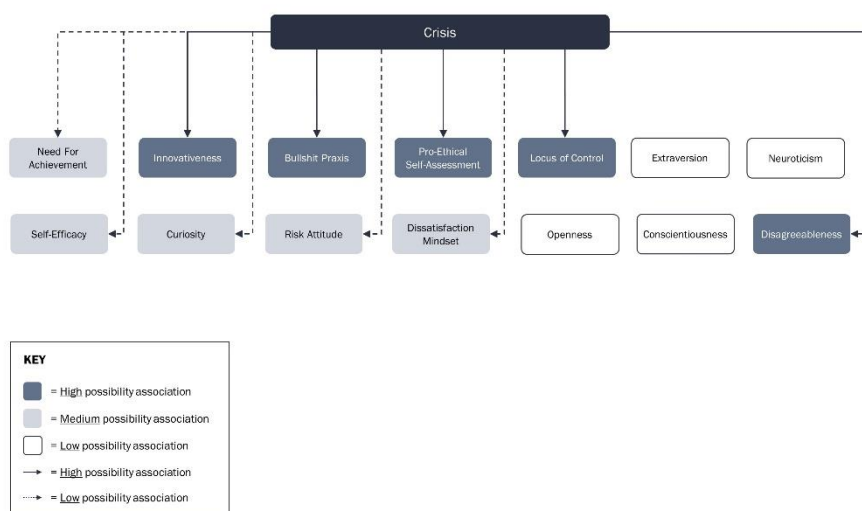


Figure 3.3: Model of entrepreneurial attributes

Agreeableness

Examining the interview data on the entrepreneurial attribute of agreeableness revealed a marked shift towards disagreeableness, indicating a distinct departure from agreeable tendencies, especially in the backdrop of a crisis.

During discussions on the challenges posed by a crisis, entrepreneurs exhibited pronounced traits of disagreeableness. In such circumstances, participants demonstrated a proactive and assertive stance, seizing opportunities amid adversity. For instance, one entrepreneur stated, "And so I think in a time of crisis, it's also looking at the opportunity ahead. So I believe I think there's some mixed understanding around this, but I think there's probably some level of truth deep down" (FE16). This statement not only highlighted a proactive approach but also underscored a departure from agreeable traits, as the entrepreneur emphasised the imperative of capitalising on opportunities during challenging times, rather than acknowledging its challenges.

Similarly, another entrepreneur expressed a readiness to make calculated decisions during crises, a disposition closely aligned with disagreeableness when discussing the pandemic's impact on their business. They stated, "We're in a situation here. If we don't do anything, we die. We could do something we don't (fail). And if we don't, fantastic. If we do well, we gave it a freaking shot" (FE6). This perspective not only showcased a willingness to challenge the status quo but also demonstrated a decisive action-oriented approach, characteristics associated with disagreeableness when discussing the impact of the pandemic.

These specific verbal articulations and perspectives provided a basis for labelling the absence of agreeableness within the interviews. The expressed characteristics, including a proactive approach and readiness to challenge adversity, are key indicators of disagreeableness in entrepreneurship literature. Thus, the interviews not only confirm the absence of agreeableness but also serve as a valuable illustration of how the observed expressions and behavioural articulations can be indicative of unobservable attributes. This observation underscores the crucial link between verbal articulations, behaviour and the underlying attributes.

The interviews consistently highlighted that the crisis significantly influenced these entrepreneurs' behaviours and perspectives, in that their disagreeableness was evidenced in their response to a suggestion of crisis impact on business outcomes. The proactive responses and assertive decision-making portrayed a departure from conventional

agreeable traits, emphasising the dynamic impact of crises on the expression of agreeableness or disagreeableness.

Minimally Featured Attributes

Four attributes were identified in approximately 18–35% of the interviews. Although this percentage may not be as substantial as that of other attributes, it still holds significance. Reporting the prevalence of these attributes contributes to an enhanced understanding of entrepreneurs' experiences during the COVID-19 crisis for the research community.

Table 3.4 includes some representative quotes of the minimally featured attributes found in this research study. While it would not be possible to include every single mention of each attribute that was found, the representative quotes and respective meanings provide examples for the ways each attribute was spoken about. These will be discussed in more detail in the following section.

Table 3.4: Minimally featured attributes and their representative quotes and meanings

Attribute and Context	Representative Quotations	Meaning
<p>Conscientiousness</p> <p>Context: When discussing the reasons for their success as entrepreneurs, particularly when times get tough</p>	<p>“You still have got a sense of purpose in your own work ethic” (FE4)</p> <p>“So absolute perseverance. I can't tell you how important it is saying I'm leaving phone messages as well. So I do have their phone number, I do try and use phone rather than email. And yes, I leave a message, leave a message, leave a message, leave a message” (FE3)</p>	<p>Achievement-oriented conscientiousness was highly valued</p> <p>Persistence was an aspect of conscientiousness highly valued</p>
<p>Extraversion</p> <p>Context: When discussing their attractiveness as people</p>	<p>“But everybody, my team always loved me. And I think the combination of subject matter expertise and having an aspect of I can, I can inspire people and they respect me and I can get them along on a journey were I think two really important factors that I brought to this company” (FE2)</p> <p>“You know, I think, you know, a lot of founders of start-ups are really, really extroverted people that are very passionate and can believe they can reach the stars”. (FE12)</p>	<p>A sociable and energetic nature allowed for effective team building</p> <p>An extraverted personality is necessary for successful founders</p>
<p>Neuroticism</p> <p>Context: When discussing reasons for conducting activities, particularly in times that provide more risk opportunity</p>	<p>“So I remember I get so nervous for that...or if I was very studious at school. So I always would study and stress a lot about tests and exams. And I think that's because I always just really wanted to do well”. (FE15)</p> <p>“And I'm not sure that that's partly a rational reason or for a rational reason. Irrational reasons may well be that you've got this emotional attachment to your child, and you don't want to let it affect the rational. The rational part would be. Have most of my paper wealth tied up in this company, 20 or 30 per cent of it, would you just trust the random CEO you've hired not to run that into the ground and vaporise your wealth? That would be the rational reason for saying and certainly the question to be asked for a founder. But I do want to leave. I suppose you want to find somebody that you're very concerned is better than you in most aspects and kind of let them run with it from that point on”. (FE1)</p>	<p>Neuroticism may be associated with need for achievement</p> <p>Neuroticism is seen as irrational by entrepreneurs, personal neurotic traits are deemed rational</p>
<p>Openness</p> <p>Context: When discussing their success dealing with people</p>	<p>“So I think we did some great work in making sure that our staff were (informed of what was going on), we got a lot of disclosure to give them that comfort from just the knowledge Some great leaders should be very transparent, very open, very constructive, and firstly, just giving the staff as much information as possible.”(FE1)</p>	<p>Openness in communication is important to retaining relationships during the crisis</p>

	<p>"I think if you're a person that's open to, you know, open to shift your perspective and understanding a situation as it is, I think that you'd be more open to (being) receptive and open to letting these lessons. I mean, it's pretty hard. Like I mean, I really thought I genuinely thought that having more choice for the customer was better, but I didn't think about it". (FE16)</p>	<p>Entrepreneurs may be overly open with the sharing of their lives and life experiences</p>
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Conscientiousness

The manifestation of conscientiousness among the entrepreneur participants appeared to be more nuanced than initially expected. The interviews unveiled two primary forms of conscientiousness expression. Firstly, the interviews provided instances of individuals who, due to their inherent impatience and proactive nature, sought to bypass bureaucratic processes in large corporate environments, opting for a more direct and action-oriented approach. This perspective is well articulated by one of the participants, who stated, "I'm such an impatient person. I want to drive through things, and it doesn't sit very well in large corporates" (FE12). This behaviour is consistent with the essence of conscientiousness in terms of goal-oriented impulsiveness and task facilitation.

The second form of conscientiousness expression was more implicit and aligned with traditional definitions of conscientious behaviour. This was evident in the actions and career journeys of participants who displayed diligent work ethics, goal-oriented actions, and a strong sense of responsibility. For instance, one entrepreneur recounted their professional trajectory, which showcased their persistent and conscientious approach to work and management responsibilities: "I was given more responsibility, and eventually I was managing about 11 people revenues of probably 30, 40 million dollars a year from our own trading and client commissions" (FE1). This conscientious action was echoed by (FE2), "which kind of meant that from an early age, I would probably say around 11 or 12 years old, I was kind of working or learning how to work in kitchens and in restaurants and bars and all that kind of stuff".

While the interviews did not yield direct evidence linking conscientiousness to crisis management, a nuanced interpretation unveils potential indirect impacts. When participants responded to questions related to the crisis, such as those exploring openness or innovativeness, a distinct pattern emerged. Participants articulated responses suggesting that the crisis presented an opportunity for them to act differently. Although this doesn't directly relate to conscientiousness in the explicit discussions of crisis, the thought processes driving different actions during the pandemic infer a level of planning and self-discipline—traditional hallmarks of conscientiousness (McCrae and John, 1992). It is plausible that the crisis expressed traditional conscientious attributes in more extreme ways, such as innovative action, deviating from conventional expressions like meticulous planning. This underscores the adaptive nature of conscientiousness as an entrepreneurial attribute, shedding light on its potential manifestation in unconventional yet substantial ways during crises.

Extraversion

The examination of interview data pertaining to the attribute of extraversion revealed a multifaceted perspective on the role of extraversion in entrepreneurial behaviour. For instance, one participant emphasised the importance of networking and connecting with people, highlighting the positive impact of assisting others and building relationships, “I did like people and, you know, I like helping people as well.... I've enjoyed networking and meeting people along the way. It's been part of one of the awesome parts of the entire journey” (FE11). Another participant acknowledged the dynamic nature of communication and the need to adapt on the fly during interactions, indicating an extraverted trait of adaptability: “It's all conversations, there is no perfect next sentence. You've got to be able to do it all on the fly and stuff. It's quite a different skill set” (FE3). Furthermore, although not traditionally defined as extraversion, approximately 29% of participants indicated a keen interest in the sales process. They stressed the significance of entrepreneurs being able to enthusiastically promote their business or idea to investors, staff and customers. Some participants even shared their experiences of enlisting co-founders who possessed higher levels of extraversion, considering it vital for the success of their entrepreneurial ventures, “(on the topic of being able to sell) So I think those startup founders that can recognise that and step aside at the right time for the organisation is really very helpful” (FE12).

The observations made during the interview analysis underscore the intricate nature of extraversion within the entrepreneurial context. While evidence of extraversion was found in the interviews, there was limited direct evidence to suggest a distinct relationship between extraversion and crisis management. Despite the lack of direct evidence linking extraversion to crisis management, a nuanced examination reveals potential indirect impacts.

Participants, when responding to crisis-related inquiries, particularly in sections addressing Bullshitting or pro-ethical self-assessment, articulated responses indicating that the crisis provided them with an opportunity to act differently. For instance, their active participation in communication strategies with investors, customers and staff aimed at fostering a non-inflammatory response to business decisions during the pandemic showcased an adapted form of extraversion. While this may not align directly with traditional extraversion in the explicit discussions of crisis, the underlying positivity and assertiveness in navigating challenging situations resonate with the essence of extraversion (McCrae and John, 1992). The crisis could have expressed traditional extraversion attributes in more extreme ways, such as over-communication, deviating from conventional social collaboration. This highlights the potentially adaptive nature of extraversion, shedding light on its potential

manifestation in unconventional yet impactful ways during crises, shaping entrepreneurial behaviour in unforeseen dimensions.

Neuroticism

The exploration of interview data pertaining to the attribute of neuroticism reveals a nuanced relationship between this trait and entrepreneurship. In the interviews, the attribute of neuroticism was not prominently featured in most participants' responses, aligning with the existing literature's general assertion regarding low neuroticism levels in entrepreneurs. Nevertheless, there were exceptions among the participants who exhibited higher levels of neuroticism, particularly in the context of their entrepreneurial journeys, notably during the crisis. These instances became most apparent when participants openly discussed their emotional irrationality and anxiety, specifically concerning trust, business decisions and self-perception.

For example, one participant expressed concerns about compliance, risk appetite and reputation associated with business decisions, indicating a heightened sense of anxiety and an inclination to overthink these matters, "How much do we have to comply with, and that's based upon the risk appetites, based upon the culture, and we get a feel that way if there's something wrong here and do I want my name associated with this business" (FE4). Importantly, most participants who identified their neuroticism also acknowledged its irrational nature. They demonstrated an ability to navigate and mitigate the impact of their neurotic traits, recognising their predominantly unhelpful nature in the context of entrepreneurial success. This observation aligns with the existing literature's perspective on the matter: "I remember starting to get this feeling that I've got to launch this business because I don't think someone else is going to come up with the idea and do it. And so I think that also really pushed me as well. You might start getting worried about" (FE15).

Despite these observations, there was limited direct evidence in the interview verbatims to establish a conclusive relationship between neuroticism and crisis management. While a direct link between neuroticism and crisis management remains unclear in the interview verbatims, a closer examination reveals potential indirect impacts. Participants, when responding to crisis-related inquiries, particularly in sections exploring locus of control, expressed responses indicating that the crisis afforded them an opportunity to act differently. For instance, their proactive seizing of control and navigation of unknown circumstances to prevent potential business harm during the pandemic showcased a potentially adapted form of neuroticism. Although not a direct alignment with traditional neuroticism in the explicit discussions of crisis, the underlying reactivity to the unknown during the pandemic resonates

with the essence of neuroticism (McCrae and John, 1992), albeit traditionally centred around anxiety. The crisis could have expressed traditional neuroticism attributes in more extreme ways, such as over-reactivity in control-taking exercises, deviating from conventional anxiety manifestations. This sheds light on the potentially adaptive nature of neuroticism, indicating potential unconventional yet impactful expressions during crises that influence entrepreneurial behaviour in distinctive ways.

Openness

Two distinct forms of openness emerged in the study. The first pertained to openness in the context of information sharing, which some participants emphasised as crucial for business success, especially during times of crisis. Interestingly, this form of openness primarily extended to employees and co-founders but did not always encompass external stakeholders such as investors and customers: “(speaking with stakeholders) We need to be very open with them” (FE1); “I've kind of built up a reputation as an expert just because of the content and the insights that I give. I do a lot of advice now” (FE4).

The second notable form of openness was personal openness to communication among the participants. This attribute was difficult to attribute solely to entrepreneurship or an entrepreneurial personality but was nonetheless intriguing to document. Many participants displayed a remarkable level of personal openness by candidly sharing their emotions and life experiences during the interviews. They perceived this level of personal openness as vital to their happiness and success. It is conceivable that personal openness may contribute to entrepreneurial success, although further exploration is needed to establish a direct link: “And so I guess it is just embodying it or just my own, just expressing my own passion. Fairly unguarded. It is attractive to people, and I think I think it's authenticity, I think it's sincerity” (FE17); “Can we go make myself better? So that kind of not really openness, but that kind of selfishness of thinking, it's worth having” (FE10).

In the analysis of the interview transcripts, there was limited direct evidence of a relationship between openness and crisis management. Despite the absence of direct evidence linking openness to crisis management in the interview transcripts, a nuanced exploration reveals potential indirect impacts. Participants, when addressing queries related to the crisis, notably in sections exploring risk attitude, innovativeness or curiosity, conveyed responses that hinted at the crisis providing an opportunity to act differently. For instance, their proactive steps to grow their businesses in novel ways and the continuous pursuit of learning and development in the face of uncertainty indicated a form of openness. While this may not align directly with traditional openness manifestations in the explicit discussions of crisis, the

underlying processes of insightful exploration and embracing change resonate with the essence of the openness definition (McCrae and John, 1992). This suggests that the pandemic could have expressed traditional openness attributes in more unusual ways, such as over-innovation driven by a desire to embrace change and diverging from conventional exploration of uncharted territories. This sheds light on the potentially adaptive nature of openness, indicating potentially unconventional yet impactful expressions during crises that shape entrepreneurial behaviour uniquely.

Highly Featured Attributes

Five attributes were notably featured in over 70% of all interviews, demonstrating their pronounced significance in comprehending entrepreneurial experiences within crises. These attributes serve as key focal points for delving into the nuanced realm of cognitive and personality attributes and may potentially contribute to a broader understanding of this domain.

Table 3.5 includes some representative quotes of the highly featured attributes found in this research study. While it would not be possible to include every single mention of each attribute that was found, the representative quotes and respective meanings provide examples of the ways each attribute was discussed. These will be explored in more detail in the following section.

Table 3.5: Highly featured attributes and their representative quotes and meanings

Attribute and Context	Representative Quotations	Meaning
<p>Innovativeness</p> <p>Context: When determining pathways to success during a difficult period</p>	<p>“I think it probably depends on the business and with something like innovative and new, I think it would be challenging to know yourself”. (FE5)</p> <p>“a lot of employees, you want to hire that driven, innovative mindset. And the risk of that is potentially they do it for a few years and they jump and do their own thing. Right. You can't prevent that. The consequence of trying to stop that is you hire the wrong people. So I you know, I think I think that's just the nature of where we are”. (FE12)</p>	<p>Innovativeness is recognised as important and valued, but it can be difficult to truly innovate and come up with something novel</p> <p>Entrepreneurial personalities respond to new things in an action-oriented manner</p>
<p>Locus of Control</p> <p>Context: When discussing their roles as entrepreneurs and their personal impact</p>	<p>“How would you leave your employees basically, you know, destitute and without a job? So unfortunately, you are not in charge of your own destiny. I mean, yes, you are. You could just decide to get rid it tomorrow. But it comes with a serious costs, of course, that is frankly too high”. (FE1)</p> <p>“So then I tried basically I realised I had two skill sets. One was one skill set was obviously my just energy and drive. And then so I started learning to areas sales and then marketing because I just basically figured that if I can add value to someone else, I shouldn't have any issues with a career at any stage”. (FE13)</p>	<p>Entrepreneurs believe that they have complete influence on all aspects of their ventures</p> <p>An internal locus of control can lead to skills building exercises</p>
<p>Need for Achievement</p> <p>Context: When discussing their impact as it related to their own self-concept</p>	<p>“So even now, when I think about the future and I said, well, I want to build a business that is going to do X, then I know that with focus that I will probably that I probably shouldn't get there based upon like the historical track record of achieving things. And I know it sounds very arrogant and I'm kind of listening to myself, but if it is, I think it's stubbornness. I'm very stubborn on trying to kind of get what I want”. (FE2)</p> <p>“What I like the idea of is, is leaving a bit of a legacy”. (FE7)</p>	<p>Stubbornness and need for achievement may be the action-oriented response of an entrepreneur who fears failure</p> <p>The legacy of a business is entwined with the legacy of the entrepreneur</p>
<p>Risk Attitude</p> <p>Context: When discussing the importance of entrepreneurs to society, particularly during crises</p>	<p>“It's actually pretty easy, but there's a lot of game in the world about, you know, you play the game right where the right outfit and you do the right thing and you get to the right places. That's probably a risky or scarier or less socially acceptable game, or you have something someone else wants and I'll give you anything for. The few things are actually good enough if you are actually good enough to actually considering that people will find you and just it because they want people of selfish, greedy, which is good enough”. (FE10)</p>	<p>A risk attitude is expected by entrepreneurs, the belief is held that this is necessary for entrepreneuring</p>

<p>and how they are unique in their attitudes to difficult situations</p>	<p>“So I would say that I have taken lots of small risks from, you know, from leaving home at the age of 16 and moving on my own, facing a number of situations where I have navigated on the unknown and have being able to develop myself to be comfortable with that, to immigrate into Australia, on my own 10 years ago on climbing my way here”. (FE13)</p>	<p>The personal activities an entrepreneur takes are often higher risk in nature, less care is applied to taking these activities</p>
<p>Self-efficacy</p> <p>Context: When determining their effectiveness as entrepreneurs and the impact this provides to their ventures</p>	<p>“I went into cybersecurity and I really became one of the global experts into how to break into computer systems. And I think I was I was I can't say I am anymore because it's been a while, but I was really good at it. And I think that's kind of one level of knowledge that I kind of brought to the company is subject matter expertise”. (FE2)</p> <p>“And I always think there's two things. One, what are you passionate about and what are you good at? And I felt like I was combining those two things and that made me feel like I couldn't fail”. (FE15)</p>	<p>Self-belief in industry-based skill execution is important for entrepreneurs</p> <p>Taking measured action on skills may lead to entrepreneurial success</p>

Innovativeness

The interview transcripts reflect participants' views on creativity and innovativeness as fundamental to entrepreneurship. They contend that this attribute is an essential element of an entrepreneurial mindset, underpinning problem-solving, inspiration, and innovation. Entrepreneurs articulated how creativity, an aptitude for creation being an inherent element of innovativeness (Midgley and Dowling, 1978), allows them to tackle challenges with inventive and inspiring solutions, enabling them to navigate the step by step process towards finding resolutions, “understand the mindset of an entrepreneur and what it takes to actually think creativity, be inspiring, be innovative, and actually look at a problem that you're passionate about and working through the step by step process to come up with a solution ... Is the innovations of the creativity, the communication. What is it that a robot doesn't have that humans have? And how do you take advantage of that” (FE6). Participants shared anecdotes of how their innate curiosity and creativity led them to explore technology, learn to program, and embrace innovative thinking: “And I have this theory that when you are bored and frustrated, that's when you start becoming creative. And like my mum never allowed me to get out of the house too much. So I was always kind of stuck at home. But I had a computer and I was bored. So what did I do? I started disassembling the computer to understand how it worked” (FE2).

In addition to creativity, innovativeness was closely linked to opportunity recognition within the entrepreneurial journey. Many participants believed that their capacity to identify new ideas, products or services was rooted in creativity and innovation. They considered this ability to be a hallmark of entrepreneurship, as it facilitated the recognition of opportunities, “to look at problems or challenges or opportunities on their merit, I think that has what has built that entrepreneurial mindset” (FE2). This trait became particularly evident when entrepreneurs expressed their preferences for times of crisis, viewing them as opportunities to discover innovative solutions and adapt to changing circumstances: “I'm one of those people that likes a crisis. I don't like people dying and things. But when the chips are down, that's the best time to look for opportunities” (FE7). The entrepreneurs' descriptions of actively seeking opportunities during challenging times underscored a mindset that perceives crises not merely as obstacles but as platforms for creative problem-solving and growth.

The analysis of the interview transcripts demonstrates the vital role of innovativeness during crises such as the COVID-19 pandemic. The attribute of innovation appeared in high saliency in addressing challenges, enhancing adaptability and identifying opportunities for growth, change and adaptation, as described by the sample. It is apparent that

innovativeness contributed to the participants' crisis response, enabling them to navigate these challenges more effectively. Moreover, the presence of innovativeness as a lifelong attribute suggests that it was not solely a product of the crisis but a pre-existing characteristic that supported participants in managing the crisis. An example of this finding is evident when comparing the discourse of FE2 on innovativeness, from creativity in early childhood: "And I have this theory that when you are bored and frustrated, that's when you start becoming creative", to discussing crisis-based opportunity recognition, "to look at problems or challenges or opportunities on their merit, I think that has what has built that entrepreneurial mindset". This study underscores the significance of innovativeness as an attribute that may not only be essential to entrepreneurship but also plays a crucial role in coping with crises.

A compelling narrative emerges connecting this entrepreneurial innovativeness to the earlier-discussed attribute of disagreeableness as a business problem in the face of the pandemic. The innovative actions and the interest in creating new solutions hint at a non-compliant stance, where these entrepreneurs actively resist cognitively embracing any negative business effects the pandemic may have on their companies. Their proactive and creative approach aligns with the assertiveness and decisive action associated with disagreeableness, portraying a unique blend of attributes contributing to their entrepreneurial responses.

Locus of Control

Throughout the interviews, participants discussed locus of control as an attribute characterised by self-belief that can lead to entrepreneurial success, especially in the face of external challenges like a crisis. The interviews reflected how a proactive and internal locus of control could empower individuals to affect positive changes in their businesses in response to the external pressures of a pandemic.

Several participants exhibited an exceptionally high level of self-belief and a strong internal locus of control, suggesting that they felt they had full control over external forces. This mindset allowed them to perceive the impact of the pandemic on their ventures as minimal. As a result, they reported increased revenues during this challenging period. Their unwavering self-belief seemed to shield them from the negative effects of external forces, contributing to their business success during the crisis: "If you go into a mindset and say you can do it, then you will do it, you know, and it's just a case of the of the mindset. And one thing that I'm learning more and more about is the courage in a self-belief, and the courage is actually superseding the self-belief. You've got to have courage to do it" (FE6); "one of the

things that I've realised about myself very early on is that when I set myself a goal and I say, hey, (name), you need to do this. I'm going to almost do everything to get there. And in in my life, there's been very few occasions where I set a goal and I didn't make it" (FE2).

It is noteworthy that many participants exhibited an over-inflated sense of self-belief and internal locus of control, which appeared to diminish the influence of external factors. Interestingly, these entrepreneurs did not attribute their success to the crisis; instead, they believed that the crisis had no impact on them due to the strength of their internal locus of control. However, their self-reported financial stabilisation and growth suggest that this attribute played a significant role in supporting them during the crisis rather than rendering them impervious to its effects: "It's not that I can't do it because I think I could probably do almost anything, but I just don't want to do it and I'm not motivated to do it...But the benefit for me is that I've got complete control over when and how I invest my time and also what I do" (FE8); "I think as long as you're still breathing, there's still hope" (FE1).

This investigation underscores the pivotal role of locus of control in an entrepreneurial context during a crisis. The interviews demonstrate that the observed expressions of this attribute (i.e., how the entrepreneurs explained their reactions and behaviours to this challenge) are closely tied to the perception of control over outcomes, and this mindset can significantly impact entrepreneurs' ability to navigate external challenges. As such, it is clear that an internal locus of control influenced entrepreneurial action in this sample.

Need for Achievement

In this study, it became evident that the need for achievement was often closely linked to a profound fear of failure. Participants expressed a strong desire to see the outcomes of their entrepreneurial actions, and this desire was intrinsically tied to a deep-rooted fear of failure rather than being driven solely by the need to achieve for its own sake. This raises the question of whether the attribute being observed is truly a Need for Achievement or whether it is more accurately described as a Fear of Failure. While the link between these two concepts is intriguing and worthy of further exploration, this paper focuses on presenting the findings.

Participants frequently described their fear of being stuck in a state of mediocrity, characterised as "purgatory", where their businesses achieved some degree of success but lacked substantial growth. The fear of stagnation, or of neither failing nor succeeding, seemed to be a significant motivator for these entrepreneurs. This fear-driven need for achievement was a powerful force, pushing them to take on new challenges and resist

complacency, “When (name) and I started this and I'm going to use some religious terminology like purgatory, our biggest city wasn't a quick success or failure. Our biggest fear was called purgatory, which was essentially being stuck in this. It's good enough. It's got some traction. Keep stringing you along. And then one day you wake up and it's ten years and it's and it's neither failure, it's neither a success... So that was the biggest fear is kind of meandering along kind of a scenario and still definitely a fear” (FE1); “I think that for me to sort of had this insatiable quest for more I don't mean more money. I just mean more challenges. You at some point have to say, I can do that. And then at some point someone says, okay, you've got the job right. And then you have to walk away and go, oh, shit. I actually don't know how to do it, but I've just sold this guy something and now I have to go back and make it work. And I think that most sort of you just lose. That's how they get started. And I just don't know if that ever goes away” (FE8).

The connection between the Need for Achievement and the sense of self-worth and self-perception was also evident in the interviews. Many participants acknowledged that they closely tied their personal value to the success of their businesses. In essence, their goals, objectives and self-worth were intricately connected to those of their businesses. Consequently, business achievement became crucial in sustaining high levels of self-perception and self-worth. Conversely, the failure of their businesses could lead them to view themselves as failures as well, “So I would say I've achieved the singularity in that I am the business and the business is me. There is nothing else. So yeah, yeah, I probably have a large amount of my own self-worth and ego tied up in this”. (FE5); “Definitely, obviously, achieving your objectives is a measure of success” (FE11).

While the interviews presented a clear indication of the presence of a Need for Achievement, direct evidence linking this attribute to crisis management was somewhat limited in verbal discussions. However, when participants were questioned about their responses to the crisis, particularly in the section addressing Bullshit Praxis, their articulations strongly suggested that the crisis provided them with an opportunity to act differently. For instance, they actively engaged in communication strategies with investors, customers and staff to garner positive responses to their business decisions amid the pandemic. Although this may not directly relate to the need for achievement in the explicit discussions of crisis, the thought process exhibited during the pandemic reflects a clear determination and success orientation inherent in the definition of the need for achievement (Murray, 1938). It is plausible that the crisis expressed the traditional need for achievement attribute in unique ways, such as determined and directed communication strategies, rather than the conventional intense and prolonged efforts typically associated with achieving success. The interviews, while not

always explicitly illustrating changes in the manifestation of this attribute during the crisis, provide indirect insights into how a strong need for achievement may have assisted entrepreneurs in navigating the challenges posed by the pandemic.

Risk Attitude

Interestingly, the high-risk activities mentioned by participants were not limited to venture-related decisions. Rather, they frequently discussed personal risks, such as relocating to new countries and leaving stable employment to pursue entrepreneurial ventures. The participants' narratives revealed that they perceived risk as a calculated endeavour. They demonstrated an ability to weigh the potential consequences of their actions while embracing high-risk situations. This calculated risk-taking was often associated with the notion that embracing risk was a skill in itself, and understanding how to mitigate those risks was a crucial aspect of entrepreneurship, "I quit my job literally a day later and started my own business in the UK in a share house and being over there. But it was literally six people living in a two bedroom flat in London, working from the lounge room. And literally that was it ... And then I think that fundamentally there's got to be an element of being of being able to take a risk... It's just about being able to type, I think, a calculated risk. So it's understanding that, yeah, this is risky, it's high risk" (FE8); "So I said to my boss, I'm thinking of quitting anyway. Can you get me a redundancy, which gave me an extra like 10 weeks of pay so I had enough money to at least last probably nine months just without needing any income. So I had enough capital behind me on top of all that. I split up with my girlfriend a few months before that. So single, no kids, perfectly healthy, young enough to still have energy. So it felt like everything was in my favour" (FE5).

These risk-oriented behaviours were contrasted with the risk-averse nature of larger organisations. Many participants had prior experience working for larger organisations and voiced their frustrations with the lack of flexibility and risk-taking in such environments. This aversion to risk-averse behaviours within large organisations, which they perceived as leading to stagnation, was one of the key reasons cited for their departure from traditional employment. It was not only that these individuals were inclined towards risky behaviour, but they also seemed to have limited tolerance for risk-averse cultures that conflicted with their values: "But it goes counter to large organisations or large organisations and it's a very risk averse. So they put framework's up to slow things down to minimise risk" (FE12); "Why don't we combine the savings that we have and kind of give at least two years to see if we can bring some ideas to market... So the opportunity costs have been substantial, really, really substantial. And to be honest, I don't know how people do it, that a decent amount of

existing savings to both put into the business and to also keep your skills without a salary for two or three years. I have no idea how people do it” (FE1).

It is worth noting that while participants expressed high-risk attitudes, some of them also recognised the potential downsides of this approach. They acknowledged that being overly risk-averse might lead to better outcomes in certain situations, demonstrating a degree of self-reflection. However, the majority of participants did not subscribe to this perspective and continued to emphasise the value of taking calculated risks in their entrepreneurial journeys, “And but then it's like any risk appetite. So if you think that's the age of if you want to play here. Fair enough. I choose to play here, so I'm going to be more and more cautious than someone who may not be. But yeah, I think the best way” (FE4); “We're very risk averse. We like the good life and we're not willing to risk it in order to achieve really bigger than big goals” (FE7).

While the interviews clearly indicated the presence of a strong Risk Attitude, direct evidence linking this attribute to crisis management was somewhat limited in verbal discussions. However, when participants were questioned about their responses to the crisis, particularly in the section addressing locus of control, their articulated responses strongly suggested that the crisis provided them with an opportunity to act differently. For instance, they took decisive action in relation to their business offerings and strategies in response to the pandemic. This proactive approach was aimed at ensuring continued success in such a challenging time. While this may not directly relate to Risk Attitude in the explicit discussions of crisis, the thought process exhibited during the pandemic reflects a clear commitment to success assurance strategies in an uncertain environment. Actively taking steps to continue despite the changes in the economic setting is closely related to the definition of Risk Attitude (Weber et al., 2002). It is plausible that the crisis expressed the traditional Risk Attitude attribute in unique ways, such as determined and continued business action during a time of uncertainty—continuing into the unknown, as opposed to the conventional active attempts to engage in risky activities. The interviews, while not explicitly illustrating changes in the manifestation of this attribute during the crisis, provide indirect insights into how a strong Risk Attitude likely played a role in assisting entrepreneurs in navigating the challenges of the COVID-19 crisis.

Self-efficacy

Self-efficacy, in this context, was closely linked to the belief that personal actions, achievements and leadership played a pivotal role in the survival and success of their ventures. It was not limited to any specific type of action but encompassed a general

orientation towards taking action to achieve goals and exceed expectations. Participants demonstrated a willingness to push hard, take calculated risks and exhibit a strong drive to open doors and make things happen: “So I'm willing to push pretty hard to try and get a foot in the door because I know how much difference it can make” (FE3). This action-oriented mindset was attributed to their belief in their ability to achieve results and success by exceeding goals: “Yeah, absolutely, I think entrepreneurs, you have to be self-driven, otherwise how can they exist?” (FE11).

Moreover, self-efficacy was expressed through unwavering self-belief, describing a profound confidence that enabled entrepreneurs to tackle challenges with courage and persistence. This self-confidence and belief went beyond specific areas of expertise and instead encompassed a broader mindset of questioning the status quo, embracing self-belief, and demonstrating a willingness to challenge established norms and conventions, “Yeah, it's I believe it's self-confidence and belief in this and having the self-belief of questioning the status quo and something that I believe maybe your generation is awesome at this and asking the question why or what or how” (FE6). This self-belief was intertwined with an innate stubbornness to achieve one's objectives and a relentless focus on achieving desired outcomes, “So even now, when I when I when I think about the future and I said, well, I want to build a business that is going to do X, then I know that with focus that I will probably that I probably shouldn't get there based upon like the historical track record of achieving things. And I know it sounds very arrogant and I'm kind of listening to myself, but if it is, I think it's stubbornness. I'm very stubborn on trying to kind of get what I want” (FE2).

The interviews also highlighted the close connection between self-efficacy and the pursuit of outcomes and goals. Participants firmly believed that their willingness to try new things, combined with a high level of self-discipline, contributed to better venture outcomes. They acknowledged their inherent impatience, strong focus on achieving outcomes, and a lifelong pattern of discipline and hard work that drove their determination to make things happen: “I am impatient so and I'm very outcomes driven, but I've had that ever since I was a kid. So if I wanted something, first of all, I was very, very focused. So if I wanted something, I'd have a lot of focus on making it happen. I think that's really I think that that is innate in the discipline. And I was always very hard working in discipline. So I think this combination of being very hardworking and disciplined and focused on outcomes, I think that was definitely true since I was I was a kid” (FE12). This combination of being outcomes-driven, focused, hardworking, and disciplined was seen as a key contributor to their venture success.

The theme of beginner's luck and the courage to try new things emerged as related to self-efficacy. Entrepreneurs attributed their willingness to venture into the unknown and take

calculated risks to their sense of beginner's luck, paired with a readiness to embrace the unknown: "I'm going to go so far off the off the rulebook and make up. Of course, I'm not even going to ask for permission and just do it. And then it gave me the courage to go. You know what? Facebook concept doesn't really work the way I want. How hard could it be to build software as great not knowing what you don't know? And it gave me the beginner's luck and beginners willingness to go, I'll just try it if I knew now what the journey was going to tell until there's no way I would have done it in all honesty. But that's the great thing. And there is a whole science around. Beginner's luck and jumping off because you don't know and you get some really good results" (FE17).

While the interviews provided ample evidence of self-efficacy, direct evidence linking this attribute to crisis management was somewhat limited in verbal discussions. However, when participants were questioned about their responses to the crisis, particularly in the section addressing locus of control, their articulated responses strongly suggested that the crisis provided them with an opportunity to act differently. For instance, they took individually decisive action in relation to their business offerings and strategies in response to the pandemic, aiming to achieve success in such a challenging time. While this may not directly relate to self-efficacy in the explicit discussions of crisis, the thought process exhibited during the pandemic indicates a clear level of individual attempts to achieve action-oriented success despite or in spite of the pandemic. This idea aligns closely with the definition of self-efficacy, which is the belief in an individual's capacity, through action, to influence or achieve an outcome (Bandura, 1982). It is plausible that the crisis expressed the traditional self-efficacy attribute in unique ways, such as determined and directed success-oriented action, as opposed to the conventional focus on individual effectiveness. The interviews, while not always explicitly illustrating changes in the manifestation of this attribute during the crisis, provide indirect insights into how self-efficacy significantly assisted entrepreneurs in managing the challenges posed by the COVID-19 pandemic.

Novel Attributes

Through a thorough examination of the interview data, four prominent attributes emerged, collectively found in over 70% of the respondents. Significantly, these attributes were absent in the original model proposed by Kerr and were notably underrepresented in the existing literature pertaining to entrepreneurial attributes. This substantial finding underscores the existing gaps in our comprehension of these attributes and their adaptations in the context of crises. It is essential to acknowledge that this study appears to be the pioneering effort in amalgamating these four attributes in an exploration of entrepreneurship and entrepreneurial

attributes during times of crisis. While it is not claimed that these attributes are exclusively associated with crises, their evident prevalence among the participants during the interview period is noteworthy.

Table 3.6 provides a selection of exemplary quotes denoting the novel attributes identified in this research study. Although it is not feasible to encompass every individual instance of these attributes, the chosen quotes and their associated connotations serve as illustrative instances of how each attribute was articulated. Subsequent sections will offer a more comprehensive discussion and analysis of these attributes .

Table 3.6: Novel attributes and their representative quotes and meanings

Attribute and Context	Representative Quotations	Meaning
<p>Bullshit Praxis</p> <p>Context: When communicating a not-yet-existent deliverable to a client or stakeholder during the crisis</p>	<p>"I think as long as you believe as long as you believe that the fact is realisable on a very short notice, like when you when you when you can go X in the next three months rather than five years, then to me you're not lying. You're just you're just kind of you're living in the future and just predicting what is what it is going to happen anyway. So that's still truthful, I think, in my opinion". (FE2)</p> <p>"You've got to stretch. I think yeah, I think I think sometimes you're doing you're creating a special an entrepreneur. You're going into a business where there's not quite a solution or the need is not met yet. There's an unmet need. And then the technology to come up with that solution is not quite de or untested or unproven. So are a lot of unknowns. Right. So you need to stretch in order to be able to solve for the unknown. I suppose that's what I mean". (FE9)</p>	<p>Fantasy and storytelling is an important element of entrepreneurial selling</p> <p>Stretching the truth is imperative for success in the startup sphere, especially when seeking investment</p>
<p>Pro-Ethical Self-Assessment</p> <p>Context: When communicating the venture position during the crisis to both internal and external stakeholders</p>	<p>"we're also I'm I am transparent now that we're actually making money. And it's not a disaster. I am. And I plan to continue to be transparent with the people in the business as well about where we're actually financially". (FE3)</p> <p>"And I also think, secondly, just being open and transparent all of the time, not when it suits you, is important. And that helps because it means that it's efficient. That means people know that what I say is what is going to happen. And I think that that form sort of, I guess, was of trust without us having to actually do a deal or do any work together. They just feel like, well, that's someone that I guess is going to do the right thing, is trustworthy. And so I think that that's important. And I think underlying that, it's about just being, I guess, quite humble is the right word". (FE8)</p>	<p>Entrepreneurs believe themselves to be open and transparent in their internal and external communication</p> <p>Entrepreneurs condemn unethical and secretive business practices, and they believe these to be untrustworthy</p>
<p>Dissatisfaction Mindset</p> <p>Context: When reflecting on personal and venture success despite any external challenges</p>	<p>"Well, I think because there's no end, right. Like you can't have. Like, what did you really covet when you were young that you wanted to have and then you got it and you had it for like two weeks and it just became regular again, like, if you think about that, once you</p>	<p>Entrepreneurs feel that they will never be satisfied with anything they achieve</p>

	<p>reach any level, if you can stay there, like, that's no longer the challenge and you want to move on". (FE11)</p> <p>"That's such a hard question. I don't know personally, but lots of other people tell me, you know, or will congratulate for me, I, I say this internally and I say this to my team if I feel it myself as a failure, because I it's that endless of I'm here, but I should be here. In my mind, as like, why haven't I done this faster and why haven't I built quicker? Why didn't I know this earlier? You know what? And it's all my fault". (FE13)</p>	<p>Personal and business success are closely linked for entrepreneurs</p>
<p>Curiosity</p> <p>Context: When reflecting on the precursors to their entrepreneurial success</p>	<p>"Well, I think there's a natural curiosity towards this topic. So I think the curiosity element is innate. I'm curious about quite a few different things, whether it's a physics topic or this is a topic, I'm curious, naturally curious. But different people would like to have a propensity to us being curious to what's one thing or another, right? Like, I've met a lot of scientists and they're really not curious about the story, then naturally curious people, that's for sure. But not curious about the finance will most of the time. In fact, most of them would totally reject business altogether. But obviously, something evil is even a topic. So the only be curious about science and maybe philosophy, that sort of stuff. Right. Which I never had that sort of bias towards any topic for me and any topic was interesting. But then obviously my curiosity shifted from science to business that this will give you a good insight". (FE9)</p> <p>"When I'm with people, maybe it I tend to find people are really curious, but that's the lens that I'm seeing life through. So I'm probably more tuned in to seeing that attribute in other people. Whereas if I were looking for how not engaged people are, I'd see that a lot more. But I'm seeing a certain viewpoint of life. So I see it and I go, yeah, my students are disengaged, but I know they're really curious. I just have to find it or I have to get in the door or something". (FE17)</p>	<p>Self-directed lifelong learning is an innate attribute of entrepreneurs</p> <p>Entrepreneurs seek curiosity both internally and externally</p>

Bullshit Praxis

A common theme arose when participants mentioned the concept of sales within their ventures. Many participants discussed the need to obscure the truth in some way to succeed in business. They believed that this practice was considered an essential aspect of business success and part of the norm. This aspect did not neatly align with traditional notions of lying; rather, it found a better fit in the concept of Bullshit, which revolves around being concerned with the outcome over factual accuracy. While the Bullshit literature is nascent, its manifestations are plentiful, and there were many depictions of truth obscuration in over 80% of the interviews. When coding the interview transcripts, we grouped any speech that fit into the categories of an unclarifiable unclarity, misalignment with a previously spoken truth or an avoidance of the truth together, as, initially, these comments were viewed as lies. However, when labelling this emergent attribute 'lying', we noted that the comments did not often have the ill-intent of direct deceit, as lying often does. Through a further review of the literature, we came across the concept of Bullshit, which aligned perfectly with the data we had collected. Thus, these comments have been labelled 'Bullshit'.

It is important to recognise that Bullshit can be regarded as an attribute marked by temporal dimensions, significantly influenced by the immediate situational context, as opposed to traditional attributes that tend to exhibit greater stability over time. We suggest that an unconscious Bullshit Praxis represents the temporal attribute that invariably accompanies the Bullshitting behaviour, as evident in the interview transcripts. This idea will be discussed in more detail in the discussion section.

The interviews showed that Bullshit Praxis was most directly evident when participants discussed the need to sell the truth, obscuring it to some extent to be more palatable or acceptable for their audience. This practice was particularly relevant when discussing communication tactics with investors, customers and staff during the crisis. Participants faced ethical dilemmas when deciding whether to present the truth about their business challenges as they were or to sugarcoat them for a more favourable reception: "So it's definitely a case of ethically selling...what we mean was the truth... you having to make an ethics call on whether people can take the scary truth or whether it needs to be just delivered with a bit of sugar or what not" (FE1).

Additionally, the concept of living in a fantasy emerged, revealing how some entrepreneurs create internal narratives that could be perceived by society as

unachievable or unrealistic. This internal fantasy narrative, however, was considered vital for entrepreneurial success. Participants recognised that their mindset and behaviours might not align with conventional thinking but believed that embracing such a narrative was crucial for success: “As a funny, because I almost say that sometimes when do you become Elisabeth Holmes, I like the founder of parent company Theranos. That was that was fantasy is an Elon Musk is a fantasist, but he's able to pull it off. So without fantasy, I don't think he would be doing anything. The I don't think I think it was locked up on that, too” (FE14a).

A striking aspect was the almost complete denial or oblivion exhibited by some entrepreneurs concerning the impact of the crisis. In their view, the disruptions to society and the economy were seen solely as opportunities for business growth. This notion went beyond self-belief and can be interpreted as a form of self-Bullshit, where the entrepreneurs believed that adverse events could not negatively affect them, disregarding objective facts. In this way, internal Bullshit Praxis was manifested in the denial of the pandemic's existence as a crisis, including its impact, acting as if it were business as usual. While Bullshit Praxis was evident in various forms, it was notably self-directed, influencing self-concept and entrepreneurial activities. This internal Bullshit concept appeared to play a significant role in entrepreneurial success during a crisis by almost denying the crisis's existence, thereby acting as if there were no disruption.

Pro-Ethical Self-Assessment

Pro-Ethical Self-Assessment is a salient attribute that emerged from the interviews with entrepreneurs, particularly in their discussions related to sales, communication practices, and stakeholder relationships during the crisis. This attribute signifies the entrepreneurs' strong emphasis on ethical and transparent communication strategies, which they consider vital to their ongoing success. These discussions concerning ethics and transparency stood out, with over 70% of the interviews mentioning these concepts. While this attribute is not conventionally explored in entrepreneurship literature, it closely relates to philosophy, specifically the domain of ethics.

The coding process for this attribute was straightforward, as it involved identifying explicit mentions of ethics and transparency within the interview transcripts. The participants frequently emphasised that they valued ethical and transparent communication and believed that these principles were integral to their self-concept

and their business's values, particularly in terms of stakeholder communications during the crisis. This specific focus on ethical values set it apart from the openness attribute mentioned earlier, which involved sharing unnecessary information. Instead, Pro-Ethical Self-Assessment represents a perception of truth and the desire to convey truthfulness as an element of one's self-concept.

Participants frequently expressed their commitment to transparency, particularly in their communication practices with stakeholders such as consumers, investors and staff. Transparency was perceived as a vital element in creating meaningful and lasting relationships. Entrepreneurs attributed much of their success during the crisis to their transparent communication, which engendered trust and loyalty among stakeholders and contributed to long-term relationships without a drop-off in consumer engagement. Some even noted that outward transparency with the public led to an increase in revenue growth during the crisis. This emphasis on transparency extended beyond business activities; it was intertwined with the entrepreneurs' perception of themselves as ethical and transparent individuals: "Some great leaders should be very transparent, very open, very constructive, and firstly, just giving the staff as much information as possible" (FE1); "I think it's really important to stay optimistic with your team, but also to be realistic and transparent with them as well. You know, the team's not stupid to understand what's going on, and I can see and I think for us, keeping them informed every step of the way was really important and giving them reassurance for me. My number one priority was not to lose anyone's job and after that, to not give anyone pay cut, which we managed to achieve and taking care of the team" (FE15).

While it was initially tempting to simply label this ethical and transparent mindset as the openness attribute mentioned above, it was presented very differently. Rather than openness to experience or the act of openness in sharing unnecessary information, this openness was more justified. When discussing this transparency, participants did not seem to act in a way that was transparent, nor did their speech reflect this. Instead, openness and transparency were used as indicators for the perception of truth that the participants seemed to want to convey, "And I actually feel guilty about that. We were doing the show I worked for in the industry. We're doing a lot of work to help the vulnerable customer. And here's me getting a nice, nice financial payout. And I thought I can hardly take the money and run, to be perfectly honest, because the industry does look after myself and my family very, very well" (FE4).

Dissatisfaction Mindset

Dissatisfaction Mindset is a prominent attribute that emerged from the entrepreneurs' discussions about their self-perceptions and venture success during the COVID-19 crisis. Despite self-reported revenue growth and business achievements, a striking theme of dissatisfaction in both their personal lives and business endeavours became evident. This attribute is unique and does not align with traditional entrepreneurial attributes. The term "Dissatisfaction Mindset" was coined to describe this deep-seated feeling of discontent, which contradicts their reported successes. Many participants also noted that they believed this to be a common experience among entrepreneurs, featuring in over 70% of the interviews.

What distinguishes the Dissatisfaction Mindset from other attributes, such as the need for achievement, is the participants' inability ever to feel satisfied or successful, regardless of the level of perceived success they achieve. Participants found it challenging to define specific metrics that, once achieved, would make them feel accomplished, indicating that the bar for success kept moving higher. This relentless pursuit of success often prevented them from experiencing satisfaction, as their minds were continually focused on the next goal. The idea was mainly comprised of explicit mentions of lack of satisfaction but also included feelings of failure. We named this lack of satisfaction, despite self-reported success, as Dissatisfaction Mindset due to its inconsistency with the facts, achieving goals set and having success.

Nearly all participants expressed their dissatisfaction, both in relation to their business success and their personal lives. Many entrepreneurs closely tied their self-views of success to the perceived success of their ventures, and some even referred to themselves as failures despite evidence of revenue growth during the crisis. This theme was prevalent throughout the interviews: "I don't feel successful is the short version of that. Yeah, I think like every other entrepreneur imposter syndrome is a hundred per cent is it is a massive challenge. And, you know, earlier in my career, I thought I was going to end up as CEO of a big business by coming up through the middle of the business. But then it just sort of became clear, especially coming from that life, back from that life" (FE3); "But it's this kind of constant waves that I think is an entrepreneur to be comfortable with that you constantly calling yourself a failure and then you need to get out of hand again to call yourself a success. But I think more often you would call yourself in yourself a failure than a successful person" (FE14a).

Interestingly, when prompted, participants noted that, no matter the level of perceived success they achieved, no matter the goals that they set and hit, they would never feel satisfied or successful. When asked for a set of metrics for which, once achieved, they would feel accomplished, most could not answer, highlighting that there is never an end because the bar keeps moving higher and higher. This mindset may allow for serial entrepreneurship to take place: “And the weird thing is that when I did achieve that whole goal, I often don't get any satisfaction from it. So then you kind of achieve it and even before you achieve it, but knowing that I am going to achieve it. My mind's already dwelling on the next goal. And so on even when you achieve that other like, well done. I'm like, yeah, whatever, let's go to the next one and you're already on the next journey” (FE2); “Although this is entrepreneur's dilemma. I suppose it is never enough, right? You always think you can do better. So as long as the business continues to grow, I'll be happy” (FE11).

Curiosity

Curiosity is a noteworthy attribute that emerged from the discussions with the entrepreneurs regarding their self-perceptions and the factors contributing to their venture success during the COVID-19 crisis. Many participants highlighted their inquisitive nature, which dated back to their childhood and adolescent years, where they frequently engaged in experimentation and learning, especially when it came to toying with ideas of venture creation. This curiosity appeared to be an integral part of their self-concepts, and it was mentioned in over 80% of the interviews. While it shares similarities with the attribute of innovativeness, it was not entirely encapsulated by this concept, leading us to label it as Curiosity.

The interviews revealed that most participants had exhibited curiosity throughout their lives, both now and during their earlier years. Their curiosity was not limited to business-related experiments but also extended to various aspects of their lives. Many participants were primarily self-taught in the skills they now employ in their ventures and did not rely on formal tertiary education to gain these skills. They often regarded their curious natures as innate and attributed much of their success to this quality. Moreover, they believed that their curiosity was instrumental in fostering self-directed learning and exploration, which motivated them to create and maintain their ventures during the crisis, “I think my own journey of learning was probably the most important because for four years I just obsessed and just went absolutely ballistic on anything personal development related travel around the world with Anthony Robbins, like on his

different sort of thing. I went to as many seminars, read as many books as I could, and then those just off that four year period, I was like still frustrated. So I just thought, now is the time to implement. Always thinking about what's next, fascinated by information, fascinated by people" (FE13); "I started to question my purpose in life, because whilst investment banking is very well compensated to me, we didn't seem to be adding any value society. So I was out there helping hedge funds and funds get good returns for their investors. But so what? They didn't appear to be helping the average person on the street. So that was the purpose, was with me for quite some time" (FE1).

This type of curiosity, which drives self-directed learning and action, appears to be a potentially innate attribute of entrepreneurs, or it might be the result of their entrepreneurial journey. More research is required to explore the different facets of curiosity and its role in entrepreneurship, particularly in times of crisis. However, the participants frequently stated that their ventures' creation was spurred by their inquisitiveness, emphasising that without this intrinsic curiosity, they might not have initiated their businesses: "And I have this theory that when you are bored and frustrated, that's when you start becoming creative. And like my mum never allowed me to get out of the house too much. So I was always kind of stuck at home. But I had a computer and I was bored. So what did I do? I started disassembling the computer to understand how it worked. And then I started kind of playing around with the programs on that computer. And as a result, I started kind of looking at learning examples of how people write code. And that's kind of how I started gradually learning how to program" (FE2); "And when I started to discover how food could help my body heal, I started to see results. Within a few months, my test results started improving. So I got really excited about the brand and the products of discovering. And I wanted to find a way to help market these brands and get other people excited about these products. I thought something as simple as food can help someone like me. You don't have to go through this. I just thought that was the most remarkable thing on Earth and that food industry is just fundamentally flawed. So it came from a passion" (FE15).

Discussion

The findings section of this study serves as a comprehensive analysis and deconstruction of entrepreneurial attributes during crises. Each attribute's representation was examined and contextualised with existing literature, providing a structured evaluation of the research objectives. This section synthesises these findings within the broader framework of the paper's aims, offering a holistic

perspective on how entrepreneurial attributes manifest in the experiences of founder entrepreneurs navigating their ventures amid the unprecedented challenges posed by the COVID-19 social and economic crisis.

Moreover, this section delves into the alignment of the findings with relevant entrepreneurship theories pertaining to their attributes. This theoretical integration is of paramount importance due to the existing limitations within the entrepreneurship attribute literature. The dearth of research in the context of crises, along with the emergence of novel attributes, underscores the significance of this theoretical grounding. It serves to enhance the clarity and depth of the findings, ultimately contributing to a more robust understanding of the nuanced relationship between entrepreneurial attributes within the entrepreneurial landscape.

In addition to elucidating the findings and their theoretical underpinnings, this section outlines crucial directions for future research within this domain. The recommendations aim to bridge existing gaps and offer tangible pathways for further exploration, fostering an enriched comprehension of the intricate relationship between entrepreneurial attributes and the challenges posed by crises.

It is imperative to emphasise that while this data was collected during the peak of the COVID-19 pandemic, and attributing the attributes to their prevalence during a crisis is reasonable, the application of this data is not temporally confined. Despite acknowledging the pandemic's existence, the majority of participants did not cast it in a negative light. Instead, they perceived the crisis as an opportunity for growth and expansion. This view may be related to a typical entrepreneurial attribute and is discussed in the following sections. Consequently, many participants did not regard COVID-19 as a crisis at all. Given this perspective, it would be inaccurate for this study to assert that the crisis directly induced the emergence of these attributes. For the most part, entrepreneurs incorporated each attribute as part of their typical business discussions rather than exclusively in the context of crisis-related discourse. These findings, therefore, hold value in delineating the manifestation of each attribute during this period and noting any alterations in emergence, recognising the possibility of emergence during exogenous shocks.

The inextricable interconnection between attributes and behaviours in the entrepreneurial context is indeed a salient facet of investigation. This study underscores that understanding the entrepreneurial attributes, their manifestations, and representations necessitates an acute discernment to unveil these attributes when the

study participants do not overtly articulate them. It is beneficial to consider the Theory of Planned Behavior (Ajzen, 1985) to interpret this intricate relationship, which outlines that attributes or mindset factors are intrinsically linked to normative beliefs or subjective norms. These subjective norms denote an individual's perception of societal norms and behavioural expectations. Subsequently, they lead to the formation of intentions and, in due course, their translation into actions. In essence, it is imperative to recognise that, on many occasions, an individual's attributes can be inferred from their descriptions of intentions, actions or behaviours, as these attributes invariably serve as the antecedents and determinants of such manifestations. This perspective aligns with the profound interdependence between attributes and behaviours, emphasising that the observation of the latter offers valuable insights into the former (Ajzen, 1985).

Moreover, many studies corroborate the foundational concepts of the Theory of Planned Behavior. Research by Armitage and Conner (2001) suggests that subjective norms and attitudes, which are closely tied to attributes, significantly impact an individual's behavioural intentions. This connection between attributes, subjective norms and intentions demonstrates that attributes serve as fundamental precursors to entrepreneurial behaviour.

Further insights into the relationship between attributes and behaviours can be found in the study by Hagger et al. (2002), which delves into the relationship between self-identity, attributes, intentions and behaviours. The research shows that individuals often align their identities with attributes that correspond to their intended actions, subsequently influencing their actual behaviours.

Consequently, this nexus between attributes and behaviours shows that the observation of entrepreneurial actions offers a window into the underlying attributes. As such, this interrelationship exemplifies that an analysis of behaviours can provide valuable insights into the attributes that drive them. Therefore, in qualitative studies, where attributes may not be explicitly stated, careful discernment and analysis by the researcher can serve as an essential tool to unveil these attributes. In essence, it demonstrates that entrepreneurial attributes are not isolated elements but integral components that significantly influence entrepreneurial actions (Ajzen, 1985; Armitage and Conner, 2001; Hagger et al., 2002).

In the realm of phenomenographic research, particularly through in-depth interviews, the relationship between entrepreneurial attributes and behaviours becomes

increasingly discernible. These attributes are not always overtly articulated by participants; thus, a methodical and contextually sensitive approach is necessary to uncover them. Through an intricate content analysis of verbal descriptions of their own behaviours provided by entrepreneurs during interviews, researchers can carefully reveal attributes. Within these descriptions, keywords, phrases or recurrent themes may reveal valuable insights into the cognitive facets of entrepreneurs. For instance, if an entrepreneur articulates a decision-making process as "analytical" or "cautious", it suggests attributes like conscientiousness or risk aversion. These identified attributes can be validated and refined through a comparative analysis across multiple contexts. In doing so, researchers contribute to the rigorous conceptualisation and measurement of these attributes within the field of entrepreneurship (Ajzen, 1985; Costa and McCrae, 1992).

The following discussion begins by exploring the novel attributes identified among entrepreneurs in this study. It then moves on to consider the other attributes highlighted in the findings section.

Novel Attributes

Bullshit Praxis

Bullshit, while a seemingly crass and inappropriate term, is a fairly well-researched concept within the domains of linguistic and philosophical academic discourse. First outlined in a 1986 essay by Harry Frankfurt, a Bullshitter is concerned with outcome over facts. A Bullshitter is not actively attempting to deceive, but rather attempting to affect a result by whatever means necessary, "The Bullshitter ignores these demands altogether. He does not reject the authority of the truth, as the liar does, and oppose himself to it. He pays no attention to it at all. By virtue of this, Bullshit is a greater enemy of the truth than lies are". Frankfurt goes further to explain that Bullshitting is often an unintentional and unavoidable act by the Bullshitter: "His interest in telling the truth or in lying presupposes that there is a difference between getting things wrong and getting them right, and that it is at least occasionally possible to tell the difference. Someone who ceases to believe in the possibility of identifying certain statements as true and others as false can have only two alternatives. The first is to desist both from efforts to tell the truth and from efforts to deceive. This would mean refraining from making any assertion whatever about the facts. The second alternative is to continue making assertions that purport to describe the way things are but that cannot be

anything except Bullshit". The other key voice in this space is G.A. Cohen, who discusses Bullshit as an "unclarifiable unclarity" (2002), where he argues that Bullshit is not the activity itself by the result of an activity, yet agrees that this is likely unintentional, "The Bullshit that interests me is relevantly parallel. I countenance a Bullshitter who has tried, but failed, to produce Bullshit—what comes out, by accident, is good sense—and I also countenance a lover of truth who utters what he does not realise is Bullshit". Cohen's main differentiation from Frankfurt is that he defines Bullshit as an unclarifiable unclarity and a result of an act, whereas Frankfurt defines it as a concern with outcome over fact and an act itself. It is clear from the transcripts that Bullshit in its many forms exists among the entrepreneurs interviewed for this study. Unfortunately, there is little understanding of Bullshit in the context of founder entrepreneurs, and even more so in crises. Consequently, it became crucial to acknowledge its presence, which, through this study, became noteworthy, particularly in regard to stakeholder relationship maintenance.

To date, the academic literature lacks extensive exploration of Bullshit, and this study is among the first to shed light on this concept within the context of founder entrepreneurs, particularly during crises. It can be seen as an attribute with temporal dimensions shaped by the immediate context and situation, while traditional attributes are more stable over time. We have described the discourse collected and evidenced above as Bullshit Praxis. To our knowledge, we are the first to illuminate this concept in any academic work. We define Bullshit Praxis as the transformation of an internal Bullshit concept into an unconscious Bullshit action being exercised by entrepreneurs. We recognise that this describes an interlinking between attribute and behaviour. We propose that an unconscious Bullshit Praxis is the accompanying temporal attribute to the inevitable Bullshitting or behavioural action described in many of the interview transcripts. The internal Bullshit concept clearly acts on the entrepreneurs' self-concept as well as entrepreneurial activity and communication with the outside world. Interestingly, agreeing with the way the literature defines Bullshit, the entrepreneurs are virtually unaware of their own unconscious Bullshit Praxis yet can identify and condemn this in others.

It is worth noting in this section that Bullshit can be regarded as an attribute marked by temporal dimensions, significantly influenced by the immediate situational context, as opposed to traditional attributes that tend to exhibit greater stability over time. As such, it has been included here as its presence became known through the interviews and

subsequent analysis in this study. However, this attribute may not be an explicit 'attribute' at all but rather a collection of temporal elements, from mindset to behaviour.

In the context of entrepreneurship, the distinction between mindset and behaviour is essential in the understanding of the intricacies of entrepreneurial Bullshit Praxis. Mindset refers to the inherent capacity of individuals to embody or express specific traits, often encompassing cognitive, behavioural and emotional elements (Kuratko et al., 2021). It looks into the foundational aspects of how entrepreneurs think, act, and mobilise, particularly under uncertain conditions (Haynie et al., 2010). The process of embodying the entrepreneurial mindset involves thinking beyond existing knowledge structures, developing adaptable cognitions and formulating higher-order cognitive strategies in pursuit of entrepreneurial goals.

Conversely, entrepreneurial behaviour is the observable actions and expressions stemming from an individual's entrepreneurial mindset. It involves the enactment of identified traits, such as self-determination or self-identity, which are fundamental to the entrepreneurship process (Kirkley, 2016). Entrepreneurial behaviour is not only a product of self-identity or self-determination but necessitates the demonstration of capabilities associated with traditional entrepreneurial traits. This behaviour is grounded in a set of values, beliefs and needs that provide intrinsic motivation, guiding individuals towards engaging effectively in entrepreneurial activities.

Praxis, as a concept, is a unique element relating to both mindset and behaviour. Originating from Aristotle, praxis describes intentional activities by which individuals strive to achieve specific goals through their conscious efforts (Wulf, 2006). Unlike mindset, praxis is a temporal concept that bridges the gap between thought and action. It acts as a mediator between consciousness and social being, emphasising the interrelation of human actions and social conditions.

Furthermore, the concept of praxis has evolved across different theoretical frameworks. In ritual studies, praxis is a central construct that goes beyond the duality of thought and action. It encompasses intentional, accepted ritual acts performed by individuals and groups, along with the practical knowledge forming the basis of these acts. It serves as a bridge that connects ritual actions, social conditions and practical knowledge, highlighting the performative and staged aspects of rituals (Ax and Ponte, 2008). This notion is reflected in the interview sample's descriptions of Bullshitting actions as typical and expected within their fields, viewed positively by some and negatively by others. An example of this would be less-than-transparent

communication strategies with investors and other stakeholders with an aim to represent business results more positively.

In essence, while mindset represents the innate predisposition to embody entrepreneurial traits, behaviour signifies the tangible expression of these traits. Praxis, situated temporally between mindset and behaviour, encapsulates the practical knowledge and intentional actions that characterise entrepreneurial behaviours. Thus, we suggest that an unconscious Bullshit Praxis represents the temporal attribute that invariably accompanies the Bullshitting behaviour, as evident in the interview transcripts. As such, this dynamic concept has been labelled as Praxis but is discussed in relation to attributes as this is the context of this study.

Furthermore, a noteworthy phenomenon emerged as certain entrepreneurs exhibited an inclination towards either denying or remaining oblivious to the profound impact of the crisis. For these individuals, the societal and economic disruptions triggered by the crisis were perceived exclusively as lucrative opportunities for business growth. This phenomenon surpassed mere self-belief and can be construed as a manifestation of self-deception or self-Bullshit. In this context, entrepreneurs operated under the illusion that adverse events held no potential to adversely affect them, a perspective seemingly detached from objective realities. This internal Bullshit Praxis, a conceptual framework steeped in self-deception, manifested in the outright denial of the pandemic's classification as a crisis, dismissing its existence and minimising its impact. This unique form of self-deception operated as a business-as-usual mechanism, effectively nullifying the disruptive nature of the crisis. While Bullshit Praxis demonstrated various facets, its notable self-directed nature significantly influenced the entrepreneurs' self-concept and entrepreneurial activities. This internal Bullshit dynamic emerged as a pivotal factor in entrepreneurial success during the crisis, adeptly navigating adversity by almost negating the very existence of the crisis, fostering an environment wherein disruptive forces were treated as non-existent.

Pro-Ethical Self-Assessment

The concept of ethics within entrepreneurship is well-documented in the literature. While ethics are more commonly explored through branches of philosophy, dictating the concepts of morals, values, right and wrong, and the ramifications that come with the choices we make (Singer, 2011), entrepreneurial ethics lends a focus to the external. Ethics studies in entrepreneurship look at sustainability through business activities and entrepreneurial practices, suggesting that, perhaps, more ethical

considerations may be necessary for entrepreneurs providing ventures which should ultimately better society (Ma et al., 2020; Surie and Ashley, 2008). Some studies also provide judgement on the personal ethics of entrepreneurs, commenting on the nature of the entrepreneurial experience as one that, often, inherently has an unethical element to the practice (Baron et al., 2015; Baumhart, 2017; Collewaert and Fassin, 2013). However, the personal self-assessment of ethics among entrepreneurs, especially during times of crisis, remains an understudied area. The significance of exploring this aspect arises from the participants' strong emphasis on ethical and transparent communication strategies during the COVID-19 pandemic.

This study is the first to explore the concept of Pro-Ethical Self-Assessment within entrepreneurs, particularly during a social and economic crisis such as the COVID-19 pandemic. While further research is needed in this area, it is evident that participants believed in their ethical and transparent nature and the way they conducted their business activities despite some evidence to the contrary.

When asked about the crisis, entrepreneurs consistently emphasised their commitment to transparency, considering it a crucial element in fostering meaningful relationships with stakeholders during the pandemic. This emphasis on transparent communication was perceived not only as a business strategy but also as a reflection of the entrepreneurs' ethical values. Participants attributed their success, even amid the crisis, to the trust and loyalty engendered by transparent practices. Notably, most of the sample reported increased or stable revenue growth, highlighting the potential tangible benefits of outward transparency with stakeholders. This ethical and transparent mindset, while similar to the openness attribute, differed in its justification. The participants' transparency, in their perspectives, was not an act but was employed as an indicator of truthfulness, emphasising a genuine desire to convey the positive aspects of the reality of their situations. This commitment to transparency emerged as a powerful tool during the crisis, contributing to long-term relationships and success in navigating challenges. This became an unusual feature to explore, as the same entrepreneurs expressed a high level of Bullshit Praxis in their accounts of their experience during the crisis.

The Duality of Bullshit Praxis and a Pro-Ethical Self-Assessment

An intriguing avenue for future research emerges from the examination of the relationship between Bullshit Praxis and transparency within the context of entrepreneurial communication. While these two concepts may seem inherently

contradictory, they appeared to coexist within the same participants during their entrepreneurial endeavours, representing an unexplored dichotomy within entrepreneurship crisis literature. This duality manifested in distinct ways, as participants expressed their disapproval of Bullshit while simultaneously engaging in behaviours and communication activities that align with its definition.

Several participants vehemently rejected the idea of Bullshit, emphasising its unethical nature and contending that it was only practised by certain entrepreneurs who sought to create an artificial public image. These individuals believed that such practices did not align with their personal values and were unnecessary for their success: “And when you start probing them in terms of detail, they will avoid answering you. Right. And then they'll try to lift it up into a very high level or try to brush aside, you know, and once you've gone through this a few times with them, asking them a few questions, they never answer it. It's always and everything is always very positive. Right. All things are super doing super well. You know, the business is gangbusters sort of stuff, right? I think those are normally the traits of someone who's a Bullshit artist” (FE9); “if you look at unethical behaviour as a spectrum, you don't ever get to see one up here. I know. We get to see them where it's. It's okay, but it's starting to get a hint of unfairness coming through, but typically it's the ones who are don't have a big market share trying to grow their business again they would be convinced that what they're doing is ethical and selling when it's pointed out that it may not be or what. And they obviously are biased view when you come in from an independent body to be one of the benefits of being consulted” (FE4).

However, concurrently, these same individuals discussed activities and communication behaviours that could be classified as Bullshit, as per the definition provided. They acknowledged the need to stretch the truth, especially when venturing into uncharted territories with uncertain market needs and unproven technologies, indicating the complex nature of entrepreneurship: “You've got to stretch (the truth). I think yeah, I think I think sometimes you're doing you're creating a special an entrepreneur. You're going into a business where there's not quite a solution or the need is not met yet. There's an unmet need. And then the technology to come up with that solution is not quite de or untested or unproven. So are a lot of unknowns. Right. So you need to stretch in order to be able to solve for the unknown. I suppose that's what I mean” (FE9); “Now, as you know, from your experience, there's no such thing as a black and white, we never get presented with a choice of gates as two or four and five and three. There's so many there's so many numbers between two and four when you go to point

the infinity that that's the number of options you have. But how you make your choices? I've rarely seen any key critical pieces" (FE4).

Moreover, participants often strived to convince the interviewer of their ethical and transparent business practices, which appeared inconsistent with the Bullshit activities they had previously acknowledged: "we'd like to operate in a very transparent manner, obviously can be transparent about everything, but as transparent as you can about majority of items. Right. I reckon we are probably transparent if you are to have, say, a scale of one to 10. I think we're transparent. Our level of transparency around eight or nine, I'd say. And I think that people understand that because they know that that's the way we operate and that's the way we communicate. And decision making has got a very clear, rational way of decision making. So people across that and that's not new for us" (FE9); "But I think or companies and or people running companies must have a sense of giving back to the community itself. And I think that comes under the kind the acting it's ethically as well. And I know now a lot of the a lot of companies give money to charities and whatnot. So I think I think this that that angle that you need to bear in mind" (FE4).

This paradoxical relationship between ethical self-assessment and Bullshit Praxis represents a fertile ground for future research, exploring whether such duality is a necessary characteristic for successful entrepreneurship. While this notion is commonly discussed in non-academic discourse, the comprehensive exploration of this duality within the academic literature on entrepreneurial attributes remains uncharted territory.

Dissatisfaction Mindset

Dissatisfaction, especially in the context of entrepreneurship, is underexplored in the literature. Previous studies have often focused on the dissatisfaction individuals feel in corporate roles before transitioning to entrepreneurship, emphasizing that entrepreneurs may be inherently dissatisfied with conventional work structures (Brockhaus, 1980; 1982; Stoner and Fry, 1982). However, this attribute explores a more profound level of dissatisfaction that entrepreneurs experience despite their self-reported success. It delves into the participants' self-depreciatory monologue and the perpetual feelings of dissatisfaction, which have received little attention in the entrepreneurship literature, especially in the context of a crisis like the COVID-19 pandemic.

Dissatisfaction Mindset represents a deep-seated feeling of discontent and dissatisfaction among entrepreneurs, even in the face of apparent success and achievement. This attribute highlights the complex relationship between the pursuit of entrepreneurial success and the entrepreneurs' inability to feel satisfied or accomplished, ultimately contributing to their self-perceptions. Despite the participants' achievements and revenue growth during the COVID-19 pandemic, the Dissatisfaction Mindset emerged as a pervasive theme, significantly influencing their self-perceptions and emotional experiences. Moreover, participants acknowledge the perpetual nature of their dissatisfaction, emphasising that, regardless of the level of perceived success achieved or goals reached, they never feel satisfied or successful. The inability to articulate specific metrics for accomplishment reflects the ever-moving bar for success, making it challenging to differentiate this attribute from non-crisis scenarios. However, due to its emergent nature, it is clear that the pandemic, allowing for a deeper understanding of how entrepreneurs navigate and grapple with their internal struggles amid external challenges, has brought this attribute to the surface. This attribute highlights a profound and underexplored aspect of the entrepreneurial mindset, particularly in the challenging context of a crisis. To our knowledge, this study is among the first to identify and explore the Dissatisfaction Mindset in entrepreneurs operating successful ventures during the COVID-19 pandemic. This attribute delves into the entrepreneurs' internal struggles and emotional experiences, shedding light on an essential aspect of their mindset that has been underexplored in the existing entrepreneurship literature.

Curiosity

While not outlined in Kerr's (2018) model, Curiosity is well-documented in the entrepreneurship literature, primarily as an inherent attribute that goes hand in hand with other entrepreneurial qualities like self-efficacy, innovativeness, and optimism (Jeraj, 2014; Peljko et al., 2016; Peljko et al., 2022b; Prihatsanti, 2017;). This innate curiosity often prompts individuals to pursue entrepreneurial endeavours due to their inquisitiveness. While Curiosity aligns with the existing literature on entrepreneurial precedents, it provides a unique perspective by focusing on attributes of active entrepreneurs, particularly during crises like the COVID-19 pandemic.

Curiosity is an entrepreneurial personality attribute that involves an innate inquisitiveness and the pursuit of knowledge and self-directed learning. It is an essential aspect of entrepreneurs' self-concepts and has been linked to their capacity

to explore and create ventures, especially in the face of adversity. The sample entrepreneurs, predominantly self-taught in the skills crucial for their ventures, regard this curiosity as innate, emphasising its instrumental role in fostering self-directed learning and exploration. The context of the pandemic amplifies the significance of Curiosity, as entrepreneurs, prompted by an innate inquisitiveness, navigated uncertainties and disruptions by actively seeking knowledge and exploring new avenues. The interviews revealed that participants' entrepreneurial journeys were propelled by their relentless pursuit of learning and understanding.

The participants emphasised that any efforts to pivot their ventures' marketing or offerings due to the effects of the crisis were spurred by intrinsic curiosity, suggesting that this attribute played a role in overcoming the challenges posed by the pandemic. The crisis, with its uncertainties and disruptions, seemed to act as a catalyst, prompting entrepreneurs to leverage their curiosity for creative problem-solving and innovation. However, the more explicit interaction between Curiosity and crisis response remains a fertile ground for further exploration. This study extends Kerr's (2018) entrepreneurial attributes model by adding Curiosity as a personality attribute of entrepreneurs. To our knowledge, this study is one of the first to investigate the role of curiosity in entrepreneurship, particularly during the COVID-19 crisis, using in-depth interviews. It provides valuable insights into the importance of curiosity as a driving force behind entrepreneurial success and innovation.

The Association Between a Dissatisfaction Mindset and Curiosity

The emerging attributes of Dissatisfaction Mindset and Curiosity exhibited a pronounced interrelation. The perpetual drive for curiosity, continuous learning and the quest for more were intrinsically linked to a state of perpetual dissatisfaction among the participants, leading them to an existence marked by an incessant pursuit of growth. This constant quest could potentially be associated with a fear of the unknown, rooted in an unceasing need for comprehension in a world where the potential for understanding appears boundless. It can be hypothesised that this insatiable curiosity, coupled with unceasing dissatisfaction, constitutes the two core intrinsic entrepreneurial attributes contributing to the development of a growth mindset.

The concept of a Growth Mindset, well-entrenched in entrepreneurial literature and frequently employed in entrepreneurship education and non-academic discourse, has garnered substantial attention. Carol Dweck's *Harvard Business Review* definition in 2016 aptly captures it: "Individuals who believe their talents can be developed (through

hard work, good strategies, and input from others) have a growth mindset. They tend to achieve more than those with a more fixed mindset (those who believe their talents are innate gifts). This is because they worry less about looking smart and they put more energy into learning". Some research also suggests that individuals or companies embracing a Growth Mindset are more likely to achieve positive business outcomes (Yeager et al., 2019).

This discourse establishes a clear link between Curiosity and the Growth Mindset, although the link to a Dissatisfaction Mindset is more subtle, stemming from an individual's aversion to stagnation. Public discourse hints that the fear of the unknown may serve as a precursor to a growth mindset, with the adoption of such a mindset potentially mitigating this fear, both in the broader context of life and in the realm of entrepreneurship. However, limited exploration has been undertaken on this concept, rendering the significance of this association inconclusive.

Although the interview transcripts did not explicitly establish a direct connection between these concepts, the potential for association is evident. A participant alluded to this when discussing the dynamics of learning and growth during times of crisis and the founder's role in the context of the COVID-19 pandemic: "Yeah, but as, as a general rule, I think that it is that sort of growth mindset really. It's a case of we always need to be learning and this period of time has forced many to learn. The challenge will be will they let their go?" (FE7).

Deeper exploration in this domain is warranted, but this paper does not provide the depth of analysis required to gain a more nuanced understanding of this association or to elucidate its potential role as a precursor to fear of the unknown and the development of a growth mindset.

This intriguing avenue for future research offers a promising opportunity to delve deeper into this domain. While this paper lays the foundation by recognising the association between these concepts, further investigation is needed to provide a more comprehensive and nuanced understanding of this relationship. Subsequent studies can explore the role of this association as a potential precursor to fear of the unknown and its influence on the development of a growth mindset.

Agreeableness

The findings pertaining to the attribute of agreeableness align with existing literature that underscores the effectiveness of disagreeableness in the context of workplace leadership. Kerr et al. (2018) emphasise the positive outcomes associated with disagreeableness when combined with attributes such as self-efficacy, extraversion and the need for achievement. In the context of entrepreneurship, it is noted that entrepreneurs tend to exhibit lower scores in agreeableness compared to managers (Zhao and Seibert, 2006). The study by Zhao et al. (2010) further supports this observation, finding no significant correlation between agreeableness and entrepreneurial intentions or business performance. Notably, Brandstätter (2011) contributes to this discourse by indicating that, in certain contexts, agreeableness may exhibit rather negative effects on business creation and success.

While the interview findings did not explicitly reveal a dominant presence of disagreeableness, the expressions and stances observed during data collection strongly suggested a lack of agreeableness among the entrepreneur participants. Their expressed perspectives demonstrated a clear disagreement with the conventional view that crises are inherently detrimental. This pronounced disagreement implies that agreeableness may not be a prominent personality attribute among founder entrepreneurs when navigating crisis situations, thus substantiating the broader literature's observations on the entrepreneurial trait of agreeableness. The insights gained from the interviews align with the idea that entrepreneurs, driven by a need for autonomy and a disposition towards independent action, may exhibit lower agreeableness, a trend consistent with Koestner and Losier's (1996) evidence of a strong negative correlation between the need for autonomy and agreeableness.

It is crucial to highlight the role of the pandemic in shaping the expressions of agreeableness and disagreeableness. Examining the interview data, especially during crisis-related discussions, revealed a marked shift towards disagreeableness. Entrepreneurs exhibited pronounced traits of disagreeableness, demonstrating a proactive and assertive stance in seizing opportunities during adversity. Verbal articulations such as "looking at the opportunity ahead" (FE16) and expressing a readiness to make calculated decisions during crises (FE6) underscored a departure from agreeable traits. These instances not only showcased a willingness to challenge the status quo but also demonstrated a decisive, action-oriented approach closely aligned with disagreeableness.

The specific verbal articulations and perspectives provided a basis for labelling the absence of agreeableness within the interviews, confirming the influence of crises on the expression of a disagreeable attribute. The proactive responses and assertive decision-making portrayed during the pandemic highlighted a departure from conventional agreeable traits, emphasising the dynamic impact of crises on the expression of agreeableness or disagreeableness. While a lack of agreeableness has been found to be consistent with the typical entrepreneur (Zhao and Seibert, 2006), this was reflected in their crisis-related responses as well.

Minimally Featured Attributes

Conscientiousness

In the examination of interview data concerning the attribute of conscientiousness, a complex yet intriguing pattern emerged. The literature regarding conscientiousness in entrepreneurship suggests that entrepreneurs often exhibit high levels of conscientiousness, especially in terms of achievement-oriented conscientiousness, which has been associated with their inclination towards self-organised, action-oriented work environments, as opposed to managers who show lower comparative levels (Zhao and Seibert, 2006). This study revealed that the interviews supported this theoretical perspective, as many founder entrepreneurs appeared to be intrinsically motivated and inclined towards conscientious behaviour. The data collected in this study also aligned with the findings of previous research, indicating that individuals drawn to entrepreneurship often possess personality attributes that resonate with the demands of entrepreneurial work, as theoretically ascribed to the attraction-selection-attrition model (Schneider, 1987). This achievement motivation is said to lead to more successful business outcomes, which may also be related to the effect of individual efforts in a self-organised environment rather than a slower, institutional setting (Collins et al., 2004; Stewart and Roth, 2007).

The pandemic, as a backdrop, seemed to amplify traditional conscientious attributes in unconventional ways, such as innovative action and deviation from conventional meticulous planning. The adaptive nature of conscientiousness as an entrepreneurial attribute was underscored, shedding light on its potential manifestation in extraordinary yet substantial ways during crises. The impulsive, goal-oriented nature of conscientiousness may have found expression in the dynamic responses to the challenges posed by the pandemic.

Fundamentally, the conscientiousness observed in entrepreneurs during the crisis did not seem to be a replication of the usual, conscientious behaviour displayed by entrepreneurs through traditional definitions but an adaptation to unprecedented circumstances. The crisis may have acted as a catalyst, revealing dimensions of conscientiousness that might remain dormant in routine entrepreneurial pursuits.

The observation of conscientiousness in the interview transcripts provided insight into the presence of this attribute among founder entrepreneurs. It is critical to recognise that this expression of conscientiousness often led them to embrace entrepreneurship as a path that allowed their intrinsic qualities to flourish in a self-organised and action-oriented environment.

The ability to identify conscientiousness in the interviews lies in the detailed analysis of the participants' articulated experiences, work philosophies and action-oriented behaviours. These expressions offer valuable insights into the complex nature of conscientiousness as an entrepreneurial attribute and its role in the entrepreneurial journey.

Extraversion

The academic discourse surrounding extraversion in entrepreneurship remains a subject of debate. Some studies suggest that extraversion may facilitate positive entrepreneurship outcomes, particularly concerning activities like pitching ideas to investors or engaging with customers (Kerr et al., 2018). However, there is also a counter-argument that a high level of extraversion might not be essential, especially since entrepreneurs can manage their businesses from home, potentially reducing the need for extensive social interaction (Envick and Langford, 2000). However, this depends on the nature of the business, as in this case, entrepreneurs may still have extensive networks with which they interact.

This debate is particularly fascinating when viewed through the lens of a crisis, such as the COVID-19 pandemic, which necessitated remote work for most individuals. While not explicitly mentioned by the sample, this has the potential to affect the display of traditional extraverted traits, given the necessity of their expression to move from in-person to online. Despite the absence of consensus, the interviews indicated an array of responses related to extraversion. While not universally present, several participants exhibited characteristics associated with high levels of extraversion, particularly when discussing communication with stakeholders before and during the pandemic. These

entrepreneurs displayed an affinity for enthusiastic interactions with employees, customers and other stakeholders, reflecting an energetic approach to sociability and activity.

The ability to identify extraversion in the interviews hinges on meticulous analysis, which includes recognising the nuanced expressions of sociability, enthusiasm, adaptability and sales-oriented interactions, which provide valuable insights into the multifaceted nature of extraversion as an attribute and its role in the entrepreneurial context.

While the interviews did not directly provide evidence linking extraversion to crisis management, an examination of crisis-related responses unveils potential indirect impacts. Participants, particularly when addressing Bullshitting or pro-ethical self-assessment in the context of the crisis, articulated responses indicating that the pandemic provided them with an opportunity to act differently. The active participation in communication strategies with investors, customers and staff during the pandemic showcased an adapted form of extraversion, aligning with the essence of extraverted traits, such as positivity and assertiveness in navigating challenging situations (McCrae and John, 1992).

Essentially, the crisis seemed to amplify traditional extraversion attributes in unconventional ways, such as over-communication and deviation from conventional social collaboration. This observation highlights the potentially adaptive nature of extraversion as an entrepreneurial attribute, shedding light on its potential manifestation in unconventional yet impactful ways during crises. The ability to assertively navigate and positively engage with stakeholders during challenging times emerged as a distinctive feature of extraversion, shaping entrepreneurial behaviour in unforeseen dimensions.

Neuroticism

The observed low levels of neuroticism among the entrepreneur participants in the current study resonate with the prevailing academic discourse, which consistently posits that entrepreneurs often exhibit diminished neuroticism. This tendency is underlined by heightened self-confidence and resilience within entrepreneurial circles, effectively diminishing the inclination towards negative and anxious emotionality (Kerr et al., 2018). Neuroticism, as an entrepreneurial attribute, is acknowledged to manifest variably among individuals. While some scholars propose potential benefits of

neuroticism for high achievers, facilitating heightened vigilance and task completion (Zhao and Seibert, 2006), the literature concurrently highlights the challenges posed by this trait to the creative and efficient actions crucial for successful entrepreneurial endeavours.

The findings align with the research by Zhao and Seibert (2006), which reports lower scores on neuroticism for entrepreneurs compared to managers. Zhao et al. (2010) further corroborate these observations, noting the negative effects of neuroticism on both the intention to establish a private business and entrepreneurial performance. This consistency in research findings is reinforced by the work of Rauch and Frese (2007), where personality scales associated with emotional stability (the reverse of neuroticism), such as generalised self-efficacy, stress tolerance, and locus of control, display similar effects. Hartman and Betz (2007) and Judge et al. (2002) provide empirical evidence supporting this affinity. Therefore, the current study's identification of low neuroticism among entrepreneurs contributes to the robustness of existing literature that establishes a pattern of diminished neuroticism within entrepreneurial traits.

While the interviews did not yield direct evidence linking neuroticism to crisis management, a closer examination reveals potential indirect impacts. Participants, when responding to crisis-related inquiries, expressed responses indicating that the crisis provided them with an opportunity to act differently. In particular, their proactive seizing of control and navigation of unknown circumstances during the pandemic showcased a potentially adapted form of neuroticism.

Although not in direct alignment with traditional neuroticism in the explicit discussions of crisis, the underlying reactivity to the unknown during the pandemic resonates with the essence of neuroticism (McCrae and John, 1992), traditionally associated with anxiety. The crisis seemed to amplify traditional neuroticism attributes in more extreme ways, such as over-reactivity in control-taking exercises deviating from conventional anxiety manifestations. This sheds light on the potentially adaptive nature of neuroticism, indicating unconventional yet impactful expressions during crises that influence entrepreneurial behaviour in atypical ways.

Openness

The examination of interview data concerning the attribute of openness unveils a nuanced and multifaceted approach to this trait within the entrepreneurial context.

Consistent with the broader literature, the findings of the study align with the proposition that openness to experience constitutes a crucial aspect of entrepreneurial success, especially within dynamic and ever-changing roles that necessitate high levels of adaptability (Ispir et al., 2019). The nuanced understanding of openness among the participants accentuates the intricacies involved in interpreting and assessing such attributes within the entrepreneurial landscape.

The study's emphasis on the complexity of attributes like openness underscores the need for further research to delve into the intricate role of these attributes in entrepreneurship, particularly during crisis situations. This complexity is aptly captured by the literature, which describes openness as encompassing the breadth, depth, originality and complexity of an individual's mental and experiential life (Brandstätter, 2011). Zhao and Seibert (2006) reinforce the study's findings, reporting substantially higher scores on openness for entrepreneurs compared to managers. Additionally, Zhao et al. (2010) highlight higher correlations of openness with entrepreneurial intention and performance compared to other Big Five dimensions. The affinity between openness and innovativeness, a concept linked to positive effects on business creation and success (Rauch and Frese, 2007), further bolsters the consistency of the study's findings with existing literature. The correlations between Big Five scales and cognitive styles, as reported by Zhang and Huang (2001), align with the established link between innovativeness and openness. Thus, the study's identification of high levels of openness among entrepreneurs contributes to the robustness of literature portraying this trait as integral to entrepreneurial endeavours.

In the context of crisis management, the interview transcripts initially revealed limited direct evidence of a relationship between openness and navigating crises. However, further investigation reveals potential indirect impacts. When addressing queries related to the crisis, participants expressed responses hinting at the pandemic providing an opportunity to act differently. Notably, sections exploring risk attitude, innovativeness, or curiosity in the face of uncertainty indicated a form of openness. While these expressions may not align directly with traditional manifestations of openness in the explicit discussions of crisis, the underlying processes of insightful exploration and embracing change resonate with the essence of the openness definition (McCrae and John, 1992). The pandemic seemed to express traditional openness attributes in more unusual ways, such as over-innovation driven by a desire to embrace change, diverging from conventional exploration of uncharted territories.

Highly Featured Attributes

Innovativeness

The examination of interview data in relation to the attribute of innovativeness reveals a complex interpretation of this attribute within the entrepreneurial context.

Innovativeness can encompass both the capacity to respond to new elements and the inclination towards adopting new products, services, or ideas (Goldsmith and Foxall, 2003). In the context of this study, participants frequently associated innovativeness with creativity, aligning with the second definition. They emphasised that a creative orientation is integral to entrepreneurship, and it is this attribute that distinguishes an entrepreneur. The participants recognised creativity as a uniquely human trait that has played a pivotal role in societal growth. While it remains uncertain whether they perceive this creativity as exclusive to entrepreneurship or innate to humanity, the desire to innovate was a common theme among most participants.

In addition to creativity, innovativeness was closely linked to opportunity recognition within the entrepreneurial journey. The capacity to identify new ideas, products, or services was considered a hallmark of entrepreneurship rooted in creativity and innovation. Importantly, entrepreneurs expressed a preference for times of crisis, viewing them as opportunities to discover innovative solutions and adapt to changing circumstances.

The pandemic seemed to act as a crucible, bringing forth the salience of innovativeness in addressing challenges, enhancing adaptability and identifying opportunities for growth, change, and adaptation. The participants' descriptions underscored how innovativeness contributed to their crisis response, enabling them to navigate challenges more effectively. It became evident that innovativeness, although a lifelong attribute, played a vital role in managing the crisis, contributing to their proactive and creative approach. Innovative actions and an interest in creating new solutions during the pandemic hint at a non-compliant stance on behalf of entrepreneurs. This aligns with the assertiveness and decisive action associated with disagreeableness. This unique blend of attributes, combining innovativeness and disagreeableness, contributes to the entrepreneurs' resilience and adaptability in the face of unprecedented challenges.

Locus of Control

The examination of interview data concerning the attribute of locus of control reveals a compelling relationship between this attribute and the entrepreneurial condition, particularly in the context of a crisis such as the COVID-19 pandemic. Locus of control is a belief related to the degree of control one perceives over the outcomes of a situation. It is believed that an internal locus of control, which implies a belief in one's ability to influence and control outcomes, increases the likelihood of engaging in entrepreneurial activities (Brockhaus, 1982; Gartner, 1985). In the interviews, participants closely linked locus of control to self-efficacy. While self-efficacy primarily relates to the belief in one's capability to undertake specific tasks, locus of control extends this belief to encompass control over the overall outcomes of a situation. This means that it encompasses not only actions and goals but also broader outcomes. Interestingly, a notable subset of participants exhibited an exceptionally high level of self-belief and a robust internal locus of control, perceiving themselves to have full control over external forces, the crisis being used as an example of this. This mindset not only enabled them to weather the storm of the pandemic but also contributed to increased revenues during this challenging period. Their unwavering self-belief seemed to act as a self-perceived shield against the negative effects of external forces, fostering business success during the crisis. Interestingly, these entrepreneurs did not merely attribute their success to the crisis; rather, they asserted that the crisis had minimal impact on them due to the strength of their internal locus of control. While their financial stability and growth were self-reported, these outcomes align with the significant role played by locus of control in supporting them during the crisis rather than rendering them impervious to its effects.

Need for Achievement

The examination of interview data concerning the attribute of Need for Achievement provides valuable insights into how this attribute is expressed in entrepreneurial speech and its implications, especially in the context of a crisis like the COVID-19 pandemic. A high need for achievement has been established as a predictor for entry into entrepreneurship (Kerr et al., 2018). The interviews shed light on the intertwined nature of the Need for Achievement and Fear of Failure in the entrepreneurial context. The strong emotional connection between personal self-worth and business achievement highlights the complex relationship between these factors. While it is challenging to draw direct links to crisis management, the interviews suggest that this attribute may

play a pivotal role in driving entrepreneurs to take on new challenges and resist stagnation, which could be particularly valuable in times of crisis.

Additionally, probing into their responses to the crisis provides intriguing insights. Particularly in sections addressing challenges like Bullshit Praxis, participants' articulations strongly suggest that the crisis presented them with an opportunity to act differently. They engaged in purposeful communication strategies, demonstrating a determination and success orientation inherent in the definition of Need for Achievement (Murray, 1938). Although not explicitly illustrating changes in the manifestation of this attribute during the crisis, the interviews indirectly illuminate how a strong need for achievement may have assisted entrepreneurs in navigating the challenges posed by the pandemic.

Risk Attitude

The interviews provided valuable insights into how the attribute of Risk Attitude was expressed in entrepreneurial speech and how it relates to entrepreneurial behaviours and attitudes, particularly in the context of risk-taking and decision-making. Many participants in the study demonstrated a high level of self-awareness regarding their propensity for taking risks. They often made a point of differentiating themselves from non-entrepreneurs by emphasising their willingness to take significant risks. This observation is consistent with the existing literature, which suggests that entrepreneurs tend to have a higher risk attitude than traditional managers. This risk attitude empowers them to make bold leaps that hold the potential for substantial payoffs (Syed et al., 2019).

While the interviews did not demonstrate an explicit difference in the expression of this attribute during the crisis, the consistency of risk-taking behaviour aligns with the literature discussing high-risk attitude as an essential element of entrepreneurial recovery (Hedner et al., 2011; Maalismaa and Simonen, 2022; Shadbolt, 2016). The interviews illuminated the entrepreneurs' strong risk attitudes, their ability to engage in calculated risk-taking and their propensity to differentiate themselves from risk-averse environments, such as large organisations. While the link to crisis management was not explicitly articulated, the findings suggest that a high-risk attitude likely played a significant role in enabling entrepreneurs to respond to the challenges posed by the pandemic.

However, investigating their responses to the crisis more deeply unveils insightful revelations. Participants, when questioned about their actions during the crisis, exhibited a thought process that suggested the pandemic provided them with an opportunity to act differently. They took decisive actions in adjusting business offerings and strategies in response to the pandemic, displaying a proactive approach aimed at ensuring continued success in the face of challenges.

Although this may not overtly relate to Risk Attitude in the explicit discussions of crisis, the thought process exhibited during the pandemic reflects a clear commitment to strategies ensuring success in an uncertain environment. Actively taking steps to continue despite changes in the economic landscape aligns closely with the definition of Risk Attitude (Weber et al., 2002). The crisis seemingly expressed the traditional Risk Attitude attribute in unique ways, emphasising determined and continued business action during a time of uncertainty. This is a departure from the conventional understanding of risk attitude as actively engaging in risky activities. The interviews, while not explicitly illustrating changes in the manifestation of this attribute during the crisis, provide indirect insights into how a strong Risk Attitude may have played a role in assisting entrepreneurs in navigating the challenges posed by the crisis.

Self-efficacy

The interviews shed light on how the attribute of Self-efficacy was expressed in entrepreneurial speech, showcasing a strong connection between self-efficacy and entrepreneurial behaviours and attitudes. While the traditional definition of entrepreneurial self-efficacy encompasses various dimensions like innovation, risk-taking, marketing, management and financial control (Chen et al., 1998), the interviews in this study revealed a broader and more encompassing aspect of self-efficacy that revolved around direct action taken by founders for the benefit of their ventures.

The high level of self-efficacy, which encompassed a proactive approach to taking action and achieving results, is consistent with entrepreneurial recovery work emphasising high self-efficacy as a crucial element in overcoming adversities (Bullough and Renko, 2013; Bullough et al., 2014; Renko et al., 2021). The interviews revealed a strong sense of self-efficacy among the entrepreneurs, closely linked to their belief in the power of personal action and achievement. While the connection to crisis management was not explicitly articulated, the findings suggest that self-efficacy played a significant role in helping entrepreneurs navigate the challenges posed by the pandemic.

However, examining the participants' responses to the crisis, particularly when addressing locus of control, reveals important insights. Participants, when questioned about their actions during the crisis, exhibited a thought process suggesting that the pandemic provided them with an opportunity to act differently. They took individually decisive action in relation to their business offerings and strategies in response to the pandemic, aiming to achieve success in such a challenging time.

This observation might not overtly relate to self-efficacy in explicit discussions of the crisis. Still, the thought process exhibited during the pandemic indicates a clear level of individual attempts to achieve action-oriented success despite, or perhaps because of, the pandemic. This closely aligns with the definition of self-efficacy, which is the belief in an individual's capacity, through action, to influence or achieve an outcome (Bandura, 1982). The crisis seemingly expressed the traditional self-efficacy attribute in unique ways, emphasising determined and directed success-oriented action, as opposed to the conventional focus on individual effectiveness.

Conclusion

Two core objectives have driven this study. The first objective was to explore the extent to which current conceptualisations of entrepreneurial attributes are reflective of how entrepreneurs understand their own actions, thoughts and behaviours by employing a qualitative phenomenographic research paradigm, thereby exploring the intricate cognitive, emotional and contextual aspects that define entrepreneurial personas. Qualitative methodologies, especially in-depth interviews, are utilised to provide a comprehensive and nuanced portrayal of entrepreneurs. The second objective was to understand the firsthand experiences of entrepreneurs with a view to uncover and explore novel attributes. Rooted in phenomenographic approaches that reveal individuals' experiential landscapes, this objective aimed to illuminate dimensions that might have remained concealed within traditional quantitative research paradigms, particularly within the context of the crisis. These objectives and following the research process act to extend Doern's (2016) research process by capturing the experiences of entrepreneurs during crises. As such, we answer a call to offer a richer understanding of the experiences of founder entrepreneurs during COVID-19 (Ratten, 2020a).

This paper brings forth two significant contributions to the field of entrepreneurship research. First and foremost, this paper introduces and explains the concept of "Bullshit Praxis", marking an original and uncharted attribute intrinsic to entrepreneurs. Bullshit

Praxis is defined as the transformation of an internal bullshit concept into an unconscious behavioural action in which entrepreneurs engage. It operates as an implicit praxis, a custom deeply ingrained in the entrepreneurs' psyche before finding expression in their actions. This revelation enhances our comprehension of how entrepreneurs interact with this distinctive attribute.

Second, to the best of the author's knowledge, this study is the first to identify and theorise the presence of Pro-Ethical Self-Assessment, Dissatisfaction Mindset and Bullshit Praxis, and provide new insights into Curiosity within entrepreneurial discourse. These findings extend the existing body of work by Kerr (2018) and other scholars who have delved into various attributes of entrepreneurs, such as the Big-5 Model, Need for Achievement, Locus of Control, Self-Efficacy, Innovativeness, and Risk Attitude (e.g., Bird, 1988; Borland, 1975; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000). These novel insights enrich our understanding of entrepreneurs and underscore the pressing need for further investigation. Notably, we reveal that prior studies offer an incomplete view, both in terms of the range of cognitive and personality attributes considered and the imperative to delve deeper into how and why entrepreneurs engage with these attributes.

Agreeableness

Our findings reveal a prevalent lack of agreeableness among the entrepreneurs examined in this study. This observation aligns with existing research suggesting that a deficiency in agreeableness is a common trait among entrepreneurs, potentially rooted in innate characteristics and often associated with favourable venture outcomes (Kerr et al., 2018). Notably, several participants expressed their disagreeable sentiments while discussing the crisis, particularly in relation to their beliefs concerning the founder's influence on business success during such challenging circumstances. This suggests that crises may have a less pronounced impact on entrepreneurs who exhibit resilience¹⁵ and possess unwavering self-belief. While entrepreneurial adaptability is a well-documented subject, its profound relevance to venture activities during crises remains a topic of significant breadth and complexity that extends beyond the scope of this paper. Therefore, this study does not delve into the intricate dimensions of

¹⁵ Resilience is a well-established area of entrepreneurship research and is valuable in the context of understanding entrepreneurship during and after COVID-19. This area is too broad to cover in this study, however, future research is required around resilience and crises.

entrepreneurial adaptability, acknowledging the need for in-depth exploration in future research endeavours.

Minimally Featured Attributes

Our analysis indicates that approximately 18–35% of the participating entrepreneurs exhibited notable traits related to conscientiousness, extraversion, neuroticism, and openness. The presence of a high level of conscientiousness was particularly associated with participants who transitioned from corporate roles to embark on entrepreneurial ventures, a finding congruent with the existing literature comparing entrepreneurial and managerial attributes (Zhao and Seibert, 2006). The assessment of extraversion was somewhat challenging due to the research methodology's limitations. Nevertheless, some participants, while not personally identifying with this attribute, acknowledged its perceived importance for entrepreneurial success, aligning with previous research emphasising the significance of extraversion in entrepreneurship (Collins et al., 2004).

Among those who self-reported neurotic traits, they typically regarded these traits as unhelpful and limiting to their entrepreneurial success, actively striving to overcome these tendencies. This perspective corroborates the existing literature, which underscores the need for low neuroticism in entrepreneurial contexts (Zhao and Seibert, 2006). Notably, while extensive research emphasises the importance of openness to experience favourable entrepreneurial outcomes (Kerr et al., 2018), our study suggests that participants placed greater emphasis on openness in communication, particularly during crisis situations such as the COVID-19 pandemic, as a significant factor contributing to business success.

Highly Featured Attributes

Our analysis revealed that a significant majority, exceeding 70%, of the participating entrepreneurs demonstrated prominent attributes of innovativeness, internal locus of control, need for achievement, high-risk attitude and high self-efficacy. Notably, two of these attributes, risk attitude and entrepreneurial self-efficacy, are often associated with discussions of entrepreneurial resilience in the existing literature (Bullough and Renko, 2013; Bullough et al., 2014; Hedner et al., 2011; Maalismaa and Simonen, 2022; Renko et al., 2021; Shadbolt, 2016). Given the imperative nature of adaptability in post-crisis rebuilding, the prevalence of these attributes reinforces their necessity in the entrepreneurial context. Although the conventional definition of innovativeness

encompasses a broader spectrum of factors (Kickul and Gundry, 2002), our study revealed that participants often described it in the context of creative orientation and opportunity recognition, with many considering innovativeness as an essential component for entrepreneurial success, particularly in the context of the COVID-19 pandemic.

Internal locus of control emerged as a recurring theme in the interviews, with participants viewing it as a mindset that could drive positive changes in their businesses, even amidst external pressures such as a pandemic. While the existing literature emphasises the importance of internal locus of control in entrepreneurs (Levine and Rubenstein, 2017), limited research delves into how entrepreneurs perceive this attribute in terms of its impact on business success during a crisis. The need for achievement, recognised for its ability to predict early entry into entrepreneurship in previous studies (Kerr et al., 2018), was found to be closely associated with a fear of failure by our participants. For many, this need was rooted in a profound aversion to failure rather than a pure drive for accomplishment.

The necessity of a high-risk attitude when pursuing entrepreneurial ventures over traditional employment was acknowledged by numerous participants, aligning with established entrepreneurship literature (Kihlstrom and Laffont, 1979). Interestingly, some participants chose entrepreneurship over corporate jobs due to a lack of risk in the latter. Furthermore, self-efficacy, often defined as a composite of various factors in the literature (Chen et al., 1998), was more broadly linked to the direct impact of a founder on their business processes in our study. Participants attributed their outcomes and goal-oriented mindset, coupled with decisive action, to their entrepreneurial success both historically and during the COVID-19 pandemic.

Novel Attributes

We found new insights in the under-researched category of Curiosity and three novel, emergent attributes in this study: Bullshit Praxis, Pro-Ethical Self-Assessment and Dissatisfaction Mindset. It can be challenging to compare the representations of these attributes to the literature, as little to no literature exists on their representation of entrepreneurship or crises. More research is needed to explore these in greater depth. An important discovery, however, was found in the duality of Bullshit Praxis and Pro-Ethical Self-Assessment, as well as Dissatisfaction Mindset and Curiosity, with their link to a growth mindset.

To date, the academic literature has generally offered no exploration of the concept of Bullshit Praxis within the context of founder entrepreneurs, particularly during times of crises. This study represents a pioneering effort to illuminate this concept, recognising it as an attribute instilled with temporal dimensions influenced by its immediate contextual and situational factors. In contrast, traditional attributes are conventionally perceived as more stable traits that persist over time. We have coined the term "Bullshit Praxis" to describe the discourse we have captured and substantiated in our study. Bullshit Praxis represents the transformation of an internal Bullshit concept into unconscious Bullshit actions manifested by entrepreneurs. This conceptualisation underscores the intricate relationship between attributes and behaviours. Specifically, we posit that unconscious Bullshit Praxis serves as the transient attribute that accompanies the inevitable act of Bullshitting, as described in the narratives derived from our interview transcripts.

Moreover, Bullshit Praxis exerts a discernible influence not only on entrepreneurs' self-concepts but also on their entrepreneurial activities and their interactions with the external world. What emerges as particularly intriguing is the entrepreneurs' limited self-awareness regarding their own unconscious Bullshit Praxis, despite their ability to identify and criticise such behaviour in others, aligning with the way the existing literature defines Bullshit. This duality in self-perception and external observation underscores the complex and multifaceted nature of attributes, demonstrating that attributes extend beyond mere personality traits and are intrinsically linked to actions and praxis. This revelation opens a compelling avenue for further inquiry into the dynamic relationship between temporal attributes, such as Bullshit Praxis, and enduring personal characteristics, shedding light on the intricate relationship between the cognitive and behavioural dimensions of the entrepreneurial phenomenon.

Contextual Implications

In addition to these contributions, recording the voices of entrepreneurs and understanding the nuances of their personality attributes through phenomenographic inquiry, especially during the unprecedented COVID-19 crisis, may yield insights that might not fully manifest their immediate effects. Nevertheless, such endeavours are poised to be of paramount significance for future comparative studies with other crises or in the post-crisis periods, as they possess the potential to elucidate the long-term repercussions and the enduring impact of entrepreneurial attributes on crisis management and recovery strategies.

The COVID-19 pandemic has imposed distinctive challenges, thereby necessitating a comprehensive understanding of the multifaceted psychological makeup of entrepreneurs and their decision-making processes in response to such exigent situations. While the immediate impact may be difficult to ascertain, a thorough phenomenographic exploration can unearth latent attributes and behavioural patterns that may manifest more prominently in the post-crisis context or scenarios of varying crises.

Furthermore, as the current crisis landscape evolves, this research will serve as a critical baseline for assessing whether certain personality attributes consistently influence entrepreneurial responses in times of crisis or if there are variations depending on the nature of the crisis, its severity, or the demographic characteristics of entrepreneurs. Consequently, the insights garnered from such studies, although they may not yield the full impact of their findings immediately, will undoubtedly lay the foundation for more profound and enduring scholarship on the role of entrepreneurial attributes in entrepreneurial endeavours in the future.

Limitations

This study is subject to several limitations stemming from its scope and methodology. Given the dynamic and evolving nature of the subject matter, our research primarily focused on interviews with participants based in Sydney, Australia, to gain insights into their experiences during the COVID-19 pandemic. While this geographic focus allowed for in-depth examination, it restricts the generalisability of our findings. Expanding the study to include participants from diverse locations could provide a more comprehensive understanding of the geographic and contextual influences on entrepreneurial responses during the crisis.

Another limitation to consider is related to the participants' self-selection bias. The individuals who volunteered their time without financial compensation may not fully represent the broader entrepreneurial community. Future research may benefit from a larger sample that includes participants compensated for their time, with shorter interview durations, to explore potential variations in outcomes.

In the context of this study, it is worth noting that a significant proportion of entrepreneurs experienced self-reported success in terms of revenue generation despite the prevailing crisis. The reasons for this phenomenon are multifaceted and

can be elucidated through the lens of self-selection bias¹⁶ inherent in the research process. Entrepreneurs who willingly participate in studies of this nature are likely to possess certain characteristics, such as an availability of time, a sense of confidence in their ventures, and a willingness to share their experiences. These attributes are indicative of a level of resourcefulness and resilience, which may contribute to their ability to navigate and thrive amidst challenging circumstances. In contrast, entrepreneurs who are grappling with difficulties during the crisis may be less inclined to respond to research inquiries or may feel reticent about sharing potentially adverse information. However, the conspicuous success of the individuals who participated in this study serves as a testament to the effectiveness of their strategies and actions, underscoring that their approaches have yielded tangible results, even within the exigencies of a crisis. This phenomenon accentuates the relevance of their perspectives and practices in informing the discourse on entrepreneurial attributes and the nuances of crisis management.

Furthermore, the validity of this study is inherently tied to the interpretation of the interview transcripts by the researchers. The subjective nature of thematic analysis and the hand-selection of entrepreneurs from Sydney may introduce bias into the research process. Therefore, future studies could employ a more diversified and rigorous participant selection process to enhance the robustness of the research outcomes.

Future Research

This study has successfully achieved its objectives by shedding light on the experiences of founder entrepreneurs during the COVID-19 crisis, offering a comprehensive examination of their attributes. However, to further advance our understanding of this field, we recommend several avenues for future research.

First, conducting a larger-scale study involving a more diverse sample from multiple geographic locations is essential. This approach can enhance the generalisability of our findings, allowing for a deeper understanding of how attribute representations may vary across different entrepreneurial contexts. Moreover, investigating these attributes

¹⁶ Social-desirability bias was also investigated, but given some of the results elucidated in the following sections, this is likely less prominent than a self-selection bias.

in various settings can provide a more holistic view of their roles in entrepreneurial decision-making and behaviour.

Furthermore, the emergent attributes identified in our study, such as Curiosity, Bullshit Praxis, Pro-Ethical Self-Assessment and Dissatisfaction Mindset, warrant further exploration. Investigating the relationships between these attributes, both in crisis situations and traditional entrepreneurial contexts, can offer valuable insights into their complex relationships and effects on entrepreneurial outcomes.

Additionally, understanding the linkage between the need for achievement and the fear of failure among entrepreneurs is crucial. Further research is needed to delve into how these attributes mutually influence one another and collectively impact entrepreneurial decisions and actions.

Longitudinal research can provide a more comprehensive view of how these attributes evolve over time, particularly in the post-crisis period. Examining their temporal dynamics and long-term implications is essential for a deeper understanding of their role in the entrepreneurial journey.

Comparative studies across different crisis scenarios, such as economic downturns or natural disasters, can offer nuanced insights into how attributes vary across diverse crisis contexts. This approach can enhance our knowledge of the contextual factors that shape attribute prevalence.

Moreover, exploring the development of intervention strategies and training programs to enhance specific attributes among entrepreneurs is a promising avenue. This research can lead to practical tools and resources that empower entrepreneurs to adapt more effectively to crises and improve their decision-making processes.

Finally, industry-specific studies focusing on particular sectors or domains can help uncover how attribute prevalence and impact may differ across different entrepreneurial contexts. Such studies can provide sector-specific insights and recommendations for entrepreneurs in various industries.

In pursuing these research directions, the field of entrepreneurship stands to make significant advancements in understanding the intricate relationship of entrepreneurial attributes within the context of crises, offering valuable insights for entrepreneurs, educators, policymakers and researchers alike.

Chapter Four—The Art of The Startup Swindle: A Typology of Bullshit Praxis

Abstract

This study addresses a significant gap in entrepreneurial research by examining the concept of Bullshit, traditionally a subject of philosophical discourse, as an entrepreneurial attribute and explores its typological representation during a crisis. We aim to decode the representation of Bullshit Praxis, a personality-based attribute that precedes Bullshit actions, within the experiences of founder entrepreneurs during the COVID-19 crisis.

Employing a typological framework, we present the findings of phenomenological interviews with 18 founder entrepreneurs, shedding light on how Bullshit Praxis manifests within their operations during the pandemic. The study identifies two distinct manifestations: Persuasive Bullshit Praxis and Evasive Bullshit Praxis, each comprising multiple dimensions. Persuasive Bullshit Praxis consisted of: “creating and communicating an admittedly unrealistic vision”, “vague communication to enhance positive perceptions”, “ambiguous communication to prevent panic”, “ethically selling the truth”, “self-promotion”, and “unrealistic self-assurance”. Conversely, entrepreneurial Evasive Bullshit Praxis encompasses dimensions like “Bullshit condemnation”, “grey area justification”, “living in the future”, and “competing interests”. This paper culminates in a comprehensive model of entrepreneurial Bullshit Praxis, contributing a novel framework for categorising its dimensions and manifestations in the entrepreneurial context.

This research adds a new dimension to the field of entrepreneurship by recontextualising an attribute previously underexplored in this field and setting. It also expands the current body of work on entrepreneurial attributes and the literature on entrepreneurship during crises by uncovering a previously overlooked attribute present in founder entrepreneurs who achieved revenue stabilisation and growth despite the challenges of the pandemic. These findings are valuable for scholars, policymakers and practitioners seeking a deeper understanding of the role of attributes in entrepreneurial crisis response, positioning this work as a crucial resource for

entrepreneurial survival in a dynamic business landscape. On a practical level, this study offers an opportunity for entrepreneur self-assessment and reflection.

Keywords

Entrepreneurship, crisis, qualitative, COVID-19, cognitive attributes, Bullshit, typology, personality

Introduction

The contemporary world is currently facing a significant challenge due to the impact of the COVID-19 pandemic, resulting in a substantial shift in the way businesses and workforces operate, leading to economic strain (Kuckertz et al., 2020). Concurrently, there is a notable phenomenon known as 'The Great Resignation,' where individuals are exploring alternative career paths in search of better remuneration, benefits or entrepreneurial opportunities (Hirsch, 2021). Small business entrepreneurship has been recognised for its role in driving economic and social progress during and after crises, prompting the need for an "entrepreneurial approach to address the challenges posed by the COVID-19 crisis" (Ratten, 2020a). However, there is a lack of research to guide businesses in workforce restructuring and aspiring entrepreneurs in adapting to dynamic crisis-driven practices. While existing literature on small businesses and entrepreneurship focuses on established attributes contributing to success (Kerr, Kerr and Xu, 2018), it often overlooks emerging qualities, including those demonstrated by entrepreneurs who excel in crisis situations, such as Bullshit Praxis.

Moreover, the realm of entrepreneurial attributes and their association with success, especially within the context of crises, provides room for exploration. Although scholars may harbour conjectures regarding the attributes prevalent among entrepreneurs adept at navigating crises, the existing literature offers little illumination on the attributes of primary significance. Additionally, the extent to which there may be undiscovered attributes remains shrouded in uncertainty. In the current landscape of entrepreneurial attribute research, there is an observable tendency to adapt and reapply existing attribute models, such as the Big-5 framework, often tailored to specific subsets of entrepreneurs. Notable studies have delved into domains like social entrepreneurship (Bernardino et al., 2018), nascent entrepreneurship (Muñoz-Bullón et al., 2015) and serial entrepreneurship (Brem, 2008). While these investigations undeniably enrich our understanding of specific entrepreneurial sectors and ecosystems, they are somewhat constrained in their ability to provide the comprehensive understanding required to address critical post-crisis concerns. To gain profound insights into the recovery of SMEs, it becomes imperative to broaden the scope of attribute-focused research. Regrettably, recent studies in the realm of entrepreneurial attributes have followed a rather narrow trajectory, leaving substantial gaps in our comprehension of how crises affect founder entrepreneurs (Doern, 2016).

Furthermore, the conventional use of phenomenological approaches remains surprisingly underrepresented in entrepreneurial attribute research. This underutilisation is a cause for concern as phenomenological data collection methodologies offer the potential for deeper, more comprehensive insights compared to traditional, often detached research techniques such as surveys and meta-analyses (Raco and Tanod, 2014). Overreliance on conventional methods tends to produce repetitive research outcomes, offering little substantive depth to practical entrepreneurship (Neergaard and Ulhøi, 2007).

It is vital to recognise that perception-based research, while somewhat at odds with a substantial portion of established entrepreneurship literature, has its place within specific domains of entrepreneurial attribute exploration. This is particularly evident in studies investigating success factors, as evident in research on female entrepreneurs (Rieger, 2012), regional entrepreneurs, such as those in Pakistan (Nisar et al., 2020), and investigations into lived experiences (Bann, 2009). Nonetheless, the application of perception-based research to comprehend and address entrepreneurial attributes and perceptions in the context of crises has remained conspicuously underrepresented in the existing academic discourse.

In light of the profound impact of the COVID-19 pandemic on economic and social growth, we initiate an endeavour to explore the previously unrepresented realm of entrepreneurial Bullshit Praxis. The objective of this study is to understand and define this novel attribute and its representation in the experiences of founder entrepreneurs during times of crisis. The existing entrepreneurial literature, while rich in traditional attribute models, fails to address this uncharted territory. Therefore, our primary objective is to present a holistic definition of Bullshit Praxis based on entrepreneur experiences, adding a new dimension to the discourse on entrepreneurial attributes and performance. By employing a qualitative phenomenographic research approach, we delve into the perceptions and experiences of founder entrepreneurs to categorise and typologise various representations of Bullshit Praxis. This study contributes to the academic landscape by introducing Bullshit Praxis as a novel entrepreneurial attribute and presenting a model that encompasses different forms of Persuasive and Evasive Bullshit, ten subtypes in total. Our research addresses a knowledge gap and provides practical implications for scholars, policymakers, and practitioners alike, aiming to better understand the role of attributes in entrepreneurial crisis response. This work not only offers a comprehensive definition of Bullshit Praxis but also expands the

understanding of entrepreneurial experiences during crises, paving the way for future research in this emerging domain.

Until now, the scholarly literature on entrepreneurship has exhibited a noticeable deficiency in any exploration of the concept of Bullshit. This study represents the first effort to illuminate the relevance of this concept within the domain of founder entrepreneurship, especially in the context of crises. It is important to recognise that Bullshit can be regarded as an attribute marked by temporal dimensions, significantly influenced by the immediate situational context, as opposed to traditional attributes that tend to exhibit greater stability over time. In our previous research, we introduced and elucidated the concept that we have come to refer to as "Bullshit Praxis". To the best of our knowledge, our work stands as the first academic study to define this concept. We have delineated Bullshit Praxis as the process by which an internal Bullshit concept transmutes into an unconscious manifestation of Bullshit in the form of actions carried out by entrepreneurs. It is imperative to acknowledge that this characterisation underscores the relationship between attributes and behaviour. We suggest that an unconscious Bullshit Praxis represents the temporal attribute that invariably accompanies the Bullshitting behaviour, as evident in a multitude of interview transcripts from our prior study. This internal Bullshit concept markedly influences entrepreneurs' self-concept and resonates throughout their entrepreneurial activities and external communications.

This definition, however, leaves room for expansion. Consequently, the primary objective of this paper is to furnish a holistic, practical, typological definition of Bullshit Praxis by examining its representation in the experiences of founder entrepreneurs. While the paper does not seek to determine whether these representations are crisis-specific, it acknowledges the importance of contextualising this study within the COVID-19 pandemic. As discussed in our previous paper, many participants did not perceive the pandemic as a crisis; instead, they viewed it as an opportunity for learning and growth. Hence, for the purposes of this paper, crises are defined as the socially accepted economic and social landscape of the time rather than being solely contingent on participant perception.

This study is motivated by the conspicuous absence of academic inquiry into entrepreneurial Bullshit Praxis and its representation in crisis contexts, despite the clear relevance of entrepreneurial attributes on performance and intention, particularly in times of crisis (e.g., Bird, 1988; Borland, 1975; Kihlstrom and Laffont, 1979; Levine

and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000), as well as the plethora of public discourse on Bullshit (e.g., Spicer, 2017; Spicer, 2018). The existing literature offers minimal insight into this underexplored attribute despite evidence suggesting that small business entrepreneurship plays a pivotal role in economic recovery after crises (Papaoikonomou et al., 2012). This dearth of knowledge, both theoretical and practical, is concerning and restricts our understanding of Bullshit Praxis, entrepreneurship in crises and entrepreneurial attributes.

With the goal of better defining Bullshit Praxis by understanding its representation in founder entrepreneurs, this paper addresses a central question: how can we comprehensively define Bullshit Praxis based on the experiences of entrepreneurs? This definition may encompass multiple facets, embodying a range of active representations drawn from entrepreneur discourse and researcher interpretation. Consequently, this paper strives to shed light on the various ways Bullshit Praxis manifests in founder entrepreneurs.

This paper employs a qualitative research approach known as phenomenography to achieve these objectives. This methodology seeks to “capture the richness of individuals' lived experiences” (Berglund, 2015), offering a more profound understanding of the perceptions and experiences of founder entrepreneurs during crises and provide a typological model to define Bullshit Praxis based on these perspectives. The paper identifies and categorises ten different representations of entrepreneurial Bullshit Praxis, classifying them into Persuasive and Evasive categories to highlight acknowledged and unacknowledged actions and perceptions. The overarching Persuasive and Evasive Bullshit categories have been adopted from Littrell (2021a), who discusses Bullshit in an organisational capacity.

The empirical evidence in this paper is drawn from a sample of 18 founder entrepreneurs operating their ventures in Sydney, Australia, prior to and during the COVID-19 pandemic in the period from 2020 to 2021. These entrepreneurs represent a diverse range of industries, age groups, educational backgrounds, and entrepreneurial experiences, all of which are documented in Chapter Three and provided in Appendix 1 for reference. The findings presented here are, to the best of our knowledge, the first attempt to explore entrepreneurial Bullshit Praxis.

This paper makes several contributions to existing literature. First, it provides an extended, active definition of entrepreneurial Bullshit Praxis, expanding the concept from philosophy to entrepreneurship literature (Cohen, 2002; Frankfurt, 2009. This

novel attribute, Bullshit Praxis, to our knowledge, has not previously been researched in the context of entrepreneurship. This enhanced definition, which includes example representations of Bullshit Praxis, addresses knowledge gaps and subjectivity issues in identifying this attribute in future entrepreneurship research. Additionally, it confirms the existence of Persuasive and Evasive Bullshitting in entrepreneurs and broadens their definitions (Littrell, 2021a; Spicer, 2020).

Second, the paper contributes to the field of entrepreneurship, entrepreneurial attributes and entrepreneurship in crisis by offering a clear definition of a novel attribute that will enhance the understanding of the entrepreneur, adding to existing attribute models (Kerr et al., 2018). The significance of attributes in entrepreneurial crisis management and the perspectives of entrepreneurs have become essential topics, especially in the context of the COVID-19 pandemic. Most attribute-based studies in this field do not include novel attributes; instead, they rely on well-established attributes like the Big-5, need for achievement, locus of control, self-efficacy, innovativeness, and risk attitude, to our knowledge. None of these include Bullshit Praxis in their research. This study offers a model for identifying Bullshit Praxis in founder entrepreneurs, particularly during crises, enabling researchers to assess entrepreneurial experiences and perspectives better.

Third, this paper provides a model of entrepreneurial Bullshit Praxis, encompassing various forms of Persuasive and Evasive Bullshit. To the best of our knowledge, we are the first to present a definitional model of entrepreneurial Bullshit Praxis. These contributions are of paramount interest to scholars, policymakers and practitioners seeking to comprehend the role of attributes in entrepreneurial crisis response, making this work an essential resource for entrepreneurial survival in a dynamic business environment. Moreover, the findings offer an opportunity for entrepreneurs to engage in self-assessment and reflection.

This paper unfolds in a structured manner, beginning with a background section, followed by a review of existing literature on Bullshit within its traditional philosophical and linguistic contexts. It then outlines the methodology employed in this study, followed by the presentation of findings, discussion, and practical implications. The paper concludes by acknowledging its limitations and summarising its contributions.

Background

The field of entrepreneurial attributes represents a substantial and intricate area of research within the field of entrepreneurship. Investigative endeavours within this domain tend to focus on a wide array of cognitive, mindset, and behavioural facets. Typically, these attributes are examined individually or in conjunction, occasionally blurring the distinction between cognitive attributes and personality traits, as both tend to be integral components of the entrepreneurial psychological landscape.

Cognitive attributes, as elucidated by Grégoire et al. (2011), encompass the concept of "Mentalism", which involves an in-depth exploration of individuals' mental representations. This includes their perceptions of external entities, events and contexts, as well as various mental states and constructs. It also involves a thorough examination of the "process orientation", highlighting the dynamics of how these mental representations and constructs evolve, transform and are integrated into diverse entrepreneurial processes. Furthermore, cognitive attributes entail "the operation of cognitive dynamics across different levels of analysis". In essence, cognitive attributes refer to the dynamic mental states and constructs that connect with the entrepreneurial process.

Personality attributes, as defined by McCrae and Costa (1997), are "relatively enduring styles of thinking, feeling, and acting". This comprehensive characterisation underscores the inclusive nature of personality, which encompasses cognitive dimensions along with behavioural aspects, providing a holistic understanding of the entrepreneurial mindset.

For this paper, the overarching term "entrepreneurial attribute" is employed to encompass the multifaceted dimensions of mindset factors, cognitive attributes and personality traits. This conceptual agglomeration facilitates a coherent discussion of these attributes and their interaction within the entrepreneurial context.

Contemporary research in the field of entrepreneurial attributes has witnessed a recurrent emphasis on revisiting well-established factors. These investigations predominantly gravitate towards four primary categories, with particular emphasis on the Big-5 Model, self-efficacy, innovativeness, locus of control, and the need for achievement. These attributes collectively fall under the overarching category of 'personality' in Kerr, Kerr, and Xu's (2018) comprehensive entrepreneurship model. These attributes play a pivotal role in shaping entrepreneurial success (Leblanc, 2017)

and serve as guiding heuristics in decision-making, particularly in the context of novel and intricate business scenarios (Jiang et al., 2017). Although entrepreneurial attributes primarily delve into the cognitive landscapes of entrepreneurs, their tangible manifestation through observable behaviours serves as a robust indicator of their existence and practical relevance.

Within the current landscape of entrepreneurial attribute research, there is an apparent tendency towards recontextualising existing entrepreneurial attribute models, such as the Big-5 framework, with a specific focus on subsets of entrepreneurs. This includes investigations centred on social entrepreneurs (e.g., Bernardino et al., 2018), nascent entrepreneurs (e.g., Muñoz-Bullón et al., 2015), or serial entrepreneurs (e.g., Brem, 2008). While these studies provide valuable insights into particular sectors or entrepreneurial ecosystems, they often fall short of providing the comprehensive understanding necessary to address more pressing concerns, such as the recovery of societies and economies in the aftermath of crises. There is a compelling need to expand the scope of attribute-based research to gain a deeper insight into the revival of SMEs. Regrettably, only a limited number of studies have adopted a more expansive approach to entrepreneurial attribute research in recent years. This limitation has resulted in an inadequate exploration of the nuanced impact of crises on founder entrepreneurs, thus leaving significant gaps in our understanding (Doern, 2016).

It is worth mentioning in this section that Bullshit can be regarded as an attribute marked by temporal dimensions, significantly influenced by the immediate situational context, as opposed to traditional attributes that tend to exhibit greater stability over time. As such, it has been included here as its presence became known through the interviews and subsequent analysis in this study. However, this attribute may not be an explicit 'attribute' at all but rather a collection of temporal elements, from mindset to behaviour.

In the context of this study, recognising the distinction between mindset and behaviour is important for understanding the intricacies of entrepreneurial Bullshit Praxis. Mindset, as defined by Kuratko et al. (2021), involves the inherent capacity of individuals to embody or express specific traits, encompassing cognitive, behavioural, and emotional dimensions. It examines how entrepreneurs think, act, and mobilise, especially when faced with uncertain conditions, as highlighted by Haynie et al. (2010).

Conversely, entrepreneurial behaviour represents observable actions and expressions stemming from an individual's entrepreneurial mindset. This involves the enactment of

identified traits such as self-determination or self-identity, important elements in the entrepreneurship process, as highlighted by Kirkley (2016). Entrepreneurial behaviour, as Kirkley notes, is not only a byproduct of self-identity or self-determination but requires the demonstration of capabilities associated with traditional entrepreneurial traits.

Praxis, however, as a conceptual element, stands at the intersection of mindset and behaviour. Originating from Aristotle and discussed by Wulf (2006), praxis reveals intentional activities through which individuals strive to achieve specific goals via conscious efforts. Unlike mindset, praxis introduces a temporal dimension, acting as an intermediary element between consciousness and social being. It underscores the interrelation of human actions and social conditions.

Moreover, the concept of praxis has evolved across diverse theoretical frameworks. In the domain of ritual studies, praxis takes on a central role, going beyond the duality of thought and action. It encompasses intentional, accepted ritual acts performed by individuals and groups, coupled with the practical knowledge forming the foundation of these acts. Praxis serves as a bridge connecting ritual actions, social conditions, and practical knowledge, highlighting the performative and staged aspects of rituals, as explored by Ax and Ponte (2008). This is evidenced in this study's interviews, through the sample's descriptions of their own Bullshitting actions and approaches. For instance, less-than-transparent communication strategies with investors and stakeholders aiming to portray business results more positively exemplify this phenomenon.

In essence, while mindset represents the innate predisposition to embody entrepreneurial traits, behaviour signifies the tangible expression of these traits. Praxis, situated temporally between mindset and behaviour, encapsulates the practical knowledge and intentional actions that characterise entrepreneurial behaviours. Thus, we suggest that an unconscious Bullshit Praxis represents the temporal attribute that invariably accompanies the Bullshitting behaviour, as evident in the interview transcripts. As such, this dynamic concept has been labelled as Praxis but is discussed in relation to attributes as this is the context of this study.

Additionally, it is crucial to highlight the underutilisation of unconventional phenomenological approaches in the domain of entrepreneurial attribute research. This underutilisation is an important concern as phenomenological data collection methodologies hold the potential to provide profound and comprehensive insights in

comparison to traditional, more detached research techniques, such as surveys and meta-analyses (Raco and Tanod, 2014). Overreliance on conventional methodologies often leads to recurrent and unenlightening research outcomes, contributing little substantial depth to practical entrepreneurship (Neergaard and Uihøi, 2007).

It is imperative to acknowledge that perception-based research, while somewhat at odds with a substantial portion of established entrepreneurship literature, does have a valid place within specific domains of entrepreneurial attribute exploration. This is particularly evident in studies focused on success factors, as exemplified by research on female entrepreneurs (Rieger, 2012), regional entrepreneurs, such as those in Pakistan (Nisar et al., 2020), or inquiries into lived experiences (Bann, 2009). Nevertheless, the application of perception-based research to comprehend and address entrepreneurial attributes and perceptions within the context of crises remains conspicuously underrepresented.

Review of the Literature on Bullshit

Bullshit in Philosophy and Linguistics

Within the realm of entrepreneurship attributes, the extant literature has exhibited a degree of coverage, albeit with conspicuous gaps, notably the absence of discourse on the intricate concept of Bullshit. The concept of Bullshit, primarily considered in philosophical research domains, has witnessed continuous refinements and deliberations surrounding its definition. These academic discussions have predominantly revolved around linguistic nuances rather than practical applications and explicit definitional study in entrepreneurial contexts. While the definitional debate surrounding Bullshit continues, the most widely accepted characterisation, as first elucidated by Harry Frankfurt in his seminal 1986 essay, "On Bullshit", posits that a Bullshitter, the producer of Bullshit, prioritises outcomes over facts. In contrast to one actively seeking to deceive, a Bullshitter strives to influence outcomes through any means at their disposal. Frankfurt asserts that the Bullshitter does not engage in outright opposition to the authority of truth, as is the case with a liar; instead, they utterly disregard it, making Bullshit a more challenging adversary to truth than lies. Frankfurt further contends that Bullshit frequently occurs unintentionally and is, to a certain extent, unavoidable for the Bullshitter. This unintentional nature arises from the Bullshitter's implicit belief in the possibility of distinguishing true from false statements, "His interest in telling the truth or in lying presupposes that there is a difference

between getting things wrong and getting them right, and that it is at least occasionally possible to tell the difference. Someone who ceases to believe in the possibility of identifying certain statements as true and others as false can have only two alternatives. The first is to desist both from efforts to tell the truth and from efforts to deceive. This would mean refraining from making any assertion about the facts. The second alternative is to continue making assertions that purport to describe the way things are but that cannot be anything except Bullshit"; thus, ceasing to believe in this distinction leads to the inadvertent creation of Bullshit.

G.A. Cohen, another influential academic within this domain, provides an alternative perspective. Cohen characterises Bullshit as "unclarifiable unclarity" in his 2002 paper, "Deeper into Bullshit". He posits that Bullshit is not the act itself but rather the result stemming from it, namely the impact on the self and others due to the absence of clear truth. Cohen notes that this unclarifiable unclarity is typically unintentional, introducing the notion of a Bullshitter who attempts but fails to produce Bullshit, resulting in an expression of good sense instead. This unintentionality underscores both Frankfurt's and Cohen's perspectives. In this way, the main difference in definition between Cohen and Frankfurt is that Cohen focuses on Bullshit as an outcome of an act, whereas Frankfurt focuses on Bullshitting as the act itself. They also distinguish between intentional and unintentional Bullshitters, highlighting the prevalence of unintentional Bullshitting. Nevertheless, a subset of Bullshitters, termed "Bullshit Artists" by Frankfurt and "Aim-Bullshitters" by Cohen, intentionally engage in convoluted communication aimed at obscuring the truth without outright lying. This form of Bullshit-speak is intentionally employed to manipulate the Bullshittee, the recipient who believes the unclarifiable utterance produced by the Bullshitter. In Frankfurt's work, it is seen as speech without regard for the truth. In Cohen's work, they are speaking a convoluted, unclarifiable unclarity to mislead intentionally. While not explicitly articulated in Frankfurt or Cohen's work, it is suggested that for Bullshit to exist, both a Bullshitter and a Bullshittee must be present. This notion is more explicitly addressed in Pennycook et al.'s 2015 paper, "On the reception and detection of pseudo-profound Bullshit", which posits the necessity of a Bullshittee for Bullshit to manifest. In this paper's typological section, we propose that the Bullshitter and the Bullshittee may often be the same individual. Where Bullshit can be produced to publicly affect others' beliefs and actions, for a Bullshitter (not an aim-Bullshitter) to produce an unclarifiable unclarity without knowingly lying, they must inevitably be Bullshitting themselves first, making them the initial Bullshittee. Within entrepreneurship, we propose that constant

self-Bullshitting may be imperative for entrepreneurs to set and pursue ambitious goals distinct from traditional, secure employment.

Scholarly discussions on Bullshit, frequently centring on Frankfurt's and Cohen's contributions, have generated considerable discourse and debate. Critics have weighed in, with Sorensen (2011) and Fallis (2011) critiquing Frankfurt's notion of Bullshit falling short of lying, while Thomas Carson (2016) introduced an amalgamated concept, where "Sometimes when a person Frankfurt-Bullshits, the product is Cohen-Bullshit". Frankfurt-Bullshit is described as "Nonsense rubbish", whereas Cohen-Bullshit is termed "Trivial insincere talk or writing". Such debates on the practical definition of Bullshit are expounded upon in various papers, with some advocating for or contesting the definitions proposed by Frankfurt and Cohen-Bullshit (Belfiore, 2009; Fredal, 2011; Hernández-Ramírez, 2018; Maes and Schaubroeck, 2006; Rice, 2015). Yet, despite this discourse, the practical delineation of Bullshit remains enigmatic at best.

Bullshit in Management and Entrepreneurship

In recent years, a discernible shift in academic discourse has engendered a corpus of studies with a heightened pertinence to entrepreneurship, particularly centring on the phenomenon of organisational Bullshit. While distinct from entrepreneurial Bullshit, these investigations offer potential insights into the types of Bullshit that may manifest within small business and entrepreneurial ventures. Notably, Christensen et al. (2019) illuminate the performative dimension of organisational communication, revealing two fundamental social functions of organisational Bullshit: commanding and strategising. Commanding is characterised by "Bullshit offering a sense of commanding without commands, direction without directives", as it allows managers to, for instance, appraise employees in a way that ostensibly emphasises development but predominantly concerns performance. Conversely, strategising has been described as "attempts to define and achieve such futures" and is "likely to depict reality in a language that differs from—perhaps even defies—the immediate experiences of employees and other audiences". It is plausible that this latter definition has relevance in delineating entrepreneurial Bullshit. Concurring with Christensen's perspective on organisational Bullshit, Herold et al. (2020) affirm that "Bullshit also seems to be more likely to occur during organisational crises, as uncertain eventualities and rumours increase the likelihood of Bullshitting". This perspective aligns with the notion that Bullshit Praxis is prevalent in entrepreneurial crises.

A prominent voice in the field of organisational Bullshit serves is André Spicer. In his 2020 paper, "Playing the Bullshit Game: How Empty and Misleading Communication Takes Over Organizations", Spicer identifies Bullshit as "a social practice that organisational members engage with to become part of a speech community, to get things done in that community, and to reinforce their identity". He suggests that this practice often finds fertile ground among conceptual entrepreneurs, particularly during periods of permissive uncertainty, as seen in organisational crises. This perspective, outlined in Figure 4.1, resonates with the opinions articulated in our previous paper, where the salience in the appearance of Bullshit among entrepreneurs during crises is explored. While Spicer has addressed the theme of organisational and business Bullshit in multiple works (e.g., Spicer, 2013; Spicer, 2017), his 2020 paper stands out as the most current and pertinent to this study.

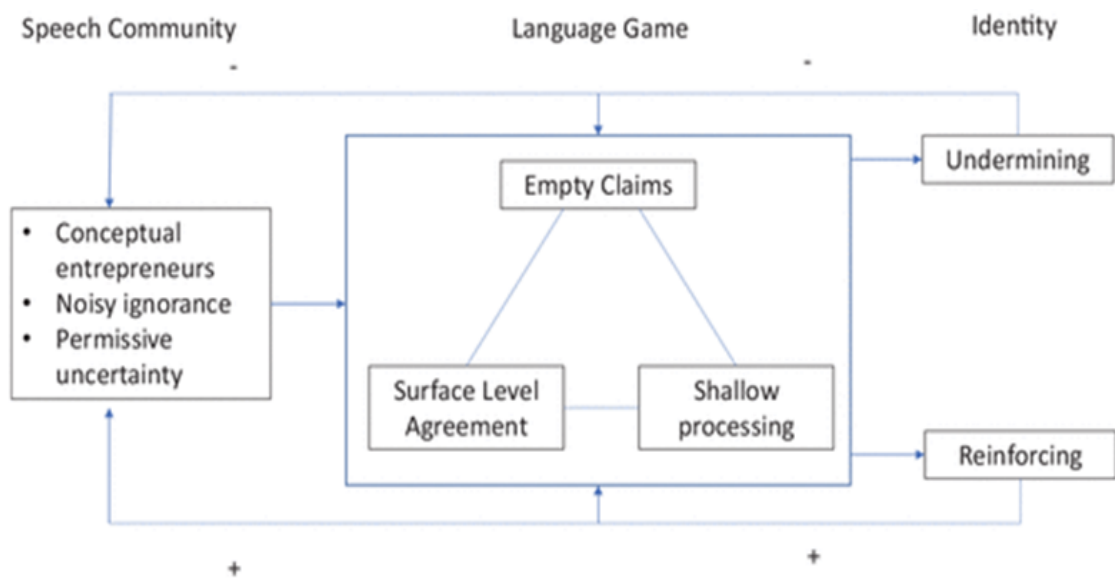


Figure 4.1: A Theory of Bullshitting. André Spicer, 2020

Interestingly, Spicer highlights the findings of Littrell et al. (2021a), noting that "Bullshitters tend to have lower cognitive ability, be less honest, less open-minded, have lower feelings of self-worth, and a higher tendency for self-enhancement" (Spicer, 2020). Littrell et al. introduce a novel dimension to Bullshit studies, emphasising Bullshit frequency. They introduce the psychometric Bullshit Frequency Scale, which encompasses 12 items to provide a self-reported measure of Bullshit frequency. This scale classifies two primary types of Bullshit: persuasive Bullshit, characterised by "positively biased misrepresentations of one's own knowledge, attitudes, or skills" and employed to enhance one's persuasiveness, and Evasive Bullshit, involving "strategic evasiveness... motivated by a desire to avoid giving direct answers to (inquiries) where

more direct responses might result in undesirable social costs". Notably, Evasive Bullshit is observed to be more prevalent. These findings have been corroborated by Čavojová and Brezina (2021).

Furthermore, Littrell et al. (2021) contend that Persuasive Bullshitters, as opposed to their Evasive counterparts, tend to be more receptive to various forms of Bullshit. Persuasive Bullshit, in their analysis, is "(1) is motivated by a desire to impress and be accepted by others; (2) often involves misrepresenting oneself as more intelligent or knowledgeable about a topic than he/she actually is; (3) can include language meant to be perceived as superficially interesting or exciting; and (4) is enacted when perceived to be easy to get away with". Conversely, Evasive Bullshit, "represents Bullshitting initiated when a person does not want to reveal what he/she thinks about a particular topic, believes that answering a question(s) in a frank manner would be harmful or embarrassing, and/or wants to avoid an inquiry altogether". This finding opens new avenues for exploration, suggesting that individuals who engage in particular forms of Bullshit may also be particularly receptive to various manifestations of Bullshit. However, there may be limitations in this work by participants self-reporting their own levels of Bullshit, being that Bullshit is often seen as taboo and unsavoury.

However, a conspicuous void in this burgeoning body of literature pertains to the delineation of Bullshit within the entrepreneurial context, as well as when understanding its manifestations during crises, particularly within the framework of the COVID-19 pandemic. The existing studies in the realm of Bullshit tend to offer generalised definitions rather than nuanced typologies, which entail researcher-driven examples of presentation rather than relying on self-reported accounts. This study addresses these gaps by incorporating the perspectives of Sydney-based entrepreneurs operating during the COVID-19 social and economic crisis. By doing so, it seeks to provide a more precise definitional lens through a qualitative typological approach and supplying practical illustrations of the diverse facets of entrepreneurial Bullshit with direct examples. This concept is loosely delineated in our previous paper as Bullshit Praxis, signifying the accepted practice or act of taking action, frequently through communication, with an outcomes-focused orientation and limited regard for truth.

Legitimacy Theory in Entrepreneurship

While not inherently aligned with the traditional discourse on Bullshit, it is imperative to acknowledge the pervasive influence of legitimacy theory within the domain of entrepreneurship, as it often creates a propensity for conflating legitimacy theory with Bullshit theory when scrutinising entrepreneurs, their cognitive orientations, intentions, and behaviours. While a considerable portion of legitimacy theory explores the intricacies of social legitimacy and the inclusion of nascent founders, encompassing various facets of their entrepreneurial behaviours and successes (De Clercq and Voronov, 2009), alternative studies delve into the realm of entrepreneurial storytelling. This narrative discourse underscores the imperative for entrepreneurs to disseminate their entrepreneurial journey or narrative to stakeholders to garner legitimacy and support, whether in social or financial terms. Importantly, this process necessitates continuous revision (Fisher et al., 2017; Garud et al., 2014). It is grounded in the understanding that, for entrepreneurial endeavours to thrive, they must attain public recognition as legitimate entities (Fisher et al., 2016), as the legitimacy of organisational activities hinges on being perceived as viable and aligned with social norms (Suddaby et al., 2017). Storytelling undeniably constitutes an essential component of the entrepreneurial journey, contributing to the development of organisational identity (Lounsbury and Glynn, 2001). Nonetheless, this action embodies a consciously undertaken entrepreneurial behaviour designed to position an individual or venture favourably for a desired social outcome. Although the domain of storytelling is still evolving, it falls squarely within the realm of behaviour and does not emanate from an unconscious cognitive mindset.

Legitimacy theory finds its place in diverse areas of entrepreneurship research, frequently featuring in the context of social entrepreneurship. In this context, legitimacy theory often underscores the self-reflexive nature of this pursuit, where legitimacy is informed by the success narratives of heroic entrepreneurs and the ideal models for organisational types derived from commercial businesses (Nicholls, 2010). Nevertheless, these discussions tend to encompass general considerations of social entrepreneurship rather than placing a concerted focus on the legitimacy of specific attributes of the entrepreneur, instead directing attention towards the organisation as an entity (Kibler et al., 2018). Some studies within the legitimacy framework delve into the realm of entrepreneurial crowdfunding. Within this domain, various project-based characteristics have been linked to different forms of legitimacy and success (Chen, 2022). These encompass facets like modest expectation setting, equity investment

terms, and narrative visual pitches (Frydrych et al., 2014). However, much like the aforementioned storytelling research, these inquiries primarily emphasise the actions and behaviours of entrepreneurs, steering clear of cognitive attributes or mindsets that may influence founder personalities.

Notably, a segment of legitimacy research within entrepreneurship scrutinises the role of deceit in the creation of successful ventures, specifically the ethical and moral dimensions of deceptive practices. Some findings assert that entrepreneurs employ proactive strategies, including "questionable ethical behaviours, including telling legitimacy lies—intentional misrepresentations of the facts", to gain initial legitimacy with key stakeholders (Rutherford et al., 2009). These investigations often employ case study discourse analyses to underscore that societal perceptions judge individuals as entrepreneurial not only based on their actions but also on public perception. Anderson and Smith (2007) underscore the moral imperative tied to entrepreneurship, particularly concerning accurate legitimacy. Consequently, many studies are dedicated to addressing the ethical intricacies presented by emerging ventures in their pursuit of legitimacy (Steverson et al., 2013; Theoharakis et al., 2021). Despite these ethical considerations, entrepreneurs continue to resort to intentional deception to attain legitimacy, often targeting investors to secure resources and enhance the prospects of firm survival and growth. Remarkably, investors, cognisant of the expected volatility and inherent risks of startups, tend to be forgiving of such intentionally deceptive behaviours (Pollack and Bosse, 2014). Pollack and Bosse go on to explain that "entrepreneurs lie to investors by sharing inaccurate stories and intentionally misleading information" (Aerts and Cheng, 2012; Herzenstein et al., 2011; Lounsbury and Glynn, 2001) in order to reach a point at which, "the firm begins authentically sending credible signals to prospective investors that the firm is acceptable, appropriate, and desirable" (Rutherford and Buller, 2007, Singh et al., 1986).

While the existence of intentional entrepreneurial deception is apparent, what remains unclear is the degree to which this deception is intentionally misleading and whether such behaviour, when unintentional, stems from an unconscious praxis. This is precisely the terrain where Bullshit literature should be explored within the entrepreneurial context. As elucidated earlier, Bullshitting is characterised by the absence of intentional deception and stands apart from lying. Moreover, as our previous study has elucidated, unconscious Bullshit Praxis, the cognitive predisposition and precursor to Bullshitting behaviour, is indeed discernible in entrepreneurs. Consequently, the existing body of research within legitimacy theory and studies on

lying in entrepreneurship overlooks the facet of unintentional behaviour and the role of entrepreneurial attributes. Hence, the ensuing section of this paper endeavours to illuminate the aspects of entrepreneurial Bullshit Praxis further, thus laying the foundation for future research to explore this facet of entrepreneurial legitimacy comprehensively.

Methodology

In this study, we collected and evaluated data in accordance with the qualitative, phenomenographic methodological style. Phenomenology is “the study of essences and accordingly its treatment of every problem is an attempt to define an essence, the essence of perception” (Merleau-Ponty and Bannan, 1956). Its focus lies with “intentionality”, meaning that “every act of consciousness we perform, every experience that we have is intentional”, even if we do not realise it (Sokolowski, 2000). Consequently, conducting phenomenological research can lead to an “authentic understanding” of a chosen phenomenon (Richardson, 1999). In this way, it is the most fruitful method of understanding the experiences of founder entrepreneurs through the interpretation of their perspectives. This phenomenographic approach is the most appropriate for creating a practical definition of entrepreneurial Bullshit Praxis, as only through this rich understanding can functional examples be drawn. Furthermore, notwithstanding the extensive body of scholarly work devoted to Bullshit as an academic construct, there exists a notable gap in research that offers a typological comprehension of entrepreneurial Bullshit. More precisely, such a typology is sought, one founded upon comprehensive narratives derived from the lived experiences of entrepreneurs navigating the challenges posed by the COVID-19 pandemic, with specific attention to their entrepreneurial attributes.

Data Collection

This study commenced with the initiation of semi-structured interviews involving founder entrepreneurs in December 2020, marking the onset of the COVID-19 pandemic. This deliberate temporal delay was instrumental in allowing for a comprehensive assessment of the crisis's profound ramifications, allowing participants and their respective ventures to experience and adapt to evolving circumstances. This interview phase spanned over four months, concluding in March 2021. The decision to collect data during the pandemic's peak was underpinned by the pursuit of a deeper comprehension of participants' perspectives. This approach facilitated the accurate

documentation and interpretation of their intricate experiences within a timely context, thereby removing the reliance on long-term recollection. The subsequent data analysis process involved initial coding, which transpired in April 2021 and thereafter.

Subsequently, the data was subjected to a secondary phase of coding and analysis for this paper, spanning the interval from December 2021 to February 2022. All interviews were meticulously documented through audio recording and transcription, with each session ranging from 40 minutes to two hours.

In this study, the researchers adopted a criterion-based purposive sampling approach to recruit participants, leveraging publicly available profile information from LinkedIn and employing a snowball referral system initiated by prior participants. The selected cohort comprised venture founders situated in Sydney who had steered their businesses through the challenges posed by the COVID-19 pandemic, with a minimum of one year of pre-pandemic operational history. Following the convention in phenomenographic studies, typically encompassing 10 to 20 participants (Salaz et al., 2018), the research team chose to maintain a compact yet information-rich sample size. The saturation point was identified at 11 participants; however, the study extended its participant pool to incorporate a total of 18 individuals to ensure the precision of findings. This approach aligns with established qualitative interview-based studies, in which the conclusion is often guided by the attainment of data saturation, indicating that no further variation in categories of experience is forthcoming (Yin, 2015). Despite the modest sample size, the screening process encompassed over 200 potential participants. The selection aimed to encompass a diversity of industries in which the participants had founded their ventures, a characteristic intrinsic to phenomenographic inquiry. These industries encompassed areas such as employment, cybersecurity, consulting, compliance, data, education, finance, technology, marketing, hospitality and food. In demographic terms, 80% of the sample was male, with an average age of approximately 40 years. While this demographic profile might appear to reduce variation, it was consistent with established literature on entrepreneur demographics, where the prototypical entrepreneur falls within the 35–44-year-old male demographic (Parker, 2009). A detailed breakdown of the demographic results is available in Appendix 1. The notable homogeneity observed among the participants was a deliberate research methodology that finds endorsement in numerous studies within the domain of entrepreneurship. A considerable body of scholarship promotes the utilisation of more homogeneous participant samples in research investigations, as it serves the purpose of distinctly isolating the particular attributes or variables under scrutiny.

Semi-structured interviews were conducted using an open-ended approach based on theoretical, archival data synthesis. Questions were broad, allowing for additional information to be provided by the participants. Sub-questions were provided in reaction to the discourse provided as a result of the initial trigger questions. Questions revolved around getting to know the participant (e.g., “What has been your experience with entrepreneurship growing up and throughout your life?”), success (e.g., “What is success to you, in the context of your business and entrepreneurship journey?”), crises (e.g., “To what extent is the current COVID-19 economic and social crisis affecting your business?”), marketing activities (e.g., “Have your marketing strategies changed as a result of this crisis”) and other practices (e.g., “Are there any other things which we have not covered which you changed as a result of the current economic crisis or which you think would be related to the themes we have been discussing?”). Any further probe questions allowed for as much information to be gathered as possible but were reserved for when it was naturally appropriate to enquire further about a comment made. Probe questions reduce the risk of perceived ambiguity within participants' answers by allowing them to clarify the phenomena in a way that makes sense to them (Barriball and While, 1994).

Data Analysis

The interviews, recorded in audio format, were transcribed and subject to systematic coding procedures using NVIVO computer software. Initially, a thematic coding approach was applied in our previous study, ultimately leading to the identification of various categories, one of which culminated in the emergent concept of Bullshit Praxis. Subsequently, the dataset containing quotations related to Bullshit Praxis underwent an additional two rounds of coding. This iterative process aimed to ensure a comprehensive and precise representation of the various manifestations of Bullshit within the dataset.

Thematic coding is a standard phenomenological data analysis method for semi-structured, in-depth interviewing (Flynn and Korcuska, 2018). The coding process was executed manually to facilitate the development and flexible adjustment of node associations, a crucial step due to the often extensive and disjointed nature of the interview accounts. This methodological approach yielded a succinct set of Bullshit Praxis categories, each encapsulating distinct variations of this phenomenon as articulated by the participants and reflected in their self-reported behaviours. The outcome of this rigorous coding process was the emergence of a typology outlining

different types of Bullshit Praxis, which were subsequently refined, labelled and comprehensively described through illustrative examples.

Thematic coding serves as a common method for conducting typological analyses in the field of entrepreneurship research. This approach allows the data to organically yield novel insights and revelations that quantitative methodologies may not uncover. While typological modelling processes, as exemplified by Doty and Glick (1994), can provide a parsimonious framework for comprehending complex organisational features, they may present challenges when applied to relatively uncharted areas of study with limited available data. As a consequence, manual coding was employed, aligning with a method that facilitated the identification of inherent patterns, similar to established qualitative entrepreneurial typologies (Alstete, 2002; Jones-Evans, 1995; Patton, 1990; Siu, 1995).

To establish a coding scheme, the Bullshit Praxis codes from our previous study (see Figure 4.2) were extracted from the dataset and re-evaluated to account for variations in presentation. As in the preceding study, a Gioia Grounded Theory approach was adopted. This involved accessing the data and conducting an inductive analysis, wherein themes were delineated through an initial open coding process and concepts were grouped and labelled descriptively (Corley and Gioia, 2004). Subsequently, axial coding was undertaken to reveal relationships between these descriptions, ultimately leading to the identification of overarching, higher-order themes. Given the inductive and exploratory nature of this research, the emergent typological themes necessitated a high level of coding rigour to assign each attribute to its respective selective code accurately. A comprehensive overview of the coding structure can be found in Figure 4.3.

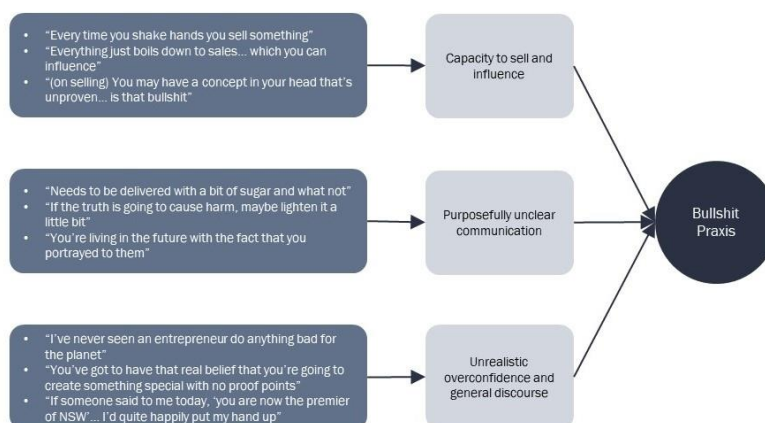


Figure 4.2: Bullshit Praxis coding from previous study

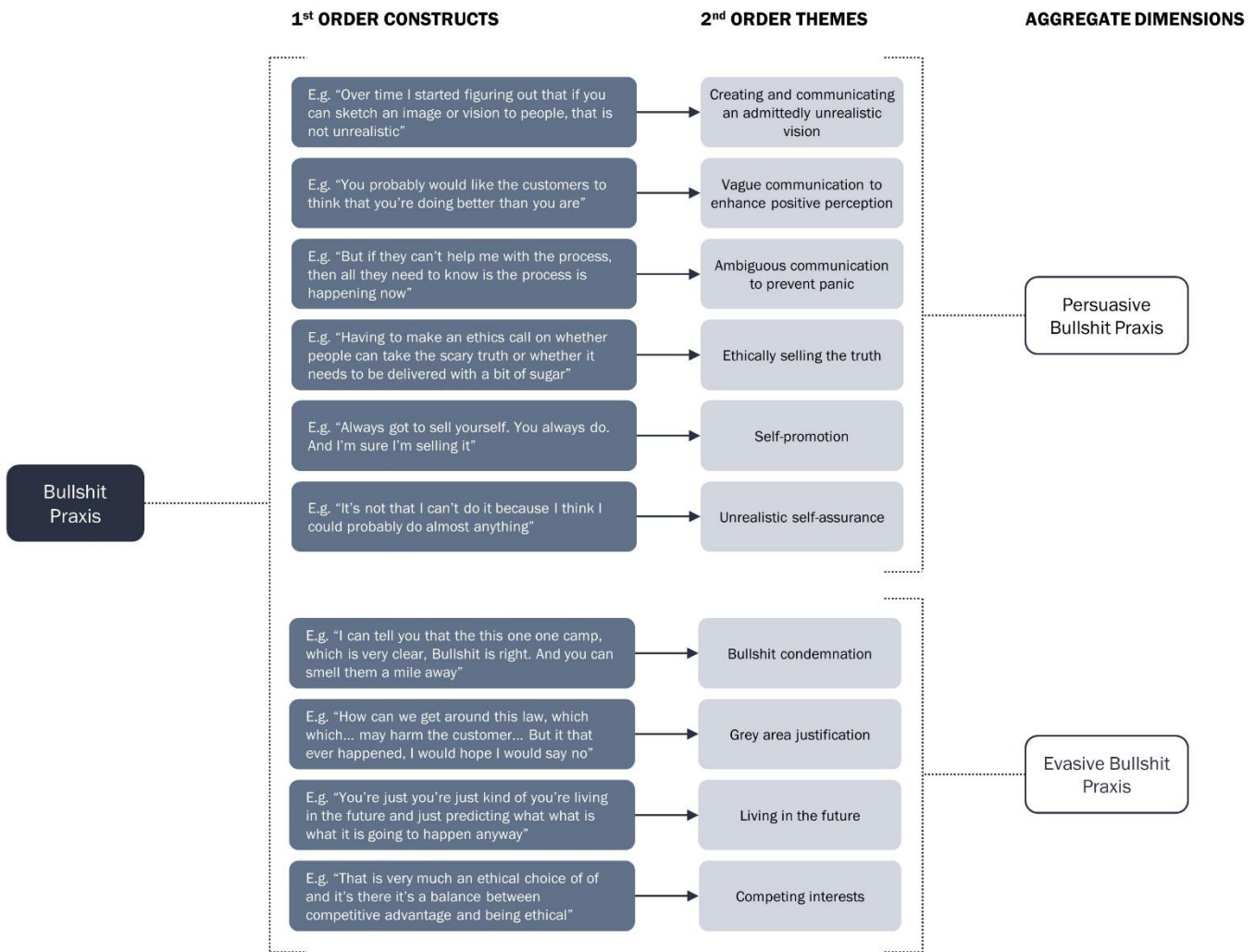


Figure 4.3: Bullshit Praxis coding schematic for typological delineation

Results and Discussion

The data analysis has unveiled two primary categories of Bullshit Praxis manifestations, adopted from Littrell (2021a): participants who openly acknowledge their engagement in Bullshit activities and communication and those who describe such activities but refrain from admitting their involvement. Intriguingly, these categories, with the exception of FE9 and FE12, displayed little overlap, with participants predominantly falling into one or the other. Approximately 58% of the instances of Bullshit Praxis were accompanied by a candid admission, while the remaining 42% exhibited a more subtle approach, frequently entailing the disavowal of their own Bullshit.

These findings expand upon the work of Littrell et al. (2021a), wherein individuals who openly admitted to their Bullshit Praxis often portrayed it as a deliberate misrepresentation of themselves or their ventures aimed at cultivating a favourable impression among their intended audience. This tendency aligns with Littrell's persuasive Bullshitter theory. Conversely, entrepreneurs who hesitated to acknowledge their Bullshit Praxes, frequently expressing disapproval of both the practice and its practitioners, were consistent with Littrell's evasive Bullshitter theory. In this context, participants employed their Bullshit Praxes as a means to evade candidly expressing their opinions on certain matters or situations, often associated with rationalising actions conducted in morally ambiguous territory.

Notably, while Littrell suggests that Persuasive Bullshitters are more susceptible to the Bullshit of others, our findings appear to indicate otherwise. All instances of Bullshitting within this study were drawn from founder entrepreneurs who had previously exhibited Bullshit Praxes. Furthermore, participants categorised as Evasive Bullshitters had previously been identified in our earlier research as possessing a Pro-Ethical Self-Assessment, reflecting a self-concept rooted in inherent ethicality and transparency, a self-assessment consistent with their actions. Thus, it appears that these Evasive Bullshitters presented their Bullshit while simultaneously denying it, potentially engaging in self-deception regarding their own Bullshit Praxes. Consequently, it is plausible that both Persuasive and Evasive Bullshitters demonstrate susceptibility to believing Bullshit, particularly when it pertains to their own deceptive practices.

This paper will subsequently delve into both Persuasive and Evasive Bullshit categories as represented within the dataset, further breaking down these categories into subtypes to facilitate a nuanced understanding of the various manifestations and characteristics of entrepreneurial Bullshit Praxis observed during crises.

It is imperative to acknowledge that this paper does not aim to definitively establish whether this typology of Bullshit Praxis is exclusive to crises or applicable to entrepreneurship in a broader sense. While the study's context revolves around the COVID-19 pandemic, the data collected often pertains to deeply ingrained, pre-pandemic unconscious praxes that are more reflective of enduring personality traits. Although one might hypothesise that the specific manifestations of Bullshit Praxis could be unique to the crisis environment, the analysis of the verbatim responses suggests that this attribute is not inherently crisis-specific. Consequently, understanding any novel attribute that has contributed to self-reported venture stabilisation or growth

during challenging times is paramount for gaining deeper insights into the entrepreneurial psyche. Such insights are instrumental in comprehending the driving forces behind the group of entrepreneurs poised to play a pivotal role in the post-crisis reconstruction of societies and economies.

Furthermore, it is worth noting that the process of capturing entrepreneurs' voices and delving into the intricacies of their personality attributes via phenomenographic inquiry, particularly within the exceptional context of the COVID-19 crisis, may uncover insights that might not readily reveal their immediate implications. Nonetheless, such endeavours hold a pivotal role in future comparative investigations involving different crises or post-crisis eras. They bear the potential to shed light on the enduring consequences and lasting influence of entrepreneurial Bullshit Praxis on crisis mitigation and recuperation strategies.

Category 1: Persuasive Bullshit or Admitted Bullshit Praxis

The data collected and subjected to analysis revealed that Persuasive Bullshit can be characterised as a form of self-acknowledged Bullshit Praxis undertaken with the aim of portraying oneself or one's venture in a more favourable light than its actual state. The primary intent is to cultivate a positive perception rather than to engage in deception. Within the domain of Persuasive Bullshit Praxis, seven distinct types of Bullshit emerged: “creating and communicating of an admittedly unrealistic vision”, “vague communication to enhance positive perceptions”, “ambiguous communication to prevent panic”, “ethical selling the truth”, “self-promotion” and “unrealistic self-assurance”.

Creating and Communicating an Admittedly Unrealistic Vision

Most individuals categorised as persuasive Bullshitters exhibited notable engagement in this category. Their Bullshit practices primarily revolved around enhancing the presentation of their ideas or ventures to appear more impressive or accomplished than their actual state at the present moment. This embellishment might involve portraying their visionary goals as current realities rather than future possibilities or constructing a fantasy narrative to maintain on a personal level. Remarkably, all participants in this category openly acknowledged their involvement in Bullshit, and they all perceived these activities and forms of communication as constructive, fitting and vital for achieving success. It was their prevailing belief that having an inherent unconscious Bullshit Praxis, particularly when dealing with internal and prospective

internal stakeholders such as staff, board directors and investors (both current and potential), was commonplace in the startup environment.

One participant illustrated this as follows: "...you can sketch an image or a vision to people that is not unrealistic, but it is. It is, yeah, it is still borderline realistic, then people kind of go on to the journey with you...you by describing the vision, people can come, you can get them on the journey" (FE2). Another participant emphasised: "I can see in my head all the things that we can deliver, and it's not like we can't deliver them, I know we can. So I always try to convey some of the bigger picture, particularly for bigger companies... I'm trying to pitch to the bigger picture if all the value that we will be creating above what we already have" (FE5).

In many instances, this form of Bullshit Praxis was adopted to enlist the support of others, especially investors. It was a prevalent perception that investors required a certain degree of Bullshit to become involved and invest in a project since providing realistic information, such as current sales or business value, was generally unappealing. A participant explained: "Because you do believe in yourself, but you have to get other people to do that, to believe in themselves and believe in what you're telling them". (FE11). Another participant elaborated: "...if you have a conversation and you're selling a value proposition and you're very 100 per cent factual about it, it's not going to be very appealing". (FE12).

Furthermore, this type of Bullshit Praxis was also discussed in the context of self-delusion. Participants often referred to it as vision-setting or creating a fantasy, believing that they had to maintain an internal perspective of their venture that was realistically unattainable in order to strive for a loftier aspiration. A participant expressed this sentiment: "...making up a number of thin air as far as how many, what I want to achieve for it, and then just working systematically to do it". (FE13). Another participant noted: "I think you need to fantasise in the areas where you know something...And I think that keeps me balanced because I fantasise". (FE14a).

Remarkably, one participant even delved into a discussion about the boundaries of Bullshit Praxis in communication, emphasising that while fantasy was essential for creation, it ultimately needed to be grounded in some form of realistic activity to make a genuine contribution to a venture, "combining fantasy with knowledge and experience. Yeah, some grounding. And I think that's something that you ask that and surround yourself with a lot of people that give you some feedback, maybe just help you sometimes" (FE14a).

This perspective aligns with the prevailing view in the literature on storytelling within entrepreneurial legitimacy theory, which posits that to gain legitimacy and support from various stakeholders, be it for social or financial purposes, entrepreneurs must communicate an enticing vision woven into an engaging narrative. (Fisher et al., 2017; Garud et al., 2014). This facet of the venture creation journey appears to be intrinsically tied to an unconscious Bullshit Praxis, with many of the study's participants subscribing to their own Bullshit before embarking on actions to communicate these ideas to others. Intriguingly, this element of the entrepreneurial psyche does not appear to be specific to the COVID-19 pandemic but rather a recurring attribute of entrepreneurs in general—a crucial facet of engagement.

Vague Communication to Enhance Positive Perceptions

Within this distinct category, Bullshit was deliberately employed through the utilisation of vague communication strategies to create an illusion of heightened success for their ventures in the eyes of their customers, as opposed to their internal stakeholders. Participants in this category believed that employing Bullshit was imperative to cater to the aspirations of their customers, recognising that their ventures might not be as appealing without a certain degree of Bullshit. For instance, one participant elucidated this perspective:

“Yeah, when you say that, like, you probably would like the customers to think that you're doing better than you are. I mean, obviously, you would want that...So I try to do that, you know, welcome people to the team as we hopefully get a couple of case studies with a few customers who are doing right now. I'm going to publicise the shit out of them. And we used our own product recently to hire six people. So I just finished like a massive in-depth article about that first. So that's the sort of thing that I push. So that's what I try to do” (FE5).

Furthermore, another participant shared insights, stating:

“You've got people out there that selling something that's just totally not true. They'll have a and it's going to be right. And that's what I really dislike that. But I think it's important when you're selling a that you've really got to understand what is beyond just a technical definition. So the person that you're talking to, what are they after? And to be able to provide them the context from their perspective” (FE12).

This practice aligns closely with the preceding category of Bullshit, wherein Bullshit is instrumental in cultivating a more favourable perception. It is noteworthy that entrepreneurial ventures must secure public recognition as legitimate to achieve genuine success (Fisher et al., 2016), as organisational activities need to be perceived as conforming to societal norms to be considered legitimate (Suddaby et al., 2017). Hence, employing Bullshit to enhance a positive perception represents a conscious act of Persuasive Bullshit.

Ambiguous Communication to Prevent Panic

Entrepreneurial practitioners frequently resorted to Bullshit communication Praxes during the COVID-19 crisis to avert internal anxiety, a practice primarily directed towards their employees within the venture. Entrepreneurs perceived a need for a semblance of optimism, occasionally founded on partial truths, to assuage concerns among their staff members, both regarding the overall stability of the business and their individual roles amid the challenging circumstances. As elucidated by one participant, this approach involved a strategic decision, “But I always had this theory that if I could tell someone organisation about it and they can help me with that, that's worth doing. But if they can't help me with the process, then all they need to know is the process is happening” (FE12). The same participant went on to note, “The milestones that all people need to know is that we're on track. Things can get delayed. And I'll say, you know, this has been delayed, but we're still on track. And that's all they need to know” (FE12).

This approach was not limited to employees but also extended to current investors, where the purpose was often to solicit additional investments during a period of operational challenges. In such cases, entrepreneurs sought to foster a sense of confidence and optimism among investors by projecting a more favourable view of the business's circumstances. One entrepreneur articulated this rationale:

“If anything, you probably want them to feel like you're doing better than you are to give a sense of positivity and optimism. And so we've got plenty of money in the bank. It's not like we're about to go bankrupt. If I serve, our shareholders have an option to basically invest at the same terms as a seed round an extra million dollars for another 18 months. So I'd probably be going back to them at some point in the next four or five months to maybe get that additional capital. But I don't want to do that until we have more runs in the board and we don't need the money at the moment” (FE5).

Participants utilising this form of Bullshit self-reported its effectiveness, indicating that it facilitated additional investment and served to minimise internal distress among their staff, thereby retaining the workforce. This practice is congruent with the principles of entrepreneurial legitimacy theory, particularly the role of storytelling, which underscores the significance of crafting a compelling narrative to secure investment and maintain the satisfaction of investors (Fisher et al., 2017; Garud et al., 2014). Within the context of the COVID-19 pandemic, this practice assumed heightened importance, as it served to mitigate both internal and external apprehensions at a time when market conditions were generating justified concerns.

Ethically Selling the Truth

This category of Bullshit Praxis exhibited a propensity towards deliberate deception, particularly in the context of promoting the idea or venture in a manner inconsistent with the truth. This category diverges from the communication category, as participants explicitly acknowledge the necessity of omitting certain truths to achieve favourable outcomes. While it bears some semblance to the Evasive Bullshit section, the participants in this category unequivocally admitted to engaging in and employing such practices rather than disavowing their existence or condemning the ethical aspects of the process. As one participant explained, “So it's definitely a case of ethically selling...what we mean was the truth... you having to make an ethics call on whether people can take the scary truth or whether it needs to be just delivered with a bit of sugar or what not” (FE1). Another participant echoed this sentiment, saying:

“over time, I started to learn how to have those conversations a little bit more sugar-coated, I would say, especially to investors... If you are too real realistic and you set your goals too tactical or you just describe for us what you can see, but not what you want to achieve, they often think, oh, you're not ambitious enough... So it is be like always thinking about the bombastic, like the bigger thing rather than the what is possible, I would say being able to. Quickly understand what the person in front of you wants to hear. And then trying to mix it in your own story... think it's a game you need to play... it's not that you're going to outright lie to them, right?... Like I said, yeah, we're going to we are going to sign up Atlassian tomorrow as a customer. Like every investor knows that that's probably not true and it's going to take another three, four months because founders do kind of have the. The tendency to, I would say, lie, but borderline two things in a different

way .So do you think like. These sort of to play in that world have to. Sort of also the facts or put things in a different way to, I guess, be able to talk the talk” (FE2).

Throughout the analytical process, there was deliberation regarding whether this section could be categorised as outright lying rather than Bullshit. The purpose of this practice is quite evident: to promote a version of the truth that may not currently exist. However, in light of Frankfurt's conception of Bullshitting, which emphasises the focus on achieving a particular outcome rather than truth, it became evident that this form of entrepreneurial Bullshit indeed fell under the purview of Bullshit. The participants' intention was not to deceive but rather to serve a purpose. Therefore, this element was coded as a variant of Bullshit. Consistent with prior discussions, it is worth noting that investors, in particular, tend to be forgiving of deceptive or misleading behaviour when the venture reaches a point of genuine credibility and desirability (Pollack and Bosse, 2014, Rutherford and Buller, 2007; Singh et al., 1986). This widely accepted Bullshit Praxis appears to stem from an unconscious awareness of social acceptability, implying that it is a learned concept rather than an innate understanding.

Self-promotion

Numerous participants perceived self-promotion as an indispensable facet of the entrepreneurial journey, asserting that the act of presenting themselves—while not always an entirely faithful representation of their current state—proved to be effective in cultivating a positive image as entrepreneurs. This portrayal often translated into achievements in securing investments and forming partnerships, underpinned by the perception of competence and trustworthiness in the realm of relationship-building.

As one participant emphasised, “always got to sell yourself. You always do. And I'm sure I'm selling it. But I'm not seeing it that way. I'm just sharing the I'm the share in the law” (FE6). Another participant explained:

“I might strategise that if I know that you could help me with something. Right. I might find a way that I could help you with something first. And I have to be patient and I can't you know, I have to buy my time. That's quite strategic. And I wouldn't do that very often. But generally speaking, I'm always trying to help first...And I also think, secondly, just being open and transparent all of the time, not when it suits you, is important. And that helps because it means that it's efficient. That means people know that

what I say is what is going to happen. And I think that that form sort of, I guess, was of trust without us having to actually do a deal or do any work together. They just feel like, well, that's someone that I guess is going to do the right thing, is trustworthy. And so I think that that's important. And I think underlying that, it's about just being, I guess, quite humble is the right word..." (FE8).

Yet another participant highlighted the distinction between relationship-based selling and transactional selling, stating:

"I'm more of a relationship building approach to selling. So whether that's selling a concept, whether it's selling an idea to fund us its longer term, it's planting seeds, it's sort of growing it as we go. I think that transactional selling is a real skill where people are able to basically focus in on if I know you well enough, then I know that if you part with your money for X, your life will improve in the following areas because I know that well. So I sort of separate the transactional selling with more of a relationship sort of piece. So I think the relationship selling, I, I think that I do pretty well or I could would be the stronger of the two, that transactional selling, which is more about what's in it for you as opposed to what's in it for me, because that's my sort of transactions is about I want a coffee. I don't really care what you do with it. Here's my money. Just give me my coffee. That isn't necessarily something that I would put in an area that I'd be good at. I may be wrong in that, but that's just my take on things" (FE8).

One participant even delved into the researcher's role and the participant recruitment process, stating, "You probably didn't know if you saw it as a sale. But all I read was that you were passionate about doing research and to benefit the wider community from now and into the future. Your objectives align with my objectives. So for me, we connected and here we are, if you want to call that selling" (FE6).

Selling plays an integral role in the realm of venture creation; to deliver a product or service for financial gain, selling becomes a requisite. Correspondingly, entrepreneurs consistently engage in practices that involve some degree of misleading, especially with investors, by imparting somewhat imprecise narratives or information to cultivate a positive image (Aerts and Cheng, 2012; Herzenstein et al., 2011; Lounsbury and Glynn, 2001). This practice extends to the presentation of themselves. It is worth noting that this form of Bullshit Praxis is widely acknowledged within the entrepreneurial

ecosystem, despite its inherent contradiction with the foundational premise of trust in relationship building. This situation hints at a potential association between this facet of Bullshit Praxis and the Pro-Ethical Self-Assessment, as elucidated in our previous study. Entrepreneurs engaging in Bullshit practices simultaneously position themselves as trustworthy, ethical, and transparent individuals. While the incongruity between these two aspects of an individual's character is evident, they appear to construct a favourable external perception synergistically. Although this work does not delve further into the intricacies of the dichotomy between Bullshit Praxis and the Pro-Ethical Self-Assessment, such an exploration could yield invaluable insights into this category of Persuasive Bullshit Praxis.

Unrealistic Self-assurance

Another substantial category within the realm of Persuasive Bullshit Praxis pertained to an unrealistic sense of self-assurance. This classification encompassed instances where founder entrepreneurs exhibited an exceptionally positive self-conception regarding their capacity to deliver or accomplish various tasks despite lacking a substantial track record in said domains. It could arguably be characterised as a form of 'Bullshitting the Bullshitter,' as these individuals seemed to genuinely embrace the overconfident claims they made about themselves, despite the dearth of substantial evidence supporting their assertions. For instance, one entrepreneur expressed, "It's not that I can't do it because I think I could probably do almost anything, but I just don't want to do it and I'm not motivated to do it" (FE8).

This participant went on to state:

"I do think that while I may not be able to do it today, you give me twenty four hours and I'll either be able to do it or I'll know what I can do. And I know and more importantly, I know what I can't do and I'll be able to feel it. So if I give you a perfect example of someone said to me today, you are now the premier of New South Wales , I would be giving a press conference in ten minutes without even thinking twice and I would work it out as I went. I would be in a situation. I'd be going, oh my God, I could never do that because that person must have a degree and it must be so smart. I fundamentally think if I break everything down, it's really all about trying to understand what it is that you're trying to get done right. Like what is it that needs to happen? What of that? Can I actually do do I have the skill set to do? And I might have zero. Right . But at least I know that I'm not

someone that's going to pretend that I that I know what I'd quite happily put my hand up and say. I'm the premier of New South Wales and I know nothing. Right. But the benefit is. I know I know nothing. So I'm going to go and get the people who know what they're talking about. So that starts to build into that relationship relationships" (FE8).

Following with:

"And I could never do that because what a lot of people do really well is they convince you that what they do is really hard and really difficult. And you can never be like me, which is why you should subscribe to my membership or sign up to my course. You know, so there's that, unfortunately, is that narrative going around? There's not enough of a of a thought process going around going you can do it. So I think that's sort of the difference. And that's sort of where that statement comes from" (FE8).

Furthermore, another participant stated, "Yeah, I was in business so they might spend 15 hours on the spreadsheet doing a Bullshit, whatever, a forecast or something. Cool . Was it hard ? Probably not interested. I know how to do it. I've got the skills. So it took a long time, but it wasn't hard to be hard to know how to do that" (FE10).

This category included instances where participants made generalised remarks about themselves, which would typically be construed as negative, yet they construed them as positive. For instance, one participant stated, "People go, oh, you're the black sheep or the black sheep. I actually think it's a compliment to be the black sheep. I feel sorry for those who want the black sheep" (FE6). Another participant echoed this sentiment, "From that moment on, I have sort of been a wheeler dealer sort of type looking for opportunities wherever they sort of come up ever since" (FE8).

This particular facet is intriguing, as it may serve as the foundation for the existence of an unconscious Bullshit Praxis encapsulated within a Bullshit self-concept. It transcends conventional self-efficacy theory, which posits that strong personal belief can engender a self-concept characterised by proficiency and success across diverse tasks. Such tasks encompass marketing, innovation, management, risk-taking and financial control (Chen et al., 1998). Notably, entrepreneurial self-efficacy has been consistently observed at higher levels among entrepreneurs in comparison to managers. Additionally, an entrepreneurial concept termed 'Thought Self-Leadership' is closely related to this variant of Bullshit. It entails self-influence across diverse

dimensions, including self-dialogue, mental imagery, beliefs, assumptions and thought patterns (Neck et al., 1999). This Thought Self-Leadership has been demonstrated to augment entrepreneurial performance in both cognition and behaviour. However, it must be emphasised that this is an intentional process.

In contrast, unrealistic self-assurance, as manifest in this category of Persuasive Bullshit Praxis, denotes an overtly acknowledged self-concept characterised by a disregard for truth or empirical evidence, particularly in relation to entrepreneurial competence and personal behaviour. While it falls beyond the purview of this work to ascertain whether this attribute is innate or acquired, it is evident that this form of self-delusion yields tangible benefits. Notably, participants who exhibited this attribute achieved business stabilisation or growth during a period marked by the failure of numerous enterprises. Hence, it is a matter of substantial conjecture whether unrealistic self-assurance stands at the core of the entrepreneurial mindset, intention, and conduct, whether it can be reliably quantified and whether it represents a foundational precursor to entrepreneurship in a broad array of cases.

Category 2: Evasive Bullshit or Denied Bullshit Praxis

The data subject to collection and subsequent analysis led to the categorisation of Evasive Bullshit as a construct characterised by the practice of concealing one's engagement in Bullshit Praxes through self-denial. The underlying purpose of such evasion primarily revolves around the preservation of a favourable self-perception rather than any overt intent to deceive; this group distinctly disavows any form of dishonesty. The Evasive Bullshit Praxis comprises four discernible manifestations, namely: "Bullshit condemnation", "grey area justification", "living in the future" and "competing interests".

Significantly, this group notably underscores the inherent dichotomy between Bullshit Praxis and the Pro-Ethical Self-Assessment expanded upon in our previous paper. It is determined that entrepreneurs within this group habitually disregard the truth when interfacing with stakeholders or in their internal contemplations while simultaneously vehemently criticising this very conduct when articulating rationales for their communication practices. A visual representation of this model is provided in Appendix 2 for reference.

Bullshit Condemnation

The predominant category within the domain of Evasive Bullshit Praxis consisted of participants who adamantly rejected the concept of Bullshit within the entrepreneurial context. Despite their own engagement in Bullshit practices, these individuals actively brought forth discussions on the prevalence of Bullshit in the industry and suggested that it led to unfavourable outcomes. They perceived this Bullshitting behaviour as equivalent to lying, amalgamating the two concepts into a singular entity. Some examples from the interview transcripts can be seen below.

“But the companies are being run in an incredibly non-innovative way because the white male and forties are going to the made-up groups and they're beating their chest about whether on the front page, the Financial Review and, you know, the fixating on what I'd call value metrics, which are metrics that don't matter but sound good or look good on a headline“. (FE7)

“I can tell you that the that this one camp, which is very clear, Bullshit is right. And you can smell them a mile away. I can smell them in two minutes. And generally, I don't like doing business with them because that's just not the way I operate ...So normally they're quite aggressive the way they talk and not being aggressive, saying they want to beat you up or anything like that. But it's that style of talking with non-stop, you know, quite probably maybe the term to describe is quite in-your-face. Right. You can tell that. And the language is always very flowery. Right. And when you start probing them in terms of detail, they will avoid answering you. Right. And then they'll try to lift it up into a very high level or try to brush aside, you know, and and once you've gone through this a few times with them, asking them a few questions, they never answer it. It's always and everything is always very positive. Right. All things are super doing super well. You know, the business is gangbusters sort of stuff, right? I think those are normally the traits of someone who's a Bullshit artist“. (FE9)

“I think as a business owner, I don't believe a Bullshit artist is is the way to go, and I don't I think you're being pushed. I'm just going to take you that far as a business owner, because at the end of the day, running a business enterprise, you are making decisions across so many things. Right? Financial issues are strategic issues, market conditions, people issues. You cannot just spin stories and make things up and try to sweep things under

the rug. Right. You need to be very analytical, rational, fact driven in addressing these issues at the end of the day, I think, and also have the empathy element across it. Right. So I don't think Bullshit, this is the way to go. I don't believe that if you look at very successful companies like Amazon, Facebook, Google, Microsoft, all these companies. Right. You look at the leaders that that lead this company, they're all very analytical, rational, considered people. Right. It's not it's not just pure spin that we get them out of that they created successful companies. So so that's that's that's a can of thinking that I come from. Right. And I like to see that those are the standards I would aspire to and that my company inspired to". (FE9)

Notably, some participants acknowledged the potential value of Bullshit within entrepreneurial endeavours, yet maintained a sense of moral superiority, which resonates with their Pro-Ethical Self-Assessment. In their view, the distinction between ethical practice and Bullshit rested on the rapid grounding of an idea; if an idea could not be swiftly substantiated, it was deemed as Bullshit: "what that results in is founders and entrepreneurs who are doing the high effort, low impact stuff of chasing the vanity metrics where there's a lot of high impact, low effort exercises they can be undertaking to to drive revenue growth or to to to drive up a bit or to to drive down costs so they have their place. But if you have a rock star metric, which is driving your business towards success, but it's not sexy enough to be on the *Financial Review*, then that's fine" (FE7); "You know, maybe your business just isn't sexy and there's a lot of money in sexy businesses" (FE7).

One participant did justify and break down their perspective on what differentiates ethical practice from Bullshit, noting that if the idea cannot be quickly grounded, then it is Bullshit:

"Yeah, I think I think there is the element of storytelling and narrative. And I'm talking and I think a lot of people confuse this with with spin. Right. For me, that's the very difference between very clear and compelling around the story or narrative of the business of vision. Right. This is spin for me. Spin is just fluff. You know, it's just colourful language making things sound real when they're in a fiction for me, that's all that's that's just trash talk, basically. Right. But then there is there is the other side, which is basically having a very clear vision of what is the customer problem solving, how your business can solve the problem, how you're being quite revolutionary

in terms of you solving that problem and how convincing compelling it is that your business can grow as you solve that problem. Right. And deliver value to shareholders ... if you think about the way the things that they say, you can you can see that, yes, they're stretching things and pushing things and boundary. But you can see that if you can meet those conditions, you can get to that vision ...I think there's a difference between those two ...So I guess. Those who aren't spinning get us successful business owners, you think have a clear idea of the vision but is stretching it just to a certain extent ...You may be selling something, the customer that doesn't exist yet and the customer goes along and changes your business towards this product that they will use in the business. Right. And you cannot deliver and execute that has an impact on your business. Right. Or the customer. Right. So I do think it has a real impact even in the pure business sense. Right. It's not just an ethical issue. It's got real implications. Yeah" (FE9).

It is worth noting that Bullshit and lying may be indistinguishable for individuals lacking an in-depth comprehension of the nuanced differences between the two. While Bullshit is an accepted and prevalent practice within the entrepreneurial community, lying is generally perceived as undesirable. However, there remains considerable scope for further investigation into Bullshitting and its profound impact on social perceptions. Prior research has suggested that Bullshit is evaluated less negatively than lying, yet it exerts a more potent influence on attitudes and perceptions (Petrocelli et al., 2021). In light of these considerations, it becomes evident that some participants unequivocally condemned Bullshit, advocating for the transparency of truth as an essential prerequisite for fostering trust (Mackenzie and Bhatt, 2020). Nonetheless, these same participants exhibited elements of Bullshit Praxis, such as a grey area justification and competing interests, which align with the broader category of Evasive Bullshit.

Grey Area Justification

A significant number of entrepreneurs who engaged in Evasive Bullshit Praxes primarily employed a strategy known as "grey area justification". This practice revolved around the rationalisation of actions or behaviours that might generally be perceived as Bullshit or unethical. The entrepreneurs undertook these justifications to present themselves as ethically superior to their counterparts who engaged in similar practices without outwardly providing justifications. These participants firmly believed that their actions were morally sound and not reflective of Bullshit, thanks to their justifications.

For instance, a common manifestation of this practice involved scenarios in which individuals considered bending or circumventing certain legal or ethical boundaries in the interest of organisational benefit. However, they emphasised that should a situation arise where these actions could harm the customer or violate their ethical principles, they would decline to proceed:

“I look after the compliance and whatnot, they may be saying, well, how can we get around this law, which I keep fit to actually benefit our organisation actually may harm the customer ... But if that ever happened , I would hope I would say no. Sorry. Even though you can offer me a lot, I have to walk away ...”.there's no such thing as a black and white, we never get presented with a choice of gates as two or four and five and three. There's so many there's so many numbers between two and four when you go to point the infinity that that's the number of options you have ...I've kind of built up a reputation as an expert just because of the content and the insights that I give. I do a lot of advice now” (FE4); “but is it often that people who come. Asking for things within the grey area, but legally they're still OK. So ethically we're fine with it always...“We want to obey the law, but we want to act unethically. I've never had that conversation. But if you think about it, it's very rare that the law is in absolute terms in black or white, and this is a grey area and becomes too onerous or too about a risk based approach. And the way that you interpret the law by it may get you more opportunities if I give you a competitive advantage, but there is a risk to it” (FE4).

Moreover, the grey area justification often led to discussions on the importance of transparency in business operations. Entrepreneurs who employed this strategy acknowledged the significance of operating transparently, even though complete transparency might not always be attainable. They emphasised the need for rational, clear decision-making processes and the provision of relevant context to stakeholders, “we'd like to operate in a very transparent manner, obviously can be transparent about everything, but as transparent as you can about majority of items. Right. I reckon we are probably transparent if you are to have, say, a scale of one to 10. I think we're transparent. Our level of transparency around eight or nine, I'd say. And and I think that people understand that because they know that that's the way we operate and that's the way we communicate. And decision making has got a very clear, rational way of decision making. So people people across that and that's not new for us” (FE9); In the

meantime, you know, I think the broader picture then that way you get into a mindset where things are not as dire as they are. Right. And you can still be quite objective and transparent and you need to inspire people. Right. You can't just be, you know, just lay out the facts, you know, and then that's it. You still need to inspire people a bit, but not in a Bullshit way, obviously. Right, by giving them that contact. So I think I find that that helps" (FE9).

The concept of grey area justification finds alignment with the theory of rationalisation, a concept that is not frequently explored within entrepreneurship literature but has been studied in the realms of cognitive and behavioural psychology. It is also associated with discussions of rule-bending, often examined in the context of legal studies. This practice entails rationalising behaviour that may be deemed unethical to overcome ethical challenges rather than engaging in outright unethical conduct (Hall and Holmes, 2008). While some scholars view rationalisation in the context of corporate corruption, suggesting the importance of rewarding transparently ethical behaviour and establishing integrity standards, the unique perspective presented here emphasises the potential positive impacts of rationalising Bullshit practices (Dupuy and Neset, 2018). This is particularly relevant in the context of post-disaster recovery and entrepreneurial activities, where these justifications may contribute to more favourable outcomes for both ventures and society.

Living in the Future

Evasive Bullshit Praxis was also evident when participants opted to adopt a future-oriented perspective instead of adhering to the present reality. Within this group, entrepreneurs regarded this approach as ethical and acceptable, despite their previous condemnation of other Bullshit practices. This type of Bullshit revolved around presenting their ideas as they might appear in the future, even in the absence of substantial evidence. Notably, this practice was predominantly focused on internal communication and self-belief rather than being geared towards widespread external communication.

For instance, participants who presented this category of Bullshit Praxis believed that as long as they genuinely held the belief that their envisioned outcomes could be realised in the near future, perhaps within a few months rather than several years, they were not engaging in dishonesty. Instead, they perceived this as a form of foresight, predicting outcomes that were bound to occur eventually: "I think as long as you believe as long as you believe that the fact is realisable on a very short notice, like

when you when you when you can go X in the next three months rather than five years, then to me you're not lying. You're just you're just kind of you're living in the future and just predicting what is what it is going to happen anyway. So that's still truthful, I think, in my opinion" (FE2); "And then and so you've got to have that real belief that you're going to create something special with no proof points at that point. It's just an idea" (FE12).

This type of Bullshit exhibited similarities to the practice of creating and communicating an admittedly unrealistic vision, albeit with a distinct characteristic. In this case, the envisioned future was considered an objectively truthful pursuit, and participants denied any form of Bullshit, rejecting the notion of a fictitious element within their proclamations of truth. Some research in the field of entrepreneurship examines the future-focused entrepreneur, often perceived as a visionary or activist capable of realising a desired future through creativity and innovation (Nyström, 1993). It is possible that the participants engaging in this form of Bullshit see themselves as visionaries, and thus, their proclamations reflect future truths not yet achieved. However, this perspective tends to disregard the critical aspect of feasibility associated with a future-oriented focus, often lacking any clearly defined pathway to attain the envisioned future, which, by definition, constitutes a form of Bullshit.

Competing Interests

Participants engaged in discussions about the competing interests that often arise between ethical considerations and the pragmatic requirements for business growth. Some participants appeared to find it somewhat frustrating that they needed to resort to certain Bullshit communication practices to enhance their venture's chances of success. This dilemma sparked internal debates among founder entrepreneurs, who were torn between their aspirations for business success and their commitment to maintaining a strong Pro-Ethical Self-Assessment.

For instance, participants recognised the necessity of making ethical choices in aspects such as product sales and marketing. They highlighted the fine balance that entrepreneurs must strike between achieving a competitive advantage and adhering to ethical principles, "How are we going to sell our product? How are we going to market it. Yeah. That is a very much an ethical choice of and it's there it's a balance between the competitive advantage and being ethical" (FE4).

Additionally, some participants found themselves contemplating the boundary between maintaining a competitive edge and potentially pushing the limits of ethical behaviour. This internal debate often revolved around what they were willing to stand for as an organisation and whether they wanted to engage in practices that, while potentially widespread in the industry, were ethically dubious. “And I do conduct which I had never thought I would do compared to the ones where it's a balance between a competitive advantage and how far can we push that, which is what they're doing. How far can we push the boundaries of law? I would say, how far can you push the boundaries of ethical behaviour and what do you want to stand for and what is that fair and saying that everyone else does...if you look at it's unethical behaviour as a spectrum” (FE4).

One participant emphasised the importance of focusing on what truly drives the business, as opposed to being overly preoccupied with achieving attention-grabbing headlines through potentially questionable tactics. “Laser focus on that is what's going to drive the business. That's not to say you don't want the headline every now and then, but I just see an overinvestment in chasing that”. (FE7)

Ethical considerations in entrepreneurship have garnered significant scholarly attention. It has been observed that various factors, including an entrepreneur's socio-cultural background and the broader organisational and societal context, shape their ethical judgement (Vallaster et al., 2019). The participants involved in this form of Bullshit appeared to align more closely with ethical entrepreneurship considerations. Nonetheless, they acknowledged the various benefits of Bullshit practices, understanding that some level of such behaviour could play a crucial role in cultivating a positive public image, financial success, and, by extension, business growth.

Implications and Contributions

This study explores the multifaceted nature of Bullshit Praxis as manifested in founder entrepreneurs navigating the challenges posed by the COVID-19 pandemic. In drawing from the diverse experiences and perspectives of the study's participants, our research builds upon the work of Littrell et al. (2021a) by not only confirming the existence of Persuasive and Evasive Bullshit but also by providing a practical and comprehensive definition of these Bullshit types by finding various additional and related subtypes. Our analysis reveals that entrepreneurial Persuasive Bullshit Praxis encompasses several key elements, including: “creating and communicating an admittedly unrealistic vision”, “vague communication to enhance positive perceptions”, “ambiguous communication to

prevent panic”, “ethically selling the truth”, “self-promotion” and “unrealistic self-assurance”. Conversely, entrepreneurial Evasive Bullshit Praxis encompasses distinct facets, such as: “Bullshit condemnation”, “grey area justification”, “living in the future”, and “competing interests”. This exploration culminates in the presentation of a comprehensive model that delineates the various dimensions of entrepreneurial Bullshit Praxis. To the best of our knowledge, this study represents the first endeavour to establish a framework of entrepreneurial Persuasive and Evasive Bullshit Praxis in the context of a crisis, as exemplified during the COVID-19 pandemic.

These findings contribute to the extensive body of literature examining entrepreneurial attributes (e.g., Bird, 1988; Borland, 1975; Kerr, Kerr, Xu, 2018; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000), particularly in the context of crises. To our knowledge, this study represents the first inclusion of Bullshit Praxis within the academic discourse. By unveiling this previously unexplored territory in the field, we facilitate a more profound comprehension of entrepreneurs, their experiences, their conduct during times of crisis, and their pathways to success. Moreover, our research adds a unique contextual dimension to the literature on Bullshit, rendering it more comprehensible and open to further research and practical application, as contextualisation enhances theoretical development in the entrepreneurial field (Shirokova et al., 2023). This is especially pertinent in the context of leveraging Bullshit for the post-COVID-19 economic recovery, particularly through the revitalisation of small businesses.

Moreover, it is imperative to emphasise that our findings concerning Bullshit Praxis are greatly accentuated by the research approach undertaken and, as such, hold immense significance. As previously outlined, the conventional use of phenomenological approaches remains clearly underrepresented in research on entrepreneurial attributes. This underutilisation is a cause for concern, given that phenomenological data collection methodologies possess the potential to provide profound and comprehensive insights compared to traditional, often detached research techniques like surveys and meta-analyses (Raco and Tanod, 2014). An overreliance on conventional methods tends to yield repetitive research outcomes, contributing little substantive depth to the field of practical entrepreneurship (Neergaard and Ulhøi, 2007). As such, these findings aid in the expansion of this domain.

Building upon the groundwork laid by Spicer (2020) and Littrell (2021a), our study highlights that Persuasive Bullshit Praxis predominantly centres on the intent to

enhance both internal and external perceptions of self and the venture's significance. Whether achieved through creating and communicating an admittedly unrealistic vision, vague communication to enhance positive perceptions, ambiguous communication to prevent panic, ethically selling the truth, self-promotion, or unrealistic self-assurance, our participants elucidate the pivotal role of this intention as a primary precursor to entrepreneurial Bullshit Praxis. During the crisis, the amplification of positive perceptions became particularly critical as it facilitated the acquisition of customers, encouraged investors to maintain their support and increase their financial commitments, fostered a sense of security and motivation among staff, and bolstered the determination of entrepreneurs to persevere amid the pandemic's adversities. Notably, entrepreneurs embracing this form of Bullshit largely exhibited awareness of their Bullshit Praxis, considering them to be not only advantageous but also indispensable for entrepreneurial success. Intriguingly, both Evasive and persuasive Bullshitters acknowledged that Bullshitting is customary and anticipated within the entrepreneurial realm, irrespective of their disparate opinions regarding its ethical implications.

This study additionally discerns that Evasive Bullshitters appear to be in a state of denial regarding their own Bullshit. This aligns with the findings in our earlier paper, which underscored a pronounced dichotomy between Bullshit Praxis and Pro-Ethical Self-Assessment. The Evasive Bullshitters manifest a proclivity towards high Pro-Ethical Self-Assessment while concurrently holding the belief that Bullshitting is an undesirable trait and unethical practice. This lack of self-awareness concerning their own Bullshit, juxtaposed with their critical stance on Bullshit within their professional sphere, becomes prominent. Their perspectives highlight the prevalence of Bullshit Praxis during crises, whether or not individuals are consciously aware of its existence.

Contrary to the observations of Littrell et al. (2021), our study indicates that both Persuasive and Evasive Bullshitters are notably susceptible to believing Bullshit. During the crisis, Bullshit Praxis emerged as a requisite coping mechanism to sustain a positive outlook and maintain the viability of their ventures amidst adversity. A fundamental aspect of this Bullshit was the marked susceptibility of both groups to self-deception. Participants were most prone to accepting their own Bullshit, fostering a belief in their ability to succeed even in the absence of concrete evidence. Within the Persuasive group, this often took the form of an unwavering and unrealistic self-assurance, whereas, in the Evasive group, it appeared as a predilection for living in a future that had not yet occurred.

Additionally, the findings of this study connect with broader discussions on organisational bullshit, drawing parallels between workplace and entrepreneurial contexts. Ferreira et al. (2022) provide a basis for the Organizational Bullshit Perception Scale (OBPS), emphasising perceptions of organisational bullshit in the workplace. While our focus is on entrepreneurial Bullshit Praxis during crises, aligning our findings with broader discussions on organisational bullshit allows for a more comprehensive understanding of how bullshit operates across various organisational settings.

The introduction of Persuasive and Evasive Bullshit Praxis in the entrepreneurial context, especially during a crisis, also prompts considerations for the post-COVID-19 economic recovery. McCarthy et al. (2020) highlight the prevalence of corporate bullshit in organisations, emphasising the need for managers to comprehend, recognise and address it. Our study extends this discussion to entrepreneurial ventures, advocating for an awareness of Bullshit Praxis as a factor that may influence the recovery and revitalisation of small businesses post-crisis, noting that sometimes entrepreneurs were aware of this bullshit and sometimes they were not.

Limitations

The inherent phenomenological approach of this research endeavour delimits the scope of this paper. Our study primarily involves participants based in Sydney, a demographic predominantly characterised by an 80% male representation with an average age of approximately 40 years. The limited diversity in terms of geographic locations, gender representation and age distributions restricts the breadth of perspectives encompassed in this investigation. A more extensive and diverse participant pool, spanning a wider array of geographic regions and encompassing participants of various genders and age groups, could potentially yield a more comprehensive and nuanced comprehension of the examined phenomena.

It is important to acknowledge that the validity of this study is bound by the interpretation of interview transcripts conducted by the solitary researcher, thus subjecting the analysis to any potential biases inherent to this process. Employing a broader and multidisciplinary research team would likely enhance the accuracy and impartiality of the study's outcomes.

Moreover, the adoption of the phenomenographic method carries inherent limitations that influence the results of our research. Therefore, this study would benefit from the exploration of alternative methodological tools that can potentially quantify and predict the prevalence of the identified attributes in a more comprehensive manner. By leveraging diversified methodological approaches, researchers may be better equipped to gain a holistic understanding of the investigated phenomena.

Recommendations

One notable avenue for future research entails expanding the scope of the study. By including participants from diverse geographic locations across the globe, researchers can enhance the generalisability of their findings and gain a more comprehensive comprehension of entrepreneurial perspectives. For instance, a multi-national investigation could uncover cultural nuances in entrepreneurial Bullshit Praxis, allowing for cross-cultural comparisons and a deeper understanding of its operational mechanics.

Furthermore, future research should endeavour to devise a robust measurement tool tailored to the distinct types of Bullshit Praxis identified in this study. Such a tool would enable a more structured and quantitative approach to the assessment and analysis of Bullshit Praxis, making it a valuable asset for both academia and practical application. By developing and implementing such a measurement tool, researchers can systematically evaluate the prevalence and impact of Bullshit Praxis in various entrepreneurial contexts, thus providing a more rigorous basis for academic study and practical utilisation.

In summary, the foundations laid by this study present a promising starting point for future research, which could encompass broader demographics and explore innovative measurement methodologies. Through these developments, researchers will be better equipped to address the complexities and implications of entrepreneurial Bullshit Praxis with increased precision and applicability.

Conclusion

This paper has achieved its primary objective by presenting a practical, typological definition of entrepreneurial Bullshit Praxis, thereby expanding upon the framework of Persuasive and Evasive Bullshitting originally conceptualised by Littrell et al (2021a).

This study has made notable contributions to the extant literature, offering valuable insights into the fields of entrepreneurship during crises and Bullshit phenomena. Nevertheless, there remain ample opportunities for future research to explore and advance our understanding of these phenomena.

This study makes several contributions to the existing literature. First, it represents one of the first efforts, to our knowledge, to extend the work of Littrell et al. (2021a) by identifying Persuasive and Evasive Bullshit based on the narratives of founder entrepreneurs confronted by a crisis, moving to expand these definitions and finding various subtypes of both Persuasive and Evasive Bullshit. It also represents the first attempt to investigate Bullshit Praxis through the lens of entrepreneurs amidst the COVID-19 pandemic, thereby addressing the objective of providing more comprehensive insights into entrepreneurial behaviour during this period of social and economic upheaval (Ratten, 2020a).

Second, our findings enrich the current body of knowledge on entrepreneurial attributes by expanding their scope to encompass concepts that are not widely recognised in the field. This expansion offers a more profound understanding of how entrepreneurs react to crises and, in turn, may facilitate the revitalisation of small businesses.

Third, we present a comprehensive framework of entrepreneurial Bullshit Praxis, delineating various types and manifestations of both Persuasive and Evasive Bullshit. To the best of our knowledge, this represents the first instance of formulating such a model grounded in the experiences of entrepreneurs during the COVID-19 pandemic. This endeavour contributes to the existing literature by creating a foundation for a broader spectrum of research endeavours within this domain.

Fourth, in line with the studies of Spicer (2020) and Littrell et al. (2021), we identify the potential susceptibility of both Persuasive and Evasive Bullshitters to their own Bullshit Praxes. Through a deeper comprehension of the mechanics of Bullshit Praxis and the susceptibility of entrepreneurial Bullshitters to these practices during times of crisis, we may enhance the prospects of future venture survival.

Collectively, these contributions are of significance to scholars, policymakers and practitioners alike, seeking to gain a more profound understanding of the attributes of entrepreneurs as they navigate and respond to crises. Furthermore, this research is of relevance to those aiming to develop a better grasp of Bullshit as an unconscious praxis inherent to entrepreneurial behaviour.

Chapter Five—Conclusion and Implications

Conclusion

Introduction

This thesis contributes significantly to entrepreneurship attribute research, both by affirming the presence of existing attributes among founder entrepreneurs during the COVID-19 pandemic and by identifying and exploring novel attributes, including Curiosity, Bullshit Praxis, Pro-Ethical Self-Assessment and Dissatisfaction Mindset. The first objective of this thesis aimed to explore the extent to which current conceptualisations of entrepreneurial attributes are reflective of how entrepreneurs understand their own actions, thoughts and behaviours. By employing in-depth interviews and case studies, we delved deeply into the complex facets of entrepreneurial psychology, moving beyond traditional survey-based methodologies to offer a more authentic and nuanced portrayal. The second objective of the study was to understand the firsthand experiences of entrepreneurs with a view to uncover and explore novel attributes. Our research is rooted in phenomenographic methods and seeks to reveal unexplored facets of entrepreneurial personalities by exploring entrepreneurs' lived experiences.

The empirical foundation of this thesis is grounded in a sample of 18 founding entrepreneurs situated in Sydney who have actively engaged in entrepreneurial activities during the years 2020 and 2021. Collectively, these entrepreneurs bring a wealth of experience, amassing over 106 years of combined involvement in entrepreneurship within their respective ventures at the time of their interviews. The sample represents various industries, including but not limited to employment, cybersecurity, consulting, compliance, data, education, finance, technology, marketing, hospitality and food. The literature incorporated in this thesis is sourced from an extensive body of work encompassing numerous decades and a multitude of studies on entrepreneurial attributes. The synthesis of this literature contributes to the findings presented in this thesis, with a comprehensive summary available in Chapter Two.

Motivations

This thesis delivers a dual-motivated exploration of entrepreneurial attributes among founders, particularly within the challenging context of the COVID-19 crisis. These motivations arise from discernible research gaps in both the entrepreneurship attribute literature and the broader discourse on entrepreneurial behaviour during crises.

First, the motivation for this study stems from the prevailing pattern of reinterpreting established attributes and the repeated use of survey-based quantitative methods within entrepreneurship attribute research. Although some prior studies do address attribute variations among entrepreneurs in various settings and crisis contexts (e.g., Collins et al., 2004; Envick and Langford, 2000; Maina and Nyambura, 2019; Owoseni, 2014; Röhl, 2019; Suzuki et al., 2002), these inquiries often produce insights limited to variations in frequency and measurement. This iterative nature of research outcomes has prompted the need to reimagine attribute research in the entrepreneurial context, harnessing experiential insights directly from entrepreneurs to better serve the informational needs of practitioners and policymakers (Kerr, 2018). This thesis addresses this challenge by qualitatively evaluating the presentation of established attributes within founder entrepreneurs during crises, offering detailed descriptions of their presence, salience and manifestation.

The second motivation arises from the dearth of recent novel findings within the entrepreneurial attribute literature, which largely relies on the recurring utilisation of existing attributes in different contexts. This persistence impedes genuine research progression within the field. Against the backdrop of the COVID-19 crisis, which is of considerable significance for entrepreneurship and SMEs (Papaoikonomou et al., 2012), recent research has primarily concentrated on entrepreneurship education and social entrepreneurship (Bacq and Lumpkin, 2020; Bacq et al., 2020; Liguori and Winkler, 2020; Ratten and Jones, 2021; Secundo et al., 2021; Weaver, 2020). Meanwhile, entrepreneurial attributes have received limited recent attention. This research addresses this gap by documenting entrepreneurs' experiences during the COVID-19 pandemic with a focus on their attributes. The study recognises that entrepreneurship plays a crucial role in economic recovery during and following crises (Ratten, 2020a), particularly for small businesses, which constitute a substantial proportion of the Australian economy (ASBFEO, 2022).

This endeavour is further underscored by the vital importance of documenting entrepreneurial attributes during such a critical period, as they underpin entrepreneurial

intentions and actions, thus offering valuable insights for researchers, policymakers, and practitioners to inform future research endeavours and actionable interventions, both in the present and the future.

Chapter Two

Chapter Two highlights a contribution to the academic discourse by shedding light on entrepreneurial attributes within the context of crises, especially in the unprecedented COVID-19 pandemic. Through meticulous synthesis and nomothetic model of entrepreneurial crisis literature construction, this chapter addresses a notable research gap—the scarcity of studies dedicated to exploring entrepreneurial attributes during crises (Chakrabarti, 2015; Kreitmeyer, 2017; Miles et al., 2016; Roman and Rusu, 2018). This foundational finding serves as a cornerstone for the subsequent chapters, shaping the trajectory and significance of the entire thesis. The novelty of the nomothetic model lies in its ability to synthesise a wide range of research, unifying the domains of COVID-19's impact on businesses, the intricate interaction between the pandemic and entrepreneurship, crisis dynamics and entrepreneurial attributes. This model not only enriches our comprehension of the field but also establishes the groundwork for prospective investigations in this critical domain. By contributing to the foundational research conducted by prior scholars, our thesis advances the academic discourse on entrepreneurship and the role of entrepreneurs in the economic recovery process during challenging circumstances.

Additionally, this study identifies and emphasises the exigency of further research within this sphere, particularly focusing on the attributes characterising entrepreneurs during crises. By delineating these prospective areas of inquiry, this thesis provides a tangible roadmap for future research pursuits, thereby facilitating the pursuit of studies that hold the potential to significantly impact the resolution of the social and economic challenges precipitated by the pandemic.

Chapter Three

Chapter Three delves into a comprehensive qualitative analysis, exploring the manifestation of entrepreneurial attributes through in-depth interviews. Employing rigorous coding and analysis techniques with NVIVO software, this chapter offers a detailed account of the presence and presentation of established attributes, surpassing the Big Five personality traits and other commonly reviewed attributes (Bird, 1988; Borland, 1975; Kerr, 2018; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017;

Poropat, 2009; Utsch and Rauch, 2000). The chapter enriches the scholarly discourse by presenting participant verbatims providing authentic accounts of attribute expressions.

Furthermore, Chapter Three not only reaffirms the presence of established attributes but introduces four novel and underexplored attributes—Curiosity, Bullshit Praxis, Pro-Ethical Self-Assessment, and Dissatisfaction Mindset. These attributes exhibit high salencies and distinct manifestations, elucidated through the recorded discourse of study participants. This pivotal chapter broadens our understanding of entrepreneurial attributes, highlighting their nuanced and multifaceted nature in real-world entrepreneurial contexts.

The contributions in Chapter Three are twofold. First, this thesis introduces the concept of "Bullshit Praxis" as a novel and uncharted attribute intrinsic to entrepreneurs. Defined as the transformation of an internal bullshit concept into an unconscious bullshit action, Bullshit Praxis enhances our understanding of how entrepreneurs engage with this distinctive attribute, acknowledging its existence prior to actionable expression.

Second, this study identifies and theorises the presence of Pro-Ethical Self-Assessment and Dissatisfaction Mindset in entrepreneurial speech. Alongside Bullshit Praxis, these findings extend prior work on entrepreneurial attributes (Kerr, 2018) by providing an updated attribute model in relation to crises, allowing for a richer understanding of entrepreneurs and emphasising the requirement of further investigation. It highlights the necessity to explore how and why entrepreneurs engage with these attributes comprehensively, thereby addressing a gap in the existing literature.

Chapter Four

Chapter Four presents a comprehensive typology and model, introducing the novel concept of "Bullshit Praxis" within the realm of entrepreneurship. As the inaugural exploration in this context, this thesis pioneers the concept, characterising it as the transformation of an internal bullshit concept into an unconscious bullshit action exercised by entrepreneurs. This definition not only advances the academic discourse by identifying Bullshit Praxis as an integral attribute of entrepreneurs but also expands

upon prior organisational scholars' suggestions about Bullshit in "conceptual" entrepreneurs (Spicer, 2020).

This chapter's fundamental contribution lies in the identification and classification of two overarching types and ten subtypes within entrepreneurial Bullshit Praxis, systematically categorised as "Evasive" and "persuasive", overarching categories previously utilised in organisational work. Entrepreneurial Persuasive Bullshit Praxis encompasses manifestations such as creating and communicating an admittedly unrealistic vision, vague communication to enhance positive perceptions, ambiguous communication to prevent panic, ethically selling the truth, self-promotion and unrealistic self-assurance. Conversely, entrepreneurial Evasive Bullshit Praxis includes dimensions like Bullshit condemnation, grey area justification, living in the future, and competing interests.

This model offers a novel framework for understanding and categorising the dimensions and manifestations of Bullshit Praxis within the entrepreneurial domain. It not only extends the work of Littrell et al. (2021a) but also provides an original contribution to the broader literature on Bullshit, thus enriching the understanding of how entrepreneurs engage with this distinctive attribute (Frankfurt, 2009; Cohen, 2002).

Limitations and Implications for Future Research

This thesis, while making significant strides in advancing the understanding of entrepreneurial attributes, entrepreneurship in crisis contexts, and the phenomenon of Bullshit Praxis, does have several limitations. Recognising these limitations can help pave the way for further research and exploration in these areas.

First, this study, although grounded in a comprehensive review of key papers and meta-analyses, does not encompass an exhaustive analysis of the entire body of literature pertaining to entrepreneurial attributes, entrepreneurship in crisis scenarios, and Bullshit. Future research endeavours could seek to provide a more extensive and detailed examination of these domains, ensuring a comprehensive understanding of the existing research landscape.

Second, this study acknowledged the potential limitations associated with self-selected participants who provided their insights without financial compensation. Future research may explore the impact of a larger sample with differing recruitment strategies and compensation mechanisms to discern potential variations in outcomes. It is important to acknowledge that the validity of this study is, to a certain extent, constrained by the interpretation of interview transcripts by the researchers, with inherent potential for bias in the selection and analysis processes.

Third, the phenomenographic methodology employed in this research offers a specific lens through which to explore the experiences of a predominantly male, middle-aged Sydney-based entrepreneurial cohort. While phenomenography provides valuable insights, alternative methodological tools might offer different perspectives and a more comprehensive understanding of the attributes under investigation. The implementation of diverse research methods that can quantify and predict attribute prevalence, in contrast to phenomenography's qualitative nature, presents a promising avenue for future research.

Accordingly, this thesis offers essential insights into entrepreneurial attributes, entrepreneurial responses to crises, and the novel concept of Bullshit Praxis. Despite these contributions, it is crucial to acknowledge the limitations above. These limitations, while inherent to this study, highlight the need for further research in the areas of entrepreneurial attributes, crisis management, and Bullshit Praxis, with the potential for more in-depth analyses and exploration across diverse contexts, methodologies, and participant demographics. This progression of research will undoubtedly enhance our comprehension of these intricate and multifaceted domains.

Thus, the exploration of entrepreneurial attributes in the context of the COVID-19 crisis offers significant implications for researchers, policymakers, and practitioners seeking to enhance crisis response strategies. The identification and understanding of novel attributes such as Curiosity, Bullshit Praxis, Pro-Ethical Self-Assessment, and Dissatisfaction Mindset provide a basis for new research avenues. By leveraging these attributes, researchers can inform policy initiatives aimed at supporting aspiring entrepreneurs and business owners during crises.

Furthermore, the insights gained from this study can be integrated into entrepreneurship education programs to equip future entrepreneurs with the necessary attributes to navigate challenging circumstances effectively. Understanding which

attributes are particularly valuable during crises can guide policymakers in designing interventions that foster economic growth through business creation and success.

Overall, the implications of this research extend beyond academia, offering practical tools and insights that can directly influence policy and practice in crisis management and entrepreneurship development. By harnessing the knowledge of entrepreneurial attributes, stakeholders can cultivate resilience and innovation within entrepreneurial ecosystems, contributing to more robust economic recovery and growth in the face of crises like the COVID-19 pandemic.

Topics for Future Research

Bullshit Praxis as an Integral Entrepreneurial Attribute

A promising avenue for further research involves exploring the role of Bullshit Praxis as an integral attribute within the broader spectrum of entrepreneurial characteristics. This extension would delve into the interaction between Bullshit Praxis and other established attributes, assessing whether it is a consistent trait inherent in entrepreneurs, not confined solely to crisis scenarios such as COVID-19. Given its remarkable salience, there is a plausible argument to be made for the existence of Bullshit Praxis in entrepreneurs across various contexts. This hypothesis could be empirically tested by replicating the research method employed in Chapter Three of this thesis, ideally in a post-COVID-19 context when economic conditions have stabilised.

Longitudinal Study of Entrepreneurial Attributes and Bullshit Praxis

A compelling avenue for future research involves conducting a longitudinal study to examine the stability and evolution of entrepreneurial attributes, including Bullshit Praxis, over time. By tracking a cohort of entrepreneurs from the pre-crisis period through various stages of crisis and recovery, researchers can analyse how these attributes manifest and influence outcomes at different phases of the entrepreneurial journey. This longitudinal approach would provide valuable insights into the dynamic nature of entrepreneurial traits, shedding light on their adaptability and persistence across changing economic and social landscapes.

Cross-Cultural Examination of Entrepreneurial Traits

Another important area for future investigation is the cross-cultural examination of entrepreneurial attributes and responses to crisis contexts, including Bullshit Praxis. A comparative study across diverse cultural and national settings would elucidate the universality versus context-specific nature of these traits, offering nuanced insights into how cultural factors shape entrepreneurial behaviours and strategies during times of uncertainty. This research could contribute to a more globally inclusive understanding of entrepreneurship, informing policy and practice in culturally diverse environments.

Validation and Refinement of Bullshit Praxis Typology

To advance the field, future research should prioritise the validation and refinement of the Bullshit Praxis typology introduced in this thesis. Collaborative efforts among researchers could involve replicating the analysis across different contexts and populations, refining the typology based on emerging insights and feedback from diverse stakeholders. This iterative process of validation would enhance the robustness and applicability of the Bullshit Praxis framework, ensuring its relevance and utility in understanding and addressing entrepreneurial concerns.

Development of a Bullshit Praxis Measurement Tool

Although this thesis has introduced a comprehensive typology of Bullshit Praxis, the creation of a measurement tool for this attribute in the context of entrepreneurship lies beyond its scope. Developing such a tool could entail identifying specific forms of Bullshit Praxis and examining their potential impact on venture performance or success during crises like COVID-19. One viable approach involves conducting research, similar to that in Chapter Three, on a larger and more diverse sample. Researchers would then apply thematic coding, as outlined in Chapter Four, to categorise various types and subtypes of Bullshit Praxis. These findings could be subsequently correlated with reported venture outcomes. However, it is essential to acknowledge the challenge of obtaining transparent financial records in entrepreneurial research, as participants might be reluctant to disclose their financial venture details, so venture outcomes would likely be self-reported assessments of success. Given the subjective nature of self-reported success and failure, constructing an accurate measurement tool without access to financial data could pose challenges.

Typologies of Curiosity, Pro-Ethical Self-Assessment, and Dissatisfaction Mindset

While this thesis has furnished a typology of Bullshit Praxis, extending the work to create typologies for Curiosity, Pro-Ethical Self-Assessment, and Dissatisfaction Mindset in the context of entrepreneurship offers a compelling avenue for future research. Utilising a methodology analogous to that in Chapter Four, researchers could develop distinct typologies for these novel attributes. This endeavour would enable a more comprehensive and nuanced understanding of entrepreneurs, thereby providing additional tools for scholars, policymakers, and practitioners. These typologies would prove invaluable, particularly in the ongoing post-COVID-19 recovery phase, where enhancing entrepreneurial success remains of paramount importance.

Summary

This thesis makes several noteworthy contributions to the existing body of research in the fields of entrepreneurship attributes and crisis management. These contributions encompass a comprehensive exploration of various attributes prevalent among entrepreneurs during the COVID-19 crisis.

First, this study extends the scholarship on entrepreneurship in crisis situations, focusing on the pivotal role played by entrepreneurs in economic recovery and the challenges they face during crises. It offers an intricate examination of established attributes in the context of the COVID-19 pandemic, drawing from existing literature that includes attributes such as the Big-5, Need for Achievement, Locus of Control, Self-Efficacy, Innovativeness and Risk Attitude (e.g., Bird, 1988; Borland, 1975; Kihlstrom and Laffont, 1979; Levine and Rubenstein, 2017; Poropat, 2009; Utsch and Rauch, 2000). Through a qualitative approach, this research unveils the presence and salience of these attributes among entrepreneurs during this crisis, expanding our understanding of how these traits manifest in a unique context.

Second, the thesis introduces a new dimension to the underexplored category of Curiosity, as well as uncovering three novel attributes of entrepreneurs that are distinguishable and observable—Bullshit Praxis, Pro-Ethical Self-Assessment, and Dissatisfaction Mindset. These attributes not only enrich our comprehension of entrepreneurial personality attributes but also create opportunities for practitioners to assess and reflect upon their own entrepreneurial traits, extending Kerr's 2018 model.

Third, the study significantly advances the understanding of Bullshit in the entrepreneurial domain by elaborating on its Evasive and persuasive forms. This extension beyond philosophical and linguistic contexts adds depth to the research on Bullshit (Frankfurt, 2009; Cohen, 2002) and brings it into the realm of entrepreneurship (Littrell et al., 2021a; Spicer, 2020). The thesis offers a detailed typological definition of Evasive and persuasive entrepreneurial Bullshit Praxis, providing a framework for future research on entrepreneurship attributes and crisis management.

In summary, this research contributes to a range of critical areas. It enriches our knowledge of entrepreneurship in crisis scenarios, delving into the role and attributes of entrepreneurs during economic challenges. It extends the understanding of entrepreneurial attributes in the context of crises and identifies novel attributes within the entrepreneurial psyche. Furthermore, it offers a comprehensive typology for entrepreneurial Bullshit Praxis, thus contributing to the theoretical development in this domain. These findings are of paramount interest to scholars, policymakers and practitioners who aim to comprehend the attributes and behaviours of entrepreneurs amid crises. Additionally, this work offers a valuable opportunity for entrepreneurs to engage in self-assessment and reflection to enhance their effectiveness in navigating the complex landscape of entrepreneurship during turbulent times.

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Appendix

Chapter Two

28 papers relevant to COVID-19, entrepreneurship and entrepreneurial attributes

Authors	Title	Year	Source title
Alshebami A.S.	Psychological Features and entrepreneurial Intention among Saudi Small entrepreneurs during Adverse Times	2022	Sustainability (Switzerland)
Duong C.D., Ha N.T., Le T.L., Nguyen T.L.P., Nguyen T.H.T., Pham T.V.	Moderating effects of covid-19-related psychological distress on the cognitive process of entrepreneurship among higher education students in Vietnam	2022	Higher Education, Skills and Work-based Learning
Amaral P.C.F., Da Rocha A.	Building resilience during the covid-19 pandemic: the journey of a small entrepreneurial family firm in Brazil	2022	Journal of Family Business Management
Allison T.H., Anglin A.H., Davis B.C., Oo P., Seyb S.K., Short J.C., Wolfe M.T.	Standing out in a crowd of victim entrepreneurs: How entrepreneurs' language-based cues of personality traits affect public support	2022	Journal of Small Business Management
Fares J., Sadaka S., El Hokayem J.	Exploring entrepreneurship resilience capabilities during Armageddon: a qualitative study	2022	International Journal of entrepreneurial Behaviour and Research
Liu X., Wu X., Wang Q., Zhou Z.	SMEs during the covid-19 pandemic: The role of entrepreneurial resilience	2022	Frontiers in psychology
Pongtanalet K., Assarut N.	entrepreneur mindset, Social Capital and Adaptive Capacity for Tourism SME Resilience and Transformation during the covid-19 Pandemic	2022	Sustainability (Switzerland)
Widjaja S.U.M., Wibowo A., Narmaditya B.S., Wardoyo C., Saptono A.	Identifying factors affecting entrepreneurship education and entrepreneurial intention among Indonesian university students	2022	entrepreneurial Business and Economics Review
Suparno S., Saptono A., Iranto D., Disman D., Widhiastuti R.	Development of Small and Medium Enterprises during covid-19 Period: The Role of Literacy, attitude and Productive Economic Behavior	2022	Academic Journal of Interdisciplinary Studies
Yuan Y.-H.	A Study From a psychological Perspective of High Performance to Explore the Relationship Among Resource Bricolage, Social Capital, entrepreneurial attitude, and Intention	2022	Frontiers in psychology
Albornoz-Arias N., Santafé-Rojas A.-K.	Self-Confidence of Venezuelan Migrant entrepreneurs in Colombia	2022	Social Sciences
Firdaus A., Norvadewi, Muryanti, Hidayatullah S., Saksana J.C., Sitorus S.A.	The Role of the entrepreneurship mindset and Spirit in Building a Tourism Business in Indonesia Post covid-19	2022	Journal of Environmental Management and Tourism
Amore M., Garofalo O., Martin-Sanchez V.	Dispositional optimism and business recovery during a pandemic	2022	PLoS ONE
Suasana I.G.A.K.G., Warmika I.G.K., Ekawati N.W., Rastini N.M.	Is marketing digitization important?	2022	International Journal of Data and Network Science
Sulistiyani N.W., Suhariadi F., Fajrianthi	self-efficacy as a Mediator of the Impact of Social Capital on entrepreneurial Orientation: A Case of Dayak Ethnic entrepreneurship	2022	Sustainability (Switzerland)

Damodharan V.S., Ahmed K.A.A.	Exploring the Emirati female student entrepreneurs in the UAE through the theory of planned behaviour	2022	Transnational Marketing Journal
Tümpel M., Cardone P.	"If Things Really Go On as They Are at the Moment, Then I Will Work Illegally. End of Story." Pandemic Realities in Marginalized entrepreneurships	2022	Qualitative Sociology Review
McGee J.E., Terry R.P.	covid-19 as an external enabler: The role of entrepreneurial self-efficacy and entrepreneurial orientation	2022	Journal of Small Business Management
Li H., Ozdemir S.Z., Heslin P.A.	Merely Folklore? The Role of a Growth mindset in the Taking and Timing of entrepreneurial Actions	2022	entrepreneurship: Theory and Practice
Boz Semerci A.	Individual ambidexterity after entrepreneurial failure in covid-19 pandemic times: the influence of current employment status	2022	Journal of Organizational Change Management
Vuorio A., Faroque A.R., Kuivalainen O.	The role of slack resources and managerial capabilities in early and late internationalization: a configurational approach	2022	Small Enterprise Research
Wang Q., Shi R., Zhang K., Han C., Gao Y.	The impact of entrepreneurs' cognitive flexibility on the business performance of New Ventures: an empirical study based on Chinese New Ventures	2022	Current psychology
Sardar T., Jianqiu Z., Bilal M., Syed N.	Impact of ICT on entrepreneurial self-efficacy in emerging economy: Sustaining lock-down during covid-19 pandemic	2021	Human Systems Management
Wang C., Mundorf N., Salzarulo-Mcguigan A.	psychological well-being sustainable during entrepreneurial process—the moderating role of entrepreneurial creativity	2021	Sustainability (Switzerland)
Kézai P.K., Szombathelyi M.K.	FACTORS EFFECTING FEMALE STARTUPPERS IN HUNGARY	2021	Economics and Sociology
Akula S.C., Singh P.	IMPACT OF covid 19 ON entrePRENEURSHIP: A SYSTEMETIC LITERATURE REVIEW	2021	International Journal of eBusiness and eGovernment Studies
Seah Y.Z.	covid-19 and its effects on attitudes toward opportunity-motivated entrepreneurship: Before and after lockdown	2021	Sustainability (Switzerland)
Williamson J., Hassanli N., Rodrigues C., Akbar S., Wedathanthirige H.	BUILDING COMMUNITY CONNECTIONS: SUPPORTING ENTERPRISE DEVELOPMENT IN REGIONAL AUSTRALIA POST-covid-19	2021	Australasian Journal of Regional Studies

Chapter Four

Demographics of participants

Table 3.1: Demographics of participants

Participant Code	Business Industry	Business Age (approx. in years)	Business Size (approx. no employees)	COVID Revenue Impact (Self-reported)	FE Age (approx. in years)	FE Gender	FE Previous Business Experience	FE Formal Entrepreneurship Education Experience	FE Entrepreneurial Family Background	FE Solo Founder
FE1	Employment	7	25	S	35	M	N	Y	N	N
FE2	Cybersecurity	7	200+	I	40	M	Y	N	Y	N
FE3	Consulting	7.5	4	I	45	F	N	N	N	Y
FE4	Compliance	4	2	D	55	M	N	N	N	Y
FE5	Data	3	10	S	30	M	Y	N	N	Y
FE6	Education	4	15	I	50	M	Y	N	N	N
FE7	Employment	10	50	I	40	M	Y	N	Y	N
FE8	Education	4	15	I	35	M	Y	N	N	Y
FE9	Finance	2	55	I	40	M	N	Y	Y	N
FE10	Technology	3	30	U	40	M	Y	Y	U	N
FE11	Marketing	6	80	I	45	M	Y	N	N	N
FE12	Finance	2	55	I	45	M	Y	N	Y	N
FE13	Finance	13	45	I	40	M	Y	N	Y	N
FE14a	Hospitality	6.5	60	S	40	M	Y	N	Y	N
FE14b	Hospitality	6.5	60	S	40	F	Y	N	Y	N
FE15	Food	7.5	10	S	30	F	N	N	Y	Y
FE16	Education	6	100–150	I	35	M	Y	N	Y	N
FE17	Education	7.5	8	I	50	M	Y	N	N	N

Founder entrepreneur (FE) Male (M) Female (F) Yes (Y) No (N) Increase (I) Stable (S) Decrease (D) Unknown (U)