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**Entrepreneurship from a Neuropsychological Approach:
The Influence of OCD and OCPD on Entrepreneurial Decision-Making**

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**A Thesis in the Field of Entrepreneurship
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Abstract

Entrepreneurship from a neuropsychological approach is certainly a field worth investigating. This dissertation aims to closely investigate the influence of OCD and OCPD traits and behavioral patterns on entrepreneurial decision-making. In the analysis of the study, this paper uses a sample of 11 semi-structured interviews divided between OCD and OCPD entrepreneurs. The closing results of the thesis present significant evidence of the impact of OCD and OCPD traits and behaviors on entrepreneurial decision-making with a focus on early career, team, and financial decisions. This study can have a destigmatizing effect and inspire future OCD and OCPD entrepreneurs to pursue entrepreneurial careers while raising awareness of the positive effects of their neurodiverse traits and behaviors in regards to decision-making.

Keywords

entrepreneurship;
entrepreneurial decision-making;
new ventures; neuropsychology; neurodiversity;
neurodiverse entrepreneurs; mental disorders;
OCD; OCPD

Dedication

We, Levi Bergstrand and Lida Minasyan, would like to dedicate this dissertation to all the neurodiverse people out there, and OCD and OCPD individuals in particular.

We would like to thank each interviewee who participated in the study and helped make it happen while struggling with their disorders during these difficult times of the pandemic.

“Neurodiversity may be every bit as crucial for the human race as biodiversity is for life in general. Who can say what form of wiring will prove best at any given moment?”

(Blume, 1998)

Table of Contents

1. Introduction	9
2. Theoretical Review	12
2.1 Entrepreneurship and Neurodiversity	12
2.2 OCD and OCPD	15
2.3 The Relevance of OCD and OCPD to Entrepreneurship	16
2.4 Entrepreneurial Decision-Making by OCD and OCPD Individuals	20
3. Methodology	26
3.1 Research Approach	26
3.2 Research Design	26
3.3 Data Collection Method	27
3.4 Data Analysis	30
3.5 Trustworthiness and Authenticity	31
3.6 Limitations	32
4. Findings and Analysis	35
4.1 Positive and Negative Impacts of OCD and OCPD Traits and Behavioral Patterns on Entrepreneurial Decision-Making	36
4.2 The Way OCD and OCPD Traits and Behavioral Patterns Influence Entrepreneurial Decision-Making	39
4.2.1 Entrepreneurial Career Decisions	39
4.2.2 Entrepreneurial Team Decisions	41
4.2.3 Entrepreneurial Financial Decisions	43
4.3 The Different Impacts of OCD and OCPD Traits and Behavioral Patterns Regarding Entrepreneurial Decision-Making	44
5. Conclusion and Implications	47
5.1 Research Implications	49
5.2 Practical Implications	49
References	51
Appendix A	59
Appendix B	62
Appendix C	65

1. Introduction

The decisions entrepreneurs make at the early stages of their venture development have a significant impact on their venture's success and future growth (Wasserman, 2012). Frank Knight claims that successful entrepreneurial activity means dealing with 'true uncertainty' and that the entrepreneur is the one with 'sound judgment' (Landström, 2017). An entrepreneur who is expected to make decisions under the circumstances of uncertainty is regarded as a 'risk-taker' in this context. As Landström (2017) explains, Knight's theory inspired many scholars in their research, including Sarasvathy (2001) and others writing on entrepreneurial decision-making.

There is plenty of existing research describing how entrepreneurs make decisions with limited information, in a very novel context and without following any specific procedures. Busenitz and Barney (1997) state that the decisions of entrepreneurs are driven by overconfidence, which allows them to take action when many factors are still uncertain. They describe entrepreneurs' overconfidence as bias and heuristic in a positive light and as a rather beneficial decision-making method.

Entrepreneurs have been mostly described as champions of innovation, taking risks to make decisions under 'uncertainty' (Busenitz & Barney, 1997). According to Tolin, Abramowitz, Brigidi, and Foa (2003), individuals with Obsessive-Compulsive Disorder (OCD) experience pathological doubt regarding decision-making due to the low confidence in their memory. To further support this, Pushkarskaya, Tolin, Ruderman, Henick, Kelly, Pittenger, and Levy (2017) state that intolerance of uncertainty and challenges to make decisions are characteristics among OCD individuals. Similarly, Wheaton and Ward (2020) confirm in their study that Obsessive-Compulsive Personality Disorder (OCPD) is also strongly correlated with intolerance of uncertainty. This indication negatively associates OCD and OCPD with entrepreneurial decision-making, given the level of uncertainty in the entrepreneurial context.

In contrast, Wiklund, Hatak, Patzelt, and Shepherd (2018) argue that there are several positive associations between mental disorders and entrepreneurship, and propose that researchers develop new theories exploring the role of mental disorders in entrepreneurship. They note that individuals developing coping and compensatory strategies to overcome the challenges associated with mental disorders can transfer these skills into entrepreneurship and benefit from them.

Entrepreneurship and neuropsychology have been two different research fields for an extensive period. However, the interest in researching these topics in relation to one another has

been increasing in the past decade. Wiklund et al. (2018) state that individuals with different neurodiverse backgrounds have different strengths and abilities well-suited for specific work tasks. The scholars believe that entrepreneurship is more likely to be adapted to personal needs making it comfortable for individuals with mental disorders to pursue such a career.

Entrepreneurs with neuropsychiatric disorders have diverse abilities and perspectives, and more research could be conducted on any correlations between the two fields. Although some mental disorders have been researched in the entrepreneurial context, OCD and OCPD have received less attention from scholars. Tolin et al. (2003) describe ‘pathological doubt’ and ‘intolerance of uncertainty’ as traits of OCD. OCPD, on the other hand, is strongly associated with perfectionism and risk avoidance which is expressed through their rigidity and consistency together with the desired sense of control (Mallinger, 2009).

According to the American Psychiatric Association (APA), a trait is “an enduring personality characteristic that describes or determines an individual’s behavior across a range of situations” whereas a behavioral pattern is “a complex arrangement of two or more responses that occur in a prescribed order” (APA, 2020). Perhaps there is a link between the main traits and behavioral patterns of OCD and OCPD regarding decision-making, which itself is a pivotal aspect of entrepreneurship. However, the impact of OCD and OCPD traits and behavioral patterns, particularly its positive aspects of entrepreneurial activity, have not been fully researched. Moreover, keeping in mind that OCD and OCPD considerably overlap, yet also have specific traits and behavioral patterns that set them apart, we can assume that they both influence entrepreneurial decision-making in similar ways with differences in certain areas.

This thesis aims to explore the impact of OCD and OCPD on entrepreneurial decision-making. OCD and OCPD are extensively researched in the context of psychological studies, but there is limited research that focuses on the OCD and OCPD traits influencing entrepreneurial decision-making (Foa, Mathews, Abramowitz, Amir, Przeworski, Riggs, Filip & Alley, 2003). This dissertation will serve as an extension of previous studies investigating entrepreneurial decision-making. We seek to provide answers to these research questions: (1) What positive or negative impacts do OCD and OCPD have on entrepreneurial decision-making? (2) How do the main traits and behavioral patterns of OCD and OCPD influence entrepreneurial decision-making? (3) How does the impact of OCD differ from that of OCPD regarding entrepreneurial decision-making?

To be able to best answer the above-mentioned research questions we have chosen to conduct a qualitative study, as we believe it allows us to gain insight into real-life experiences of entrepreneurs having OCD or OCPD. Our research refers to multiple-case study design. In our study, we conduct a total of 11 interviews, 10 participants are equally divided between OCD and OCPD entrepreneurs and the 11th participant has both OCD and OCPD diagnosis. We anticipate conducting semi-structured interviews allowing our interviewees to follow the guiding questions we prepared, but also be flexible about referring to important aspects of their experiences regarding their disorder and entrepreneurial decision-making.

The selected entrepreneurs are in the early years of venture development and are either diagnosed with OCD or OCPD meeting the criteria of the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition by the American Psychiatric Association (DSM-5; APA, 2013) or are in the process of getting diagnosed. We do not establish any geographical boundaries while sampling, since the area and focus of our research is unrelated to specific locations. We aim to conduct our interviews with English-speaking individuals coming from English-speaking countries to ensure a common understanding, to avoid any language barriers. Individuals who have additional diagnoses of other mental disorders that are unrelated or irrelevant to OCD or OCPD are excluded from this research.

The thesis is divided into the following parts: Chapter 2 addresses the theory behind existing research devoted to this topic. Chapter 3 describes our research strategy, data collection, analysis methods, and limitations. Chapter 4 covers the empirical findings and analysis relating it to the existing theories. Chapter 5 provides the conclusion of the dissertation and presents ideas for theoretical and practical implications.

2. Theoretical Review

We begin the theoretical review by explaining the relevance of integrating neuropsychiatric disorders and entrepreneurship into one research. We provide the main definitions and concepts in these two fields of research, as well as justify the need to further research mental disorders in the context of entrepreneurship in the upcoming two subchapters. In the third and fourth subchapters, we take this discussion further to particularly focus on OCD and OCPD regarding its connection with decision-making.

2.1 Entrepreneurship and Neurodiversity

The fields of entrepreneurship and neuropsychology have separately been vastly studied for the past decades. Until recent years, the relation between the two was not considered to be one integrated topic of research. There have been many interesting discoveries in both areas, without linking the two fields together (Wiklund, Patzelt & Dimov, 2016). A connection between entrepreneurship and neuropsychology could originate from the impact that personality traits and behavioral patterns have on humans regarding their decision-making processes. The topic of entrepreneurship from a neurodiverse approach has not been empirically investigated enough, although it has been extensively debated in the past couple of years.

The term ‘neurodiversity’ has been used recently in reference to ‘neuropsychiatric disorders’, also known as ‘mental disorders’. The term ‘mental disorder’ is considered in today’s society to be slightly outdated and has with greater occurrence been replaced by the term ‘neurodiversity’ (Kapp, 2020).

The DSM-5 (APA, 2013) defines a mental disorder as follows:

A mental disorder is a clinically significant disturbance in an individual’s cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress in social, occupational, or other important activities.

Mental disorders need to meet the criteria of a wide-ranging array of conditions to be legitimately considered. There are a total of 157 various mental disorders that differ in the degree of stability, severity, therapy, and receptivity to cognitive treatments (DSM-5; APA, 2013). Quoting Clark, Cuthbert, Lewis-Fernández, Narrow, and Reed (2017, p. 75), “Mental disorder is

not an all-or-none phenomenon. Rather, it is continuously graded in severity, from its absence to severe psychopathology”. Pediatricians, psychiatrists, and psychologists use interviews, observations of behavior, different specialized techniques of assessment such as behavioral analysis tests and questionnaires to diagnose various mental disorders (APA, 2020).

The mindset of neuropsychiatric disorders in progressive societies has been evolving significantly, thus resulting in greater acceptance towards neurodiverse individuals. There have been tens of thousands of studies on various neuropsychiatric disorders and their impairment on an individual's performance (Wiklund et al., 2016). On the other hand, the very limited research conducted on the association between entrepreneurship and neuropsychiatric disorders has been focusing on the negative impact of various mental health conditions in the field of entrepreneurship (Wiklund et al., 2016).

Wiklund et al. (2018) argue that there are a number of positive associations between mental disorders and entrepreneurship, and propose that researchers develop new theories exploring the role of mental disorders within entrepreneurship. Entrepreneurship is more likely to be adapted to personal needs making it comfortable for individuals with mental disorders to pursue such a career. Although it is stated that entrepreneurship can be more attractive to high performers, there is not much evidence whether this fact results in fewer people with mental disorders choosing an entrepreneurial path (Wiklund et al., 2018). The types and symptoms of neuropsychiatric disorders will influence the choice of industry and style of entrepreneurship. However, it is disputable whether mental disorders are a driving force for an entrepreneurial career (Wiklund et al., 2018).

People with different neurodiverse backgrounds have different strengths and abilities well-suited for specific work tasks (Wiklund et al., 2018). Some mental disorders, in particular, have positive relationships with entrepreneurial action, such as ADHD with sensation seeking (White & Shah, 2011), dyslexia with more original thinking (Tafti, Hameedy & Baghal, 2009), bipolar disorder with perseverance (Hayden, Bodkins, Brenner, Shekhar, Numberger Jr, O'Donnell & Hetrick, 2008), and autism with pattern identification (Baron-Cohen, Ashwin, Ashwin, Tavassoli & Chakrabarti, 2009). Wiklund et al. (2018) noted that individuals developing coping and compensatory strategies to overcome the challenges associated with mental disorders can transfer these skills into entrepreneurship and benefit from them.

Freeman, Staudenmaier, Zisser, and Andresen (2019) studied the co-occurrence and prevalence of five psychiatric conditions within their research sample and found that around one-

third of the entrepreneurs declared a history of depression, the same amount reported being diagnosed with ADHD, a tenth of the sample stated being diagnosed with bipolarity, and the same amount reported substance use. Additionally, around one-third of the entrepreneurs declared being diagnosed with at least two mental health conditions, whereas around one fifth stated having at least three mental health conditions.

Mental health conditions, which involve neuropsychiatric disorders such as the ones previously mentioned, commonly occur together. This co-occurrence of neuropsychiatric disorders is defined as a comorbidity (Kessler, McGonagle, Zhao, Nelson, Hughes, Eshleman, Wittchen & Kendler, 1994). In a simplified world, each neuropsychiatric disorder would be distinct from all other disorders and the fact that an individual is diagnosed with one would mean that they cannot have another. However, the brain is more complex than one can imagine, an individual being diagnosed with one neuropsychiatric disorder is, therefore, more likely to meet the diagnostic criteria of at least one other disorder (Kessler et al., 1994). Neurodiverse entrepreneurs are affected by their psychiatric traits that influence their cognitive functions such as creative ability, activity levels, motivation, energy, self-concept, etc., which consequently impacts their ventures and business outcomes (Freeman et al., 2019).

The majority of the studies in this field focus on entrepreneurs diagnosed with neuropsychiatric condition Attention Deficit Hyperactivity Disorder (ADHD). Wiklund et al. (2016) explore how neuropsychiatric disorders such as ADHD influence the decision process of individuals partaking in entrepreneurial activity, as well as succeeding in it. Their findings show that the leading force behind entrepreneurial action is impulsivity in ADHD individuals and that the main stimulus for its positive and negative consequences is hyper-focus. The scholars further explain how impulsivity, which certainly shapes and plays a major role in the decision-making of ADHD individuals, could aid them in taking action under uncertainty when needed, instead of overthinking and analyzing a situation compared to entrepreneurs without this neuropsychiatric disorder. This is due to ADHD individuals following their intuitive sense and taking action when a decision seems to be appropriate, disregarding whether they will regret their decision later on.

In their study, Freeman et al. (2019) discovered that a high percentage of entrepreneurs are affected by mental health disorders and afterward revealed the great impact that neuropsychiatric disorders have on the cognitive performance of entrepreneurs and subsequently on their business outcomes. What becomes evident is the great significance that could be identified between person-

centered entrepreneurship and neuropsychiatric disorders, and the extensive influence that the latter leaves on the entrepreneurs' ventures. The significance of finding positive relationships between entrepreneurs with neuropsychiatric disorders and their firm performance, confirms the unique essence of entrepreneurship compared to other contexts. This can largely encourage individuals with neuropsychiatric disorders to perceive starting a new venture as an opportunity rather than a hindrance.

In what follows, we aim to focus on reviewing research that has investigated the impact or influence of OCD and OCPD on entrepreneurs and their entrepreneurial activity, to reveal its favorable and restricting implications. These findings of Wiklund et al. (2016) are highly applicable for our thesis, it is therefore considered to be of crucial significance to investigate the positive impact of perfectionism and detail-orientedness in OCD and OCPD individuals. In addition to this, we will further investigate how various other traits and behavioral patterns of OCD and OCPD could make neurodiverse individuals successful entrepreneurs.

2.2 OCD and OCPD

Despite the similarity in both names and abbreviations, the Obsessive-Compulsive Disorder (OCD) and the Obsessive-Compulsive Personality Disorder (OCPD) are two rather different neuropsychiatric disorders, each with their symptoms and distinct conditions (DSM-5; APA, 2013). The DSM-5 (APA, 2013) distinguishes OCD from OCPD by the presence of true obsessions and compulsions in OCD. An individual has roughly a 33% chance of being diagnosed with OCPD if they are already diagnosed with OCD, according to the DSM-5 (APA, 2013). The DSM-5 (APA, 2013) defines OCD as: “[A]n anxiety disorder in which time people have recurring, unwanted thoughts, ideas or sensations (obsessions) that make them feel driven to do something repetitively (compulsions)”.

The OCPD is a subcategory of Personality Disorder. According to the DSM of Mental Disorders, 4th Edition, Text Revision by the APA (DSM-IV-TR; APA, 2000), the main traits that identify OCPD include perfectionism, rigidity, stubbornness, and miserliness. According to the DSM-IV-TR (APA, 2000), individuals are diagnosed with OCPD when they demonstrate the following: “a pervasive pattern of preoccupation with orderliness, perfectionism, and mental and interpersonal control, at the expense of flexibility, openness, and efficiency, beginning by early

adulthood and present in a variety of contexts.” The diagnostic criteria for OCD and OCPD according to the DSM-5 and DSM-IV-TR (APA, 2013; 2000) can be found in Appendix A, parts (1), and (2) respectively.

According to the International OCD Foundation (IOCDF, 2010), both OCD and OCPD differ in many ways such as OCD behaviors causing significant limitations and impairments at work, whereas OCPD behaviors to a greater extent are being praised and respected due to the high devotion and commitment when completing tasks or delivering work. In addition, behaviors of OCD and OCPD individuals are carried out because of concerns that are caused by completely different reasons. Behaviors of OCD individuals are regularly done out of avoidance of undesirable outcomes, although behaviors of OCPD individuals are typically carried out due to one’s fear of not meeting their perfectionistic expectations (IOCDF, 2010). Furthermore, these feared consequences, thoughts, and behaviors common to OCD individuals do not frequently concern matters of real-life situations as much as it is about the rituals known as compulsions to help cope with the obsessions of intrusive thoughts, whereas behaviors of OCPD individuals are rigid procedures that are followed to manage and cope with daily tasks (IOCDF, 2010).

However, the two neuropsychiatric disorders have certain similar traits and behavioral patterns that are highly relevant in regards to entrepreneurship, such as the extremely high expectation of one’s self to the extent of requiring perfectionism to reach self-satisfaction. Both OCD and OCPD diagnoses share main commonalities such as obsessions and compulsions for individuals to cope with their daily lives (IOCDF, 2010). It is also worth mentioning that OCD interferes with many levels, and in several areas of an individual’s life; this includes social life relationships with friends and family as well as work-related relationships. Similarly to OCD, OCPD commonly affects interpersonal relationships, although it can aid in more efficient work functioning (IOCDF, 2010).

2.3 The Relevance of OCD and OCPD to Entrepreneurship

Most characteristics that have been frequently associated with entrepreneurs such as being goal-oriented, competitive, leading, controlling, hard-working, and high-achieving are strikingly similar to what is known as the Type A behavior pattern, according to a study on organizational behavior (Lee, Earley & Hanson, 1988). The Type A behavior pattern is defined as individuals

who display behavioral traits such as stubbornness, eagerness, responsibility, intense striving for achievement, the need for control and a lack of patience, to mention a few (Holt, Bremner, Sutherland, Vliek, Passer & Smith, 2012).

An upholsterer working on the chairs in the office of a physician who specializes in treating heart-attack victims discovered the Type A behavior pattern. He observed that the seats were worn-out in the front, but not the back, which suggested that the patients were always sitting on the edge of their seats (Holt et al., 2012). The edge-of-the-seat pattern is a typical characteristic of Type A behavioral pattern individuals. They live under great stress and tend to require a lot of effort from themselves and others (Holt et al., 2012).

It is common among Type A individuals to be workaholics, often striving to accomplish more work in less time. Characteristics such as competitiveness and ambition are also common traits with Type A behavior pattern individuals (Holt et al., 2012). These traits can in turn lead to the individual displaying aggression and hostility when something gets in their way. Research conducted on Type A behavioral patterns has demonstrated that the most destructive aspect is the negative emotions or emotional instability, especially anger and hostility, as well as the increased physiological reactivity the Type A individual experiences (Holt et al., 2012). For example, in the case of an entrepreneur with an unsuccessful venture, this could eventually lead to frustration and interpersonal conflicts. On the other hand, some dimensions of Type A such as high energy levels, high need for achievement, and the ability to simultaneously handle multiple projects, could consequently generate a higher entrepreneurial performance (Morrison, 1997).

The Type A behavioral pattern has not been used to a great extent thus far in entrepreneurial research. Evidence from previous studies indicate a likelihood of Type A behavior and its dimensions of being positively related to becoming an entrepreneur (Babb & Babb, 1992; Begley & Boyd, 1987; Corzine & Hood, 1998) and with high entrepreneurial growth, but not necessarily with an entrepreneurial revenue stream (Begley & Boyd, 1987). According to Burnam, Pennebacker, and Glass (1975), Type A behavior pattern individuals need to achieve control over tasks they take over; this makes entrepreneurship highly appealing to Type A behavioral pattern individuals due to the possibility of practicing greater control over a variety of different tasks within their work.

To the best of our knowledge, there is little or no published research conducted on linking OCPD individuals to type A behavior pattern. However, in a simple comparison between type A

behavioral pattern traits and OCPD traits one can easily identify many similarities between the two. As mentioned earlier, recent research on entrepreneurship and the type A behavioral pattern positively correlates the two (Babb & Babb, 1992; Begley & Boyd, 1987; Corzine & Hood, 1998), highlighting the benefits as well as the likelihood of type A behavior pattern individuals becoming successful entrepreneurs. Presumably, conducting a similar study that accounts for type A behavioral traits and OCPD traits could result in a similar conclusion of such traits being beneficial in regards to entrepreneurship.

Therefore, as seen above, some evidence illustrates that type A behavior traits are considered somehow essential within entrepreneurship and beneficial for a successful entrepreneurial career. However, many other factors such as the tolerance level of uncertainty and the level of confidence should be equally accounted for in regards to entrepreneurship and entrepreneurial decision-making. The two previously mentioned factors among others are highly related to OCD and OCPD and thus relevant to be further investigated within entrepreneurship. Furthermore, when it comes to the recognition of entrepreneurial opportunities various other factors play a role.

According to Verheul, Wennekers, Audretsch, and Thurik (2002), the creation of entrepreneurial opportunities is determined by the industrial structure and the market. Factors such as economic development, technological development, and globalization are what influence those opportunities of entrepreneurship and configure the demand for entrepreneurship. The entrepreneurial activity conditions are thus created by environmental factors (Verheul et al., 2002). Furthermore, in the making of their decisions, entrepreneurs take environmental factors into account, as well as individual characteristics and personal preferences for which it extensively depends on weighing the risk and reward between salary, employment, and self-employment (Wennekers & Thurik, 1999; Verheul et al., 2002). Moreover, the level of entrepreneurial activity is relatively influenced by environmental factors due to the various degrees of uncertainty that they cause, which consequently impacts the entrepreneurship determinants (Verheul et al., 2002). The recognition of a business opportunity and the making of a decision have a certain degree of uncertainty because various variables that are related to risk and reward are being taken into consideration by the potential entrepreneurs in this process.

A construct known as the intolerance of uncertainty (IU) is illustrated as the tendency to recognize, evaluate, and answer to uncertain situations and events in inadequate adaptive ways.

The IU has been studied increasingly as a factor of transdiagnostic treatment and in the form of psychopathology (Boswell, Thompson-Hollands, Farchione & Barlow, 2013; Shihata, McEvoy, Mullan & Carleton, 2016). The IU stimulates compulsive urges of repetitive checking in OCD individuals, according to Tolin et al. (2003). The IU was also found to drive OCPD individuals into applying excessive control over their environment as well as other people around them (Pollak, 1987). In another study that investigated the IU and OCPD, the IU was representative of factors that are relevant to OCPD. The IU was further found to be having an impact on the maladaptive behavioral manifestation of OCPD individuals, causing them to enforce efforts to exert control over their environment (Wheaton & Ward, 2020).

In addition to the compulsive urges of repetitive checking due to the IU, individuals with OCD have also been found to experience difficulties when it comes to decision-making which is characterized by approaching information categorization with caution, frequently requesting repetition of information and doubting the level of certainty regarding decisions (Obsessive Compulsive Cognitions Working Group, 1997). In an experimental study on the attentional coping style of OCPD individuals, the researchers found that individuals with OCPD spent more time concentrating on the instructions before beginning a task, expressed a greater interest in keeping track of their results, and reported a notably higher level of internal monitoring during the task in comparison to their control groups (Gallagher, South & Oltmanns, 2003).

Hébert and Link (1989) describe the entrepreneur as the one who makes judgmental decisions affecting different aspects of the venture. In a situation of absolute uncertainty, where entrepreneurs operate, they often use heuristics and biases to make decisions (Gilbert-Saad, Siedlok & McNaughton, 2018). They do so, as they regard their situation or the opportunity as unprecedented and unique, and act overconfident thinking that they will succeed (Koellinger, Minniti & Schade, 2007). However, a question arises whether biases and heuristics, such as optimism and overconfidence, are beneficial for entrepreneurial activity.

On the one hand, overconfidence can invoke risk, thus resulting in fewer chances of success; on the other hand, it can result in success due to improved efforts and motivation of an entrepreneur (Everett & Fairchild, 2015). It seems that risk-taking when driven by overconfidence would not necessarily end in failure, as it can lead to identifying opportunities at times that others are unaware of. Entrepreneurial risk-taking is explained as a positive attitude of entrepreneurs towards business situations and their ability to identify opportunities, which may be perceived as

low potential by others (Palich & Bagby, 1995). However, in case of failure, some entrepreneurs could be more inclined towards neutralizing their comparative optimism (Ucbasaran, Westhead, Wright & Flores, 2010).

In a study that examined the relationship between cognitive confidence and OCD symptoms using the memory and cognitive confidence scale (MACCS; Nedeljkovic & Kyrios, 2007) which checks for confidence in general memory, confidence in decision-making ability, and confidence in concentration abilities, the overall OCD severity was found to be uniquely predicted by the general confidence in memory (Nedeljkovic, Moulding, Kyrios & Doron, 2009). According to the IOCDF (2010), OCD individuals are insightful and fully aware of their intrusive, unwanted, and unreasonable thoughts. However, individuals with OCPD believe and are convinced that their self-imposed systems of rules are the optimal and right way of handling situations and completing tasks.

2.4 Entrepreneurial Decision-Making by OCD and OCPD Individuals

Decision-making is an inherent part of entrepreneurship and several scholars have reiterated this in their papers of entrepreneurial research. According to Bechara (2004), there are two types of decision-making processes that have been highlighted in recent research. The first type is under ambiguous conditions that rely on implicit learning mechanisms and have been established on previous feedback; this type is associated with the working memory. The second type is under conditions of risk which relies on the ability to accurately calculating the risk versus reward contingencies and is associated with emotional processing (Bechara, 2004; Brand, Labudda & Markowitsch, 2006).

Entrepreneurs make decisions at all stages of their entrepreneurial activities and they do so under extreme conditions, such as uncertainty and risk (Hammond, 1996). Shepherd, Williams and, Patzelt (2015) distinguish the following entrepreneurial decision-making areas: (1) opportunity assessment decisions; (2) entrepreneurial entry decisions; (3) exploiting opportunities; (4) entrepreneurial exit decisions. They also believe that the heterogeneity of entrepreneurs' aspirations, abilities, motivation, and self-perception affect the decision to pursue an entrepreneurial career as well as to create and operate a new venture.

While reviewing the OCD and OCPD traits and behavioral patterns through the entrepreneurial lens, there is an initial assumption that entrepreneurs with OCD and OCPD have different levels of overconfidence, risk-perception, and other traits generally associated with entrepreneurship. Therefore, they might experience differences while making entrepreneurial decisions at different levels of their entrepreneurial activity conditioned with the disorder. While the anecdotal evidence presented in the media through newspaper articles and digital stories often claim that entrepreneurs with OCD and OCPD benefit from their traits and behavioral patterns, we would like to provide research-based evidence on how these traits and behavioral patterns influence entrepreneurial decision-making. We will be reviewing the available literature on early entrepreneurial decisions of OCD and OCPD entrepreneurs where high levels of uncertainty and decisions on how they lead their startup are observed.

During the early stages of their ventures, entrepreneurs make most of their decisions under high levels of uncertainty and risk (Hammond, 1996). Foa et al. (2003) argued that there are some negative aspects influencing decision-making for individuals conditioned with OCD. This is linked to the additional amount of information and time that OCD individuals require to make decisions, as well as to the way they perceive risk in decision-making. The scholars further elaborate that OCD is associated with indecisiveness and a lack of confidence in the accuracy of memories, which may lead to the need for additional information to make a decision (Foa et al., 2003). Similarly, Tolin et al. (2003) describe how OCD individuals experience ‘pathological doubt’. The scholars assumed that the low level of trust OCD individuals have towards their memory, influenced by their desire of having a better memory – despite the state of their actual memory – informs ‘intolerance of uncertainty’. However, the same study has shown that there is an association between the checking and repetitive behavior of Obsessive-Compulsives (OCs) in particular with the intolerance of uncertainty (Tolin et al., 2003).

On the topic of early entrepreneurial decisions of OCD individuals, one can speculate that the ‘pathological doubt’ experienced by OCD individuals at early stages of the venture creation can lead to lower levels of confidence, and the ‘intolerance of uncertainty’ can lead to pessimistic views about the future. Many scholars share the opinion that biased decision-making, optimism, and individual overconfidence are beneficial in the entrepreneurial context, as it can lead to positive entrepreneurial outcomes (Koellinger et al., 2007). Busenitz and Barney (1997) claim that heuristics and biases are particularly beneficial during the startup years, as simplified decision-

making assists founders to pursue ideas that otherwise could not have been pursued. The scholars believe that using the time to gather all the necessary information to make a decision may take too long, and thus the potential opportunity might be lost (Busenitz & Barney, 1997). More studies provide evidence on the positive association of overconfidence and decisions throughout the process of new venture creation (Robinson & Marino, 2015). Given the above mentioned, we could infer that some of the OCD traits are not beneficial for the early venture decisions associated with increased levels of uncertainty.

Traits that are beneficial at the early stages of the venture creation can cease to be as valuable at later stages of operations. Everett and Fairchild (2015) make a distinction between early-stage and later-stage decisions. On the one hand, they justify the benefits of overconfidence by explaining how being more persistent and not wanting to quit makes entrepreneurs more likely to succeed. On the other hand, they conclude that overconfidence can aid in success over a short period, yet it can lead to failure in the long-run. This conclusion highlights the potential positive outcome of entrepreneurial decisions made by OCD individuals throughout their entrepreneurial career, due to their traits requiring extended time and thorough consideration for decisions (Everett & Fairchild, 2015).

Moreover, many scholars share the same opinion with Hmieleski and Baron (2009) who claim that the relationship between optimism and entrepreneurial performance does not always have a positive impact. They found that optimism, or an overconfident attitude, negatively affects the entrepreneurs' strategic decisions in particular. Being overconfident, specifically when indulging in the making of financial decisions, is highly likely to result in entrepreneurial failure (Invernizzi, Menozzi, Passarani, Patton & Viglia, 2017). The majority of arguments questioning the rationality and effectiveness of making decisions with overconfidence particularly focus on financial forecasts and decisions (Cassar & Gibson, 2007), and on how entrepreneurs acquire, allocate, and use resources, thus leading the venture to failure (Hayward, Shepherd & Griffin, 2006). Resource acquisition and financial decisions are other crucial areas of entrepreneurial decision-making, and as Landström (2017) explains, entrepreneurs may lack some knowledge and capacities on acquiring and managing finances, which can result in significant disadvantages.

It has become evident that overconfidence can be beneficial at the opportunity creation stages of entrepreneurial decision-making, yet it can have an adverse influence at later stages of the venture performance (Hayward et al., 2006). We can conclude that the main traits and

behavioral patterns of OCD entrepreneurs, such as taking their time and putting an effort to reduce uncertainties through checking and indulging into details, can prove to be beneficial in financial and long-term decisions.

In what follows, we review the traits and behavioral patterns of entrepreneurs with OCPD in regards to early-stage decisions, as well as ongoing ones. The typical OCPD traits are obsessions, persistent thoughts, as well as perfectionism, orderliness, control, along with a reluctance to delegate tasks, and miserly spending styles (DSM-5; APA, 2013). There is a positive influence on entrepreneurs' perceptions concerning their business planning abilities (Gatewood, Shaver & Gartner, 1995) and on achieving the anticipated results regarding the decisions of creating a new venture (Townsend, Busenitz & Arthurs, 2010). Taking this into consideration, it is interesting to observe the results of the study by Wolfe and Patel (2017) which suggested that OCPD individuals were more prone to pursue a self-employment career path compared to those who were not diagnosed with OCPD. Wolfe and Patel (2017) distinctly stated how their research focused solely on the positive robust relationship between self-employment and OCPD diagnosed individuals, especially in the case of males and younger individuals, and possible mediators on such an association. In their research, Wolfe, and Patel (2017) help us to further understand how the traits and behavioral patterns of neuropsychiatric disorders such as OCPD strongly influence self-employment and entrepreneurship. It is indicated that there is a higher chance of an individual being an entrepreneur if they are young or male, with neuropsychiatric disorders such as OCPD.

To further discuss the OCPD traits and behavioral patterns associated with early-stage entrepreneurial decision-making, the controlling behavior and reluctance to delegate tasks (DSM-IV-TR; APA, 2000), need to be reviewed as traits and behavioral patterns that can influence the primary motivation of an entrepreneur to start a venture. Most entrepreneurs face the dilemma of being either a sole founder or establishing a venture with a co-founder. Wasserman (2012) distinguishes two types of entrepreneurs: (1) those who prefer to stay in control while establishing, even if their venture does not turn out to be significantly profitable, and (2) those who strive to engage co-founders and attract more funding. According to the scholar, in the first case, the entrepreneurs are more prone to maintaining strong control of the decision-making and have less interference, whereas in the second case entrepreneurs engage experienced people and do give up some control for the sake of financial growth (Wasserman, 2012). Usually, in the first case the

ventures might end up being less profitable, however, since this is linked to the desire of the entrepreneur and their way of defining success, it would still be considered successful.

As for OCPD traits and behavioral patterns associated with ongoing entrepreneurial decision-making, the challenges of OCPD entrepreneurs delegating tasks might also be linked to one of their strongest traits of being perfectionists (DSM-IV-TR; APA, 2000). Although there has been a long history of research on the study of perfectionism, both in personality psychology and clinical research (Hewitt & Flett, 1991), research on the relationship between perfectionism and entrepreneurial decision-making is relatively scarce. Perfectionism is conceptualized as a multidimensional construct characterized by oneself setting extremely high standards, guided by the worry of committing mistakes, uncertainty in regards to beliefs and actions, and an overemphasis on neatness, orderliness, and organization (Frost, Marten, Lahart & Rosenblate, 1990; Hewitt & Flett, 1991; Terry-Short, Owens, Slade & Dewey, 1995).

Personality traits such as perfectionism are believed to moderate decision-making performances. Previous research that examined the relationship between decision-making and perfectionism in established and high-risk probability situations has demonstrated the important role that perfectionism plays (Brand & Alstotter-Gleich, 2008). In their research, Brand and Alstotter-Gleich (2008) implied that it is risky conditions that associate perfectionism with decision-making and not ambiguous conditions. While perfectionism is usually considered an OCPD trait, in a study that focused on perfectionistic personality traits, the researchers tested the relationship between decision-making and perfectionism in OCD individuals (Boisseau, Thompson-Brenner, Pratt, Farchione & Barlow, 2013). The results indicated that perfectionism in OCD individuals aided in decision-making. However, perfectionism in OCD individuals was associated with the decision-making of a lesser risk (Boisseau et al., 2013).

Although OCD and OCPD traits and behavioral patterns are not directly and robustly related to entrepreneurial characteristics at first glance, there is certainly a link between the two disorders. There is no doubt that entrepreneurs' human capital plays a crucial role in the assessment of an entrepreneurial opportunity as well as in other aspects of entrepreneurship (Haynie, Shepherd & McMullen, 2009). On the one hand, certain traits such as risk averseness which is associated with both OCD and OCPD is not that beneficial, despite Podoynitsyna, Van der Bij, and Song (2012) claiming that the ability to manage risk is one of the influencing factors of an entrepreneur in creating a new venture. On the other hand, other traits such as obsessions, repetition, and

associated persistence can become a precondition to success; Markman and Baron (2003) found a positive correlation between personal persistence and entrepreneurial success.

Given the lack of systematic and empirical evidence to the direct link between OCD and OCPD traits and behavioral patterns in regards to entrepreneurial decision-making, this research aims to empirically explore the positive and negative influences of OCD and OCPD on entrepreneurial decision-making. This study intends to reveal some of the positive aspects and beneficial impacts that OCD and OCPD traits and behavioral patterns have on entrepreneurship, which can result in a destigmatizing effect not only on OCD and OCPD but also on other similar neurodiversities.

3. Methodology

The key objective of this chapter is to explain the research approach and design, justify the choice of research methods, present the analysis, and highlight the limitations.

3.1 Research Approach

The purpose of this dissertation is to reveal how OCD and OCPD traits and behavioral patterns influence entrepreneurial decision-making. We also aim to distinguish the different approaches of entrepreneurial decision-making used by entrepreneurs who are diagnosed with OCD or OCPD. Given the limited research on entrepreneurial decision-making in a cross-section with neurodiversities, particularly with OCD and OCPD, we intend to develop a new theory explaining the beneficial and challenging influences of these neuropsychiatric disorders on entrepreneurial activity. The approaches supporting such an intention are the inductive and abductive approaches, which usually lead to new advancements and discoveries (Fisher & Aguinis, 2017). In contrast with the deductive approach that empirically scrutinizes the hypotheses deduced from the theory, the inductive approach feeds the findings of the research into a theory (Bryman & Bell, 2011). Firstly, we review the relevant theories to reveal any gaps and areas worth further exploration and secondly, conduct an empirical study to produce a new theory that aligns the most with the abductive approach.

It is appropriate to use a qualitative design, as qualitative research is concerned with revealing and explaining a complex relationship such as the one between neuropsychiatric disorders and entrepreneurial activity. We aim to gain a deeper understanding of the aspects of entrepreneurial decision-making influenced by different traits and behavioral patterns of OCD and OCPD. Another important aspect is to acquire a wider perspective of the unique experiences that entrepreneurs with OCD or OCPD identify in regards to their successful and challenging decision-making processes. We believe that qualitative research enables us to contribute with comprehensive, yet detailed and reasonable patterns of how OCD and OCPD traits and behavioral patterns impact entrepreneurial decisions.

3.2 Research Design

In the research design section, we describe the used framework for the collection and analysis of the data. Among the three categories of research purposes being exploratory, descriptive, and explanatory this thesis is an exploratory study. It is flexible, adaptable, aligned with our research question seeking new insights on the topic, and assessing the beneficial and challenging influences on entrepreneurial decision-making in the light of the two neuropsychiatric disorders, OCD and OCPD. As Thornhill, Saunders, and Lewis (2009) indicate, exploratory studies are useful to understand the nature of the matter and gain a better understanding of the problem being researched. Taking an exploratory approach allows us to start relatively broad and study different influences of various neurodiversities regarding aspects of entrepreneurial decision-making, then gradually narrow our focus to OCD and OCPD, which are less researched in this field. Finally, in the empirical part of the research, we narrow our focus further to specific traits and behavioral patterns of OCD and OCPD and particular aspects of decision-making.

To be able to distinguish between the positive and negative impacts of OCD and OCPD on entrepreneurial decision-making, as well as to obtain a better understanding of how the main traits and behavioral patterns of both neuropsychiatric disorders influence entrepreneurial decision-making, we intend to adopt a multiple case study design, which is commonly used in business research and is aligned with the exploratory purpose of our research (Bryman & Bell, 2011). The multiple case study design allows us to explore each case to better understand the driving force behind the motivations and traits of OCD and OCPD entrepreneurs regarding their entrepreneurial decisions. It also helps us to further investigate the underlying reasons for these driving forces motivated by the OCD and OCPD traits and behavioral patterns.

In the frames of this study, we also seek to highlight the differences between the impact of OCD from that of OCPD regarding entrepreneurial decision-making. We identify the traits and behavioral patterns of OCD and OCPD entrepreneurs and the decisions they make, in an attempt to elicit observations, parallels, and correlations. This study focuses on entrepreneurs who have OCD or OCPD, hence the level of analysis is individual since we identify specific kinds of individuals as the primary unit of measurement (Bryman & Bell, 2011).

3.3 Data Collection Method

We conduct qualitative interviews, as the focus of our research is to gather the views, opinions, and experiences of our interviewees by allowing them to share what is relevant and important in each of their cases (Bryman & Bell, 2011). Wiklund et al. (2016) conducted face-to-face and telephone interviews in their research on ADHD entrepreneurs in Sweden where they focused on the following thematic areas throughout the interviews: personal background, entrepreneurial journeys, nature of their diagnoses, and diagnosis and entrepreneurship. Given the importance to let the interviewees lead the conversation towards what stands out to them and to provide the flexibility to truly share rich and detailed answers (Bryman & Bell, 2011), we also follow similar guidance of thematic aspects during the interviews: (1) decisions about entrepreneurial career and opportunity recognition; (2) decision-making throughout the entrepreneurial activity (with a particular focus on team relations and financial decisions); (3) OCD or OCPD diagnosis and its influence on entrepreneurship.

In an attempt to explore the OCD and OCPD related motives of decision-making, we group these decisions into two categories based on the timeline, as decisions vary at different stages of entrepreneurial activity. Firstly, we explore the early stages, which include choosing an entrepreneurial career and recognizing opportunities. Secondly, we review ongoing decisions concerning the team and finances. The selection of ‘team’ and ‘finances’ as a narrower focus for exploring ongoing entrepreneurial decisions is motivated by some of the OCD and OCPD traits and behavioral patterns that could allegedly influence these particular aspects. Thirdly, we finalize with general questions about the OCD and OCPD traits and behavioral patterns, and the implications of these traits and behavioral patterns on different situations, which enables us to make connections, comparisons and conclusions.

To further clarify, we conduct semi-structured interviews following an interview guide with specific sections and open-ended questions in each section, as we anticipate that OCD and OCPD influence specific areas of entrepreneurial decision-making, we then use those areas to gain more insights. One of the questions is a short case scenario where we ask our interviewees to make an entrepreneurial decision between the two options of a ‘slower growth’ or ‘giving up half of their decision-making power’. This case is to test the entrepreneurs’ level of risk aversion and the motivation to stay in control of their decision-making, as these are relevant aspects in the cross-section of entrepreneurial decision-making in regards to OCD and OCPD traits and behavioral

patterns.

The research sample consists of 11 interviews in total, 10 participants are equally divided between OCD and OCPD entrepreneurs, and the 11th participant is diagnosed with both OCD and OCPD. The sample of participants consists of 6 males and 5 females, and range between the ages of 20 and 36 years old. Out of all the participants, 10 speak English as their first language and come from English speaking countries such as Australia, Canada, Ireland, and the United States of America, whereas one participant is from Sweden with Swedish being their first language.

In this study, entrepreneurs are defined as individuals identifying as founders, co-founders, or self-employed at a profitable business. Identifying and interviewing entrepreneurs who are diagnosed with OCD or OCPD is challenging, not only due to the difficulty of recruiting participants from this specific and sensitive target group, but also due to the additional uncertainty caused by the ongoing COVID-19 pandemic. The current situation and the fear of contamination caused by the pandemic has an inevitable impact on the stress level of our target group, resulting in increased anxiety levels, and consequently affecting their desire to participate in the study.

As previously mentioned, a total of 11 entrepreneurs participated in the study. To recruit these participants, around one hundred emails and messages were sent to OCD and OCPD care centers, private psychiatrists, and various accelerators in different countries. Due to patient-doctor confidentiality agreements, it is impossible to request direct contact with such entrepreneurs, we were therefore referred to the ones who agreed to participate via an intermediary. A short description of the research along with a request to interview entrepreneurs diagnosed with OCD or OCPD was included in the messages shared. In addition to that, similar to the shared description, announcements requesting the participation of entrepreneurs with OCD or OCPD diagnosis were posted in OCD, OCPD, and entrepreneurship related Reddit and Facebook groups with thousands of members.

The selection criteria were not limited to any geographical location, as the participants' diagnosis and symptoms, as well as their decision-making process associated with those traits and behavioral patterns, have no relevance to their location. However, one main criterion was selecting participants from English speaking countries (with one exception) to limit any language barriers. The sampling was not limited only to individuals already diagnosed with OCD or OCPD, but also included those in the process of getting one, since the process of getting a diagnosis usually requires time, effort and specialist neuropsychiatrists.

The decision to interview entrepreneurs in their early years of entrepreneurial activity is conditioned with the level of uncertainty and risk that the entrepreneurs deal with during that specific time. The level of uncertainty could be particularly challenging for individuals with OCD or OCPD. To further clarify, we define new ventures as those still at their startup stage or as Wasserman (2012) explains, those with informal structure and processes. For this study, we limit the approximate years of operation of those ventures to 10 years. The sector in which the ventures operate is disregarded, as it is not strictly aligned with the objectives of our research.

The semi-structured interviews were conducted by both researchers at all times through online video calls, given the global lockdown caused by the pandemic and the geographical distance. However, this will not be considered a limitation, since conducting an online interview while being at home gives the interviewees a sense of comfort and privacy for them to share their experiences.

3.4 Data Analysis

The semi-structured interviews resulted in generating new data and rich perspectives that correspond with the ‘grounded theory’. The grounded theory refers to the development of theory derived from data (Strauss & Corbin, 1998); this framework is widely used for analyzing qualitative data. As Locke (2000) states, the grounded theory is beneficial for facilitating the theoretical framework in less researched areas. It highly applies to our research, as the relationship between entrepreneurship in regards to OCD and OCPD has not been thoroughly researched.

After conducting the interviews, we transcribed over 650 minutes of recordings using the coding practice suggested by Strauss and Corbin (1998) according to the grounded theory approach, to implement a thorough analysis of the research. Firstly, we categorized and conceptualized the data referred to as ‘open coding’; in other words, we attempted to use OCD and OCPD traits and behavioral patterns regarding entrepreneurial decision-making aspects as generally open categories. Secondly, we related categories and concepts to one another by comparing and drawing connections between them. We then linked the codes to traits and behavioral patterns of OCD and OCPD, and explored their patterns of interaction with entrepreneurial decision-making, a process known as ‘axial coding’. Finally, we drew our conclusions and validations based on relating the core categories to the secondary categories,

defined as ‘selective coding’ (Strauss & Corbin, 1998). The validation of this research is further discussed in the next subchapter. It is worth mentioning that to ensure the accuracy of the information in the review, both researchers were involved in coding, cross-checking, and analyzing the data.

3.5 Trustworthiness and Authenticity

A positive aspect of the qualitative method is receiving direct access to the core of the subject being researched via a primary source of information. Conducting personal interviews which gives the researchers the possibility of studying individuals’ personal experiences on a first-hand basis can result in a certain depth that quantitative research fails to support. Our study is an example of this, how individuals with neuropsychiatric disorders shared important details of their entrepreneurial journey while coping with a serious disorder, thus giving insight into their lives, which would not have been possible in any other way.

LeCompte and Goetz (1982) recognize that it is somewhat difficult to replicate the results of a qualitative study to ensure external reliability and to further generalize the findings as external validation. Since the validity and reliability of the terms are more related to quantitative research, Lincoln and Guba (1985) and Guba and Lincoln (1994) suggest assessing qualitative research by ‘trustworthiness’ and ‘authenticity’.

The criteria of trustworthiness include credibility, transferability, dependability, and confirmability (Bryman & Bell, 2011). We were able to ensure credibility in our research by following the rules of accurate research practice with one researcher conducting the interviews to ensure consistency in the language and pace. Due to the short time frame, respondent validation was not conducted, however, the dissertation will be shared with the research participants after publication. The transferability of our findings is ensured, as it applies to other geographic contexts given the focus of our research not being bound to any locations. Moreover, many of the findings can be related to other intersecting research domains on the relation between neuropsychiatric disorders and entrepreneurship, and might, therefore, be of great significance for future research.

Dependability, otherwise known from quantitative research as reliability, was ensured through collecting and archiving all of the records. Records such as email communications,

interview recordings, interview transcriptions, data analysis, and other related sensitive data have all been collected and archived but are not accessible due to confidentiality agreements. Confirmability (or objectivity) is criticized for being impossible to reach in business research (Bryman & Bell, 2011), however, in this study, we maintained unbiased approaches inconsistent with our personal opinions, values, and other characteristics to the best of our potential.

The authenticity of this research is concluded as having ‘educative’ and ‘tactical’ criteria (Guba & Lincoln, 1994) since this thesis attempts to increase the acceptance and appreciation towards entrepreneurs with OCD and OCPD while encouraging neurodiverse entrepreneurs to choose an entrepreneurial path without encountering any stigmatization.

3.6 Limitations

Qualitative research is usually criticized for being too subjective and impressionistic. This criticism is solely due to the fact of the qualitative findings relying excessively on the unsystematic views of the researchers when deciding on the significance or importance of different aspects (Bryman & Bell, 2011). Qualitative research is almost equally criticized for the lack of transparency. This is usually due to difficulty in understanding how the researchers arrived at the conclusions they drew, as the data analysis process of qualitative research is mostly vague in regards to how the participants were recruited and what the sampling or selection criteria were based on (Bryman & Bell, 2011).

According to Bryman and Bell (2011), subjectivity and lack of transparency are usually the two main limitations that qualitative researchers get criticized for. In our study, we did our utmost to account for all of the above aspects to prevent any limitations concerning subjectivity and transparency. These aspects are described in the methodology parts 3.1 through 3.4. However, our topic of research is related to neuropsychiatric disorders which are considered a complex subject to study, and thus certain limitations are inevitable.

Similar to other neuropsychiatric disorders, many different factors play a role in the diagnosis of OCD and OCPD. Just like in any field of research, constant discoveries are being made and taken into account. This limitation concerns comorbidity and misdiagnosis, according to the DSM-5 (APA, 2013), individuals could be diagnosed with both OCD and OCPD or mistakenly diagnosed with only one while showing symptoms of both or possibly a completely

different neuropsychiatric diagnosis. This could be considered one of the main limitations of our study.

To highlight a limitation concerning OCD or OCPD individuals and their decision-making process, many research findings indicate that the decision-making process is affected by the serotonin system and that medication and therapy have proven to impact the cognitive performance (Jollant, Buresi, Guillaume, Jaussent, Bellivier, Leboyer, Castelnaud, Malafosse & Courtet, 2007; da Rocha, Malloy-Diniz, Lage, Romano-Silva, de Marco & Correa, 2008). According to the APA (2020), both OCD and OCPD are treated with medication such as Selective Serotonin Reuptake Inhibitor (SSRI) and therapeutic sessions such as Cognitive Behavioral Therapy (CBT).

In what follows, certain scenarios are considered in an attempt to discover additional limitations that could have made the research sample weaker or less representative. The interviewees who participated in this study may be vocal about their neurodiversities and about the different aspects of the OCD and OCPD disorders due to receiving therapy, thus consequently practicing on how to cope with such disorders to better manage their behavioral patterns. It is also possible that the participants want to be more aware of how to handle their disorders and are therefore socially engaged in certain neurodiverse communities. The above-mentioned scenarios could be the reason as to why some interviewees showed interest in being part of this study while others did not. Additionally, it is equally important to account for the limitations that could be imposed on the findings of this study due to the participants' medication suppressing certain diagnostic symptoms.

Moreover, the social desirability, defined as the interviewees' desire to answer the interview questions while being guided by their perception of what is socially accepted or anticipated, needs to be accounted for in our qualitative study that uses interviews as a sampling technique (Bryman, 2016). It is crucial to consider social desirability as a limitation of a study that touches upon sensitive topics, such as this one researching the influence of neuropsychiatric disorders on entrepreneurship.

It is also somewhat important to account for the interviewer effect, described as the distortion of response to interview questions which is the result of the interviewees' reactions based on the ethnicity, gender, or social background of the interviewer. Even though there is ambiguous evidence to support this concept, it is still worth mentioning (Bryman, 2016). Both

social desirability and the interviewer effect were taken into consideration regarding the responses that the interviewees provided as well as in the last chapter of the final findings and analysis.

4. Findings and Analysis

This chapter will focus on the empirical findings and analysis of different OCD and OCPD traits and behavioral patterns influencing entrepreneurial decision-making. In the upcoming subchapters, we will particularly answer our three research questions: (1) What positive or negative impacts do OCD and OCPD traits and behavioral patterns have on entrepreneurial decision-making? (2) How do the main traits and behavioral patterns of OCD and OCPD influence entrepreneurial decision-making? (3) How does the impact of OCD differ from that of OCPD regarding entrepreneurial decision-making?

To explore such an insufficiently researched topic – yet one of great significance – we conducted 11 interviews following an interview guide with specific sections and open-ended questions in each interview section.

The sample of participants is bound to entrepreneurs with new ventures, but not to the type of industry that their ventures operate in. The participants of the sample identify as entrepreneurial founders, co-founders, or solopreneurs with one or more profitable businesses. Out of the 11 businesses, 10 businesses have been operating between a range of two and eight years, whereas one business folded after a year of operations.

Some of the participants have comorbid disorders such as anxiety, depression, and bipolar two (a disorder where the person suffers episodes of hypomania and depression). However, none of the participants were diagnosed with a disorder that is out of the ordinary for being diagnosed with OCD or OCPD. Comorbidity was accounted for in this study since it would have been difficult otherwise to control for additional neuropsychiatric disorders (that are unrelated to the ones being studied – OCD and OCPD) while investigating the influence of OCD and OCPD on entrepreneurial decision-making. According to the DSM-5 (APA, 2013), OCD individuals commonly have other psychopathology with 76% having anxiety disorders and 63% having depressive or bipolar two disorders (DSM-5; APA, 2013). All 11 participants have been taking therapy, whereas some have been combining medication with therapy for better results.

In the upcoming subchapters, we present our findings on how OCD and OCPD traits and behavioral patterns influence entrepreneurial decision-making while thoroughly studying the greater impact they have on entrepreneurial careers, teams, and financial decisions. We will conclude by describing the benefits and challenges that OCD and OCPD entrepreneurs experience concerning their traits and behavioral patterns.

4.1 Positive and Negative Impacts of OCD and OCPD Traits and Behavioral Patterns on Entrepreneurial Decision-Making

Much of the research within entrepreneurship has been concentrated on investigating the entrepreneurial motives and traits (Collins, Hanges & Locke, 2004; Hansemark, 2003; Lachman, 1980; Meyer, Walker & Litwin, 1961). Moreover, plenty of research within the field of entrepreneurship has been trying to identify the entrepreneurial qualities and behavioral patterns that predominantly lead to the success of the ventures (Baron & Markman, 2000; McClelland, 1987; Rauch & Frese, 2007; Rauch, Wiklund, Lumpkin & Frese, 2009). Numerous personality traits contribute to an individual becoming an entrepreneur. In this subchapter, we demonstrate traits and behavioral patterns of OCD and OCPD entrepreneurs and their influence on entrepreneurial decision-making.

The primary traits and behavioral patterns that OCD participants mentioned throughout the course of conducting the interviews on the topic of decision-making processes are (1) checking and repetitive behavior; (2) overthinking and overanalyzing; (3) needing to be in control; (4) being risk-averse; (5) needing advice and reassurance. Whereas the primary traits and behavioral patterns of the OCPD participants are: (1) being detail-oriented and organized; (2) being perfectionists and having high standards; (3) needing to be in control; (4) self-trusting and self-efficacy; (5) being self-confident and independent. Most of the above-mentioned traits and behavioral patterns, shared by the interviewees, correspond with the DSM criteria for both diagnoses by the APA (DSM-5; APA, 2013). See Appendix B for interviewee quotes.

Nearly all of the OCD entrepreneurs emphasized the role that checking and repetitive behavior plays in regards to decision-making. They explained the importance of being particularly attentive to details in the process of making strategic decisions. The checking and repetitive behavior is a compulsive act that OCD individuals apply as a comforting response mechanism to control the rigid obsessions (DSM-5; APA, 2013). Almost all of the interviewees mentioned their psychological ability to overthink and overanalyze different outcomes of all possible scenarios before reaching a conclusion. Thought processes like these can enable the OCD entrepreneurs to weigh in the different positive and negative aspects of any decision. These traits and behavioral patterns aid in the OCD entrepreneurs being highly risk-averse; they also seek advice and assurance from others before making strategic decisions.

The majority of the OCPD entrepreneurs, on the other hand, stressed the importance of being detail-oriented and organized while making strategic decisions to ensure that they are not missing any important specifics or aspects. Several of the interviewees also emphasized on the significance of their perfectionistic personalities and the requirements of high standards to make the optimal judgments concerning their businesses. The OCPD traits and behavioral patterns, from being detail-oriented and organized to being perfectionists and having high standards, give many of the neurodiverse entrepreneurs a substantial level of self-trust and self-confidence in their abilities, skills, and knowledge to make self-efficient and independent decisions in the most ideal way. Being occupied with details, organization, perfectionism, high standards, etc. are all considered to be OCPD diagnostic criteria (DSM-5; APA, 2013).

All of the mentioned traits and behavioral patterns combined to justify the OCD and OCPD entrepreneurs' emphasis on the immense need for control, to consequently maintain control of the decision-making power within their ventures. A couple of additional traits and behavioral patterns that were identified as secondary throughout the interviews with the OCD participants are: (1) experiencing pathological doubt; (2) needing additional information and clarifications; (3) having fear of making mistakes. Whereas the secondary traits and behavioral patterns for OCPD participants are: (1) planning excessively; (2) needing to test people; (3) having high and rigid moral standards and values. Similarly, the DSM criteria for both diagnoses by the APA (DSM-5; APA, 2013) correspond with several of the above mentioned secondary traits and behavioral patterns shared by the interviewees.

The OCD entrepreneurs frequently mentioned experiencing pathological doubt and requiring additional information and clarifications to be confident enough with the decisions they are about to make. This is also relatively related to the fear of making mistakes that the participants endure while making choices, which is associated with the primary traits and behavioral patterns specified at the beginning of this subchapter. The OCPD entrepreneurs, on the other hand, repeatedly mentioned the need for excessive planning and making extended lists before proceeding further with a decision to account for all details without overlooking any essential aspects. In addition to this, they need to test and evaluate people before hiring or entrusting them with tasks concerning their ventures, which they are highly protective of. All judgments are based on the high and rigid moral standards and values that the OCPD entrepreneurs live by and attach great importance to. Just as being preoccupied with details and perfectionism, being fixated on planning,

lists, morals, and values, etc. are also considered to be OCPD diagnostic criteria (DSM-5; APA, 2013).

The primary and secondary traits and behavioral patterns identified thus far in the subchapter might make it seem as if OCD and OCPD entrepreneurs have a natural ability to make decisions effortlessly. However, many of the interviewed OCD and OCPD entrepreneurs consider their disorders “a blessing and a curse”. Therefore, it is important to highlight the challenging and negative aspects that OCD and OCPD entrepreneurs face while making decisions, since most of the traits and behavioral patterns previously mentioned were discussed from a positive point of view and how they aid in entrepreneurial decision-making.

Although these traits and behavioral patterns can be considered beneficial and provide a gratifying and rewarding feeling when making efficacious entrepreneurial decisions, they also cause tremendous levels of stress, anxiety and are excessively time and energy-consuming for the individuals. As mentioned earlier, OCD entrepreneurs clarified how the compulsive checking and repetitive behavior that they get engaged in while obsessing over strategic decisions can be beneficial – it can also obstruct the process and slow them down to the extent of preventing them from reaching a decision due to being overwhelmed. This compulsive checking and repetitiveness can result in OCD entrepreneurs getting stuck in an endless loop, which causes extreme distress and anxiety.

OCPD entrepreneurs explained how being detail-oriented and having high standards while excessively planning as stated before could assist in various ways, but sometimes make it difficult to complete a strategic task or reach a decision in regards to one. This is due to the perfectionistic and organization traits that they possess which causes the feeling of constantly lacking satisfaction, and consequently leads to the constant necessity of further improvements. Furthermore, OCPD entrepreneurs also described how self-trust and self-efficacy can as well be problematic in certain situations due to the difficulty they are faced with when deciding to delegate a strategic task. They have complete faith in their abilities, skills, and knowledge which on one hand makes them independent and confident enough wanting to complete all the work themselves and being in control of all the decision-making, being the overachievers that they are. On the other hand, they suffer knowing how time and energy consuming executing all the work is, or to continuously review the workload after their team members. All of this makes their anxiety levels surge.

It is worth mentioning that every interviewee who participated in the research stressed on the immense importance of therapy, such as CBT and Radically Open Dialectical Behavior Therapy (RO DBT), in channeling their OCD or OCPD disorders to be able to exploit and utilize those traits and behavioral patterns for their benefits. The importance of antidepressant medication, such as SSRI, was also mentioned in alleviating the symptoms of the disorders. Similarly, meditation was practiced by several participants as a therapeutic technique to reduce the stress and anxiety levels of OCD and OCPD entrepreneurs while clearing their mind and thoughts.

4.2 The Way OCD and OCPD Traits and Behavioral Patterns Influence Entrepreneurial Decision-Making

In what follows, the way OCD and OCPD traits and behavioral patterns influence entrepreneurial career decision-making, entrepreneurial team decision-making, and entrepreneurial financial decision-making will be discussed.

4.2.1 Entrepreneurial Career Decisions

Every entrepreneur makes early decisions to choose an entrepreneurial path or recognize an entrepreneurial opportunity. Although acknowledging that entrepreneurship as a career choice is dynamic and not necessarily a static phase throughout one's career (Hytti, 2010), many scholars identify different motivations for an entrepreneurial career (Carter, Gartner, Shaver & Gatewood, 2003; Zellweger, Sieger & Halter, 2011). According to Carter et. al., (2003) entrepreneurs found businesses driven by the desire to reach self-realization, financial success, and independence. Entrepreneurial intentions are also widely associated with different personality traits. The most frequently occurring entrepreneurial characteristics in the literature can be summarized as risk-taking or tolerance of uncertainty, need for achievement, need for autonomy, personal efficacy, and locus of control (Decker, Calo & Weer, 2012; de Janasz, de Pillis & Reardon, 2007; Vecchio, 2003). Having that said, our study revealed that the main driving forces for OCD and OCPD individuals to pursue an entrepreneurial career are:

1. Flexibility and Independence
2. Need for achievement and following one's passion
3. Increased sense of certainty and security

According to our research, the need for flexibility and independence were two of the main motives for OCD and OCPD individuals to choose an entrepreneurial career. Some appeared to find freedom as one of the most rewarding aspects of having their venture and the majority of our interviewees had experienced being micromanaged at some point in their careers, which led them to seek independence. In certain cases, anxiety associated with OCD or OCPD (DSM-5; APA, 2013) caused by regular, inflexible, and micromanaging jobs would become the main reason to seek freedom through entrepreneurial activity. Most of the entrepreneurs with OCD and OCPD found complying with regular job schedules and management styles overwhelming. Independence in this context is interpreted in two ways, financial independence and the freedom to choose their path. The latter was expressed through a desire to have control over their schedules and lives, and to be in charge of the activities they pursue.

The need for achievement (McClelland, 1961) is explored in psychological theories as a personal characteristic influencing decision to exploit opportunities (Shane, 2000). Our research revealed that every interviewee felt the need to pursue their passion, a purpose, or simply work on accomplishing something that keeps them motivated. All of these factors guided them towards the decision to choose an entrepreneurial path. In most cases, these decisions were influenced by previous unsuccessful job experiences, when either the employer did not comply with the OCD and OCPD individuals' high standards (DSM-IV-TR, APA, 2000), or the job itself did not invoke a sense of accomplishment of being appropriately rewarding. We observed additional factors such as committing to hard work and accomplishing rewarding achievements among OCPD entrepreneurs. These factors could be influenced by two of the main traits of OCPD individuals, described as excessive devotion to work and self-set high standards (DSM-IV-TR, APA, 2000). Therefore, to independently work on an entrepreneurial venture that strongly aligns with their values and standards would be more rewarding.

Reviewing entrepreneurial career choices from the entrepreneurs' psychological perspective, tolerance for ambiguity (Begley & Boyd, 1987), and the willingness to bear the risk (Sexton & Smilor, 1986) are considered two common characteristics leading people to become entrepreneurs. In the case of OCD and OCPD individuals, risk and uncertainty factors act as potential hindrances due to being associated with their risk-averseness and intolerance of uncertainty (Pushkarskaya et al., 2017; Wheaton & Ward, 2020). Our findings regarding the interviewees' attitudes towards uncertainty are diverse. Some interviewees, particularly those with

OCPD, find a regular job more secure and financially stable and are thus more inclined to keep it while following their passion inspired by their need for achievement, as previously mentioned. Most of the OCD entrepreneurs who found losing a job to be highly risky and uncertain, viewed entrepreneurship as a means to make their lives more secure. The main conclusion that we drew from this was that both OCD and OCPD individuals sought certainty, either through keeping their job or through viewing venture creation as a more risk-free career option.

To further discuss the entrepreneurial career decisions, it is clear that pursuing such a career corresponds with the recognition and exploitation of entrepreneurial opportunities (Shane & Venkataraman, 2000). Baron (2006) states that prior knowledge of a specific market, an industry, or a customer segment, assists in entrepreneurs identifying opportunities. The author also mentions searching for opportunities and being alert as to other influencing factors of opportunity recognition. While making early venture decisions, entrepreneurs may use causation or effectuation logic, as suggested by Sarasvathy (2001). Causation being associated with goal orientation entails decisions with higher risk and the need for upfront commitments, whereas effectuation relates to an orientation involving safer decisions that allow the entrepreneur to consider what they are willing to risk (Smolka, Verheul, Burmeister-Lamp & Heugens, 2018).

Given the risk-averse characteristics of OCD and OCPD individuals, as previously described, it was of great interest to explore if our interviewees would be more inclined towards using effectuation logic in their early entrepreneurial decisions. Our research showed that all of our interviewees had previous work experience, specific knowledge, and skills, or additional interests and passions that inspired their decision to start an enterprise. In most of the cases, the research participants used their existing knowledge and skills as the main determinant for becoming a founder. Therefore, we can conclude that the interviewed OCD and OCPD entrepreneurs mostly used the effectuation logic to utilize their resources, such as industry skills and knowledge, to make a founding decision. It is highly likely that such a decision is strongly associated with the fact that the OCD and OCPD entrepreneurs' previous knowledge and experience would reduce uncertainties in regards to founding, as the majority of the participants had previous experience with similar or the same job prior to founding.

4.2.2 Entrepreneurial Team Decisions

To understand how OCD and OCPD influence entrepreneurial decision-making throughout leading a venture, we focused on two themes: team decisions described in this subchapter and financial decisions reviewed in the upcoming one. In this subchapter, we review team decisions, while particularly focusing on the co-founder aspect and hiring decisions, as we alleged that these areas would be influenced the most by the OCD and OCPD traits and behavioral patterns.

There are different reasons as to why a founder might want to pursue a solo career, such as the limited possibility of a venture's quick growth, the availability of resources needed, or the desire to maintain simplicity (Wasserman, 2012). However, as Wasserman (2012) states, 'control-motivated' founders pursue solo careers as they want to keep the equity and decision-making power. At the same time, 'control' or being control-oriented, is inherent to OCD and OCPD individuals (DSM-5; APA, 2013) and is mainly conditioned with their perfectionism, intolerance of uncertainty, and over-estimation of threats (Moulding & Kyrios, 2007). It was therefore interesting to observe that out of the 11 identified and interviewed entrepreneurs, 9 were either sole founders or solopreneurs and only 2 were co-founders. To explore their 'wealth vs control' motivation of founding, we presented them with a case scenario where they got to choose between the two options of 'staying in control' and 'giving up control for the sake of rapid growth'. Afterward, the participants were asked to justify their choices and relate them to their real-life decisions. The results show that the majority of the entrepreneurs are prone to maintaining control, two entrepreneurs would give up some control if a good deal is offered, and only one person confidently chose money over control. The difference between OCD and OCPD entrepreneurs was barely notable, thus we can assume they are equally inclined towards control.

The main underlying motives as to why our interviewees chose control over rapid growth can be summarized as follows: (1) it gives them a sense of security, (2) it is hard for them to trust others in business, especially regarding financial aspects, (3) they are confident enough to make decisions on their own. The majority of the participants related their decision by comparing it with being in control of their real-life decisions, as some of them would not want to give up their decision-making power in their ventures either. Considering that risk-averseness and the need for security, as well as trust issues mostly conditioned with the perfectionistic traits, are relevant to OCD and OCPD individuals (DSM-5; APA, 2013), we can conclude that these traits can motivate OCD and OCPD entrepreneurs to found a solopreneurship or to maintain the decision-making

power during the life-span of their venture. As a result of trust issues, most of our interviewees preferred teaming up with people whom they have known for a long time and thus have a significant level of trust towards.

The trust issues were particularly evident in the hiring decisions of our interviewees and their relations with other team members. Most participants thought that working with team members can be overwhelming and communication would be difficult. More commonly, they believed delegating tasks to be a challenge, mostly due to trust issues and perfectionism. The coherent trust issues between the founder and other team members as well as the fear of having a teammate who would not be able to comply with the high work standard of the founder are factors that were more commonly observed among OCPD rather than OCD entrepreneurs. To conclude, OCD and OCPD entrepreneurs are more likely to pursue a solopreneurship career when founding a venture, as they do not have any intentions of sharing or giving up control at a later stage. They may also experience some challenges with trusting teammates and consequently delegating tasks.

4.2.3 Entrepreneurial Financial Decisions

In an attempt to understand how OCD and OCPD entrepreneurs make financial decisions and whether they differ from the average entrepreneur, a section of the interview was devoted to that. This section focused on questions regarding financial decision-power, financial tasks, and financial projections.

Both OCD and OCPD entrepreneurs mentioned how highly aware they are of their financials and the significance of being in control of the financial decision-making power within their ventures. As described in the first subchapter of the findings and analysis, the need for control is one of the primary behavioral patterns that OCD and OCPD individuals exhibit in regards to decision-making processes, which correspond with the DSM criteria for both diagnoses by the APA (DSM-5; APA, 2013). Thus OCD and OCPD entrepreneurs emphasize the immense need for control over the financial decision-making power, to consequently maintain control of the financial decisions within their ventures.

The two groups of entrepreneurs explained how some of their neurodiverse traits and behavioral patterns, such as the OCD participants' compulsive checking and repetitive behavior and the OCPD participants' detail-oriented, organized and perfectionistic behavior, aid in keeping

track of the specifics and details of the financial aspects. These traits and behavioral patterns provide the neurodiverse entrepreneurs with great self-confidence and self-trust, which enables them to uphold complete control, not only of the financial decision-making power but also of sensitive tasks such as financials, taxation or administrative work. The majority of the OCD participants, as well as each OCPD participant, expressed the necessity of being responsible for their financials. However, a few OCD entrepreneurs mentioned their tolerance regarding delegating financial tasks.

All 11 participants expressed their disinterest in seeking loans and being in debt to fund their ventures and would rather bootstrap while maintaining organic growth. In addition to that, most of the OCPD entrepreneurs described their great interest in financial projections which help reduce uncertainties, while remaining goal-oriented and aiming further towards greater achievements. The OCD entrepreneurs either showed indifference regarding financial forecasts or made simple predictions and prioritized focusing on their performance.

It is also worth mentioning that most of the OCPD entrepreneurs stated being excessively cautious with their spending and when dealing with the ventures' capital. This is known as the concept of 'miserly spending' and is considered a DSM criterion of OCPD by the APA (DSM-5; APA, 2013), which explains why they would rather bootstrap than take loans and be in debt. To conclude, it is clear that many OCD and OCPD traits and behavioral patterns have an impact on the entrepreneurs' financial decisions, however, it is evident that the control aspect of both neuropsychiatric disorders, and OCPD in particular, plays an inevitable role in shaping these decisions.

4.3 The Different Impacts of OCD and OCPD Traits and Behavioral Patterns Regarding Entrepreneurial Decision-Making

It has become evident thus far that OCD and OCPD can both positively and negatively influence entrepreneurial decision-making. Although some of the OCD and OCPD traits and behavioral patterns can be seen as strictly positive or negative, most of them can be viewed as simultaneously beneficial and hindering. Just as entrepreneurial success is not always an objective phenomenon but is rather defined by the entrepreneur's motivations and aspirations, the influence of OCD and OCPD traits and behavioral patterns on the entrepreneurial success and failure is also

a subjective matter. In other words, certain traits such as obsessions, miserly spending, etc. can be seen as beneficial by some entrepreneurs, but as challenging for others.

As one must define their failure and success based on their needs and perspectives, it is similarly important to explore how OCD and OCPD entrepreneurs subjectively perceive different impacts of OCD and OCPD on their entrepreneurial decision-making. Therefore, in this subchapter, we explore how the entrepreneurs themselves explain and interpret the interference of the OCD and OCPD neuropsychological traits and behavioral patterns with their entrepreneurial decision-making. In contrast with subchapter 4.1, where we extracted the positive and negative impacts of OCD and OCPD from the information the entrepreneurs provided, this subchapter solely focuses on the traits and behavioral patterns that the entrepreneurs personally find beneficial or hindering. Understanding this is essential – the way entrepreneurs perceive these traits and behavioral patterns enables them to influence their own decisions and the quality of their entrepreneurial activity accordingly.

In our research, the OCD entrepreneurs referred to the following traits as the most beneficial: (1) checking and repetitive behavior; (2) perfectionism and detail-orientedness; (3) excessive planning. They mostly acknowledged that perfectionism and detail-orientedness need to be controlled to benefit from them. Once controlled, OCD can be seen as a ‘superpower’ which helps increase efficacy and the venture’s success. According to the OCD entrepreneurs, some traits could be transformed into practical tools; for example, an ability to write well can be the result of detail-orientedness or repetitive behavior that can ensure a good ability to track financials. In contrast, OCD entrepreneurs find themselves challenged by intrusive thoughts, self-doubt, checking and various compulsions which causes challenges in regards to decision-making and difficulties due to extended work periods.

The OCPD entrepreneurs, on the other hand, were mostly pleased with the following traits: (1) excessive focus; (2) obsession with business; (3) perfectionism and high standards; (4) organized and detailed working style. Additionally, some of them also stressed on how they benefit from goal-orientedness, frugality with money, as well as excessively researching and learning new things on an ongoing basis. At the same time, they are challenged by perfectionism, high standards, experiencing trust issues, and excessive control that collectively interferes with their team decisions and ability to complete tasks on time. These traits result in high expectations regarding their team members and consequently in disappointment if their teammates are unable to comply

with those expectations. They are also likely to be reluctant to share their decision-making power. Some of the OCPD interviewees also found it challenging to establish a work-life balance, as they can be overly obsessed with their work and “spread themselves too thin”.

In conclusion, our interviewees advised other OCD and OCPD entrepreneurs to first and foremost acknowledge and accept their OCD or OCPD, continuously self-reflect, to practice control, and to mediate obsessive thoughts. They also found therapy to help manage their traits and behavioral patterns to utilize them for their benefits. The neurodiverse entrepreneurs suggested to pursue one’s passion and to accept inevitable mistakes as long as the work is completed in the end. Finally, following routines and having a support system can certainly facilitate one’s life over time.

5. Conclusion and Implications

This study serves as a unique contribution to the entrepreneurial theories in a distinctive intersection with neuropsychological studies. As Wiklund et al. (2018) stated, there is limited research on the topic of neuropsychiatric disorders in the field of entrepreneurship. He explored how neuropsychiatric disorders such as ADHD influence the decision-making process of individuals partaking in entrepreneurial activity, therefore it was significant to investigate the relevance of OCD and OCPD in regards to entrepreneurial decision-making.

Existing literature that merges the research domain of entrepreneurship with that of OCD and OCPD is sporadic and mainly discusses a few specific traits of OCD or OCPD concerning entrepreneurship. Foa et al. (2003) suggest that OCD is associated with indecisiveness and that individuals diagnosed with OCD require an additional amount of time and information to make a decision. Similarly, Tolin et al. (2003) describe in a negative aspect of how OCD individuals experience 'pathological doubt' and 'intolerance of uncertainty'. Positively, Everett and Fairchild, (2015) conclude that OCD individuals require extended time and thorough consideration for decisions which can lead to potentially positive outcomes of entrepreneurial decisions due to their traits. Finally, Wolfe and Patel (2017) help us understand how the traits and behavioral patterns of OCPD motivate self-employment and entrepreneurial activity. Given the above, the need to provide a study covering all of the relevant traits and behavioral patterns of OCD and OCPD concerning entrepreneurship and their influence on entrepreneurial decision-making is evident.

The motive of this study is to provide empirical evidence on how the traits and behavioral patterns of OCD and OCPD individuals influence entrepreneurial decision-making, and how the influence of OCD symptoms differ from that of OCPD symptoms. Our findings were generated through qualitative research using semi-structured interviews with a sample of five entrepreneurs diagnosed with OCD, five with OCPD, and one with both disorders. In what follows, we outline the results of our three research questions.

Firstly, in an attempt to identify the positive and negative impacts that OCD and OCPD have on entrepreneurial decision-making, our research found that OCD entrepreneurs' decisions are mostly impacted by the following traits and behavioral patterns: (1) checking and repetitive behavior; (2) overthinking and overanalyzing; (3) needing to be in control; (4) being risk-averse; (5) needing advice and reassurance. Although these traits are considered to be beneficial, they also cause tremendous levels of stress, anxiety, and are excessively time and energy-consuming for the

individuals. For OCPD entrepreneurs, the main traits and behavioral patterns affecting their decisions are the following: (1) being detail-oriented and organized; (2) being perfectionists and having high standards; (3) needing to be in control; (4) self-trusting and self-efficacy; (5) being self-confident and independent. As in the case of OCD entrepreneurs, OCPD entrepreneurs also described the adverse sides of the same symptoms. As an example, detail-orientedness and having high standards can hinder from completing a task, and self-trust and self-efficacy can prevent the desire to delegate tasks.

Secondly, we were able to identify the ways that the main traits and behavioral patterns of OCD and OCPD influence entrepreneurial decision-making. We concluded that some of these OCD and OCPD traits and behavioral patterns lead to three main motives to choose an entrepreneurial career. Micromanagement and regular jobs increased the anxiety of OCD and OCPD individuals and created a need for ‘flexibility and independence’. The ‘need for achievement’ was inspired by the requirement of high-standards, which were not met in previous work environments. Lastly, risk-averseness led to more ‘secure solutions’, which in most cases meant starting a new venture and using effectuation for opportunity recognition.

In the case of team decisions, we identified that the risk-averseness and the need for security, as well as the trust issues mostly conditioned with the perfectionistic traits, affected our interviewees’ decision to maintain decision-making power. The reluctance to give up control, along with the challenges of trusting team members and consequently delegating tasks, made OCD and OCPD entrepreneurs more likely to pursue a solopreneurship career. Some traits and behavioral patterns, such as the OCD participants’ compulsive checking and repetitive behavior, and the OCPD participants’ detail-oriented, organized and perfectionistic behavior, aided in keeping track of the specifics and details of the financial aspects. Having these traits influence the entrepreneurs’ self-trust levels, some of them were determined to uphold the control of decision-making power. In addition to that, most of the OCPD entrepreneurs claimed to be excessively cautious with their spending, often called ‘miserly spending’, which explains why they are more likely to bootstrap instead of taking loans and being in debt.

Finally, to reveal the difference between the impacts of OCD and OCPD traits and behavioral patterns on entrepreneurial decision-making, we explored how each of them defines the beneficial and hindering traits affecting their decisions. The OCD entrepreneurs referred to the following traits as the most beneficial: (1) checking and repetitive behavior; (2) perfectionism and

detail-orientedness; (3) excessive planning, whereas OCPD entrepreneurs believed they benefit from (1) excessive focus; (2) obsession with business; (3) perfectionism and high standards; (4) organized and detailed working style. While most OCD entrepreneurs were challenged by traits causing difficulties with decision-making and extended work periods, OCPD entrepreneurs claimed to be challenged by traits interfering with their team decisions, the ability to complete tasks on time, and work-life balance. Yet most importantly, our interviewees stated that therapy, continuous self-reflection, practicing control of obsessive thoughts, and meditating can turn shortages into benefits when they have a passion to pursue.

5.1 Research Implications

The most significant contribution of our research is having revealed different influences of OCD and OCPD traits and behavioral patterns on a few specific aspects of entrepreneurial decision-making. Our study, on a sample of 11 entrepreneurs and their personal experiences, serves as a good starting point for future research, as it provides an empirical foundation on how OCD and OCPD traits and behavioral patterns can lead to entrepreneurial decisions. Since the results of such explorative research are usually confined by the opinions of the interviewees, a great contribution would be to test these empirical suggestions in the future by using quantitative research methods, to investigate if the associations between OCD and OCPD traits and behavioral patterns regarding entrepreneurial decisions will uphold. Furthermore, it could also be worth conducting a similar qualitative study using in-depth interviews with a larger sample of entrepreneurs while engaging the co-founders, hirees, and mentors of OCD and OCPD entrepreneurs to increase the trustworthiness of the study.

5.2 Practical Implications

Our findings most significantly have practical implications for individuals with OCD and OCPD symptoms. Firstly, we believe that this study can become an inspiration for potential OCD and OCPD entrepreneurs to pursue entrepreneurial careers while raising awareness of the potentially positive effects of their neurodiverse traits on decision-making. We believe that awareness of the matter can increase the interest of OCD and OCPD individuals engaging in

entrepreneurship, as well as boosting the confidence of those who are already involved in entrepreneurial activities.

In different entrepreneurial contexts, such as schools, incubators, accelerators, and various workplaces, this study may increase the awareness of the challenges that OCD and OCPD entrepreneurs face daily, thus increasing the sensitivity, resulting in destigmatization. We also anticipate that therapists may advise their OCD and OCPD clients to pursue an entrepreneurial career and to aid them in addressing some of their trait-related challenges.

References

- American Psychiatric Association (2020)
- American Psychiatric Association. (2000). *Diagnostic criteria from DSM-IV-TR*. American Psychiatric Pub.
- Babb, E. M., & Babb, S. V. (1992). Psychological traits of rural entrepreneurs. *The Journal of Socio-Economics*, 21(4), 353-362
- Baron-Cohen, S., Ashwin, E., Ashwin, C., Tavassoli, T., & Chakrabarti, B. (2009). Talent in autism: hyper-systemizing, hyper-attention to detail and sensory hypersensitivity. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 364(1522), 1377-1383.
- Baron, R. A. (2006). Opportunity recognition as pattern recognition: How entrepreneurs “connect the dots” to identify new business opportunities. *Academy of Management Perspectives*, 20(1), 104-119.
- Baron, R. A., & Markman, G. D. (2000). Beyond social capital: How social skills can enhance entrepreneurs' success. *Academy of Management Perspectives*, 14(1), 106-116.
- Bechara, A. (2004). The role of emotion in decision-making: evidence from neurological patients with orbitofrontal damage. *Brain and cognition*, 55(1), 30-40.
- Begley, T. M., & Boyd, D. P. (1987). A comparison of entrepreneurs and managers of small business firms. *Journal of Management*, 13(1), 99-108.
- Begley, T. M., & Boyd, D. P. (1987). Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of Business Venturing*, 2(1), 79-93.
- Blume, H. (1998). Neurodiversity: On the neurological underpinnings of geekdom. *The Atlantic*, 30.
- Boisseau, C. L., Thompson-Brenner, H., Pratt, E. M., Farchione, T. J., & Barlow, D. H. (2013). The relationship between decision-making and perfectionism in obsessive-compulsive disorder and eating disorders. *Journal of behavior therapy and experimental psychiatry*, 44(3), 316-321.
- Boswell, J. F., Thompson-Hollands, J., Farchione, T. J., & Barlow, D. H. (2013). Intolerance of uncertainty: A common factor in the treatment of emotional disorders. *Journal of clinical psychology*, 69(6), 630-645.
- Brand, M., & Altstötter-Gleich, C. (2008). Personality and decision-making in laboratory gambling tasks—Evidence for a relationship between deciding advantageously

- under risk conditions and perfectionism. *Personality and Individual Differences*, 45(3), 226-231.
- Brand, M., Labudda, K., & Markowitsch, H. J. (2006). Neuropsychological correlates of decision-making in ambiguous and risky situations. *Neural Networks*, 19(8), 1266-1276.
- Bryman, A., & Bell, E. (2011). *Business Research Methods*. ed. sl: Oxford University Press.
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Burnam, M. A., Pennebaker, J. W., & Glass, D. C. (1975). Time consciousness, achievement striving, and the type A coronary-prone behavior pattern. *Journal of Abnormal Psychology*, 84(1), 76.
- Busenitz, L. W., & Barney, J. B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of business venturing*, 12(1), 9-30.
- Carter, N. M., Gartner, W. B., Shaver, K. G., & Gatewood, E. J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing*, 18(1), 13-39.
- Cassar, G., & Gibson, B. (2007). Forecast rationality in small firms. *Journal of Small Business Management*, 45(3), 283-302.
- Clark, L. A., Cuthbert, B., Lewis-Fernández, R., Narrow, W. E., & Reed, G. M. (2017). Three approaches to understanding and classifying mental disorder: ICD-11, DSM-5, and the National Institute of Mental Health's Research Domain Criteria (RDoC). *Psychological Science in the Public Interest*, 18(2), 72-145.
- Collins, C. J., Hanges, P. J., & Locke, E. A. (2004). The relationship of achievement motivation to entrepreneurial behavior: A meta-analysis. *Human performance*, 17(1), 95-117.
- Corzine, J. B., & Hood, J. N. (1998). Shadow and light: type A behavior and conflict handling styles in entrepreneurs. *Journal of Business and Entrepreneurship*, 10(2), 115.
- Decker, W. H., Calo, T. J., & Weer, C. H. (2012). Affiliation motivation and interest in entrepreneurial careers. *Journal of Managerial Psychology*.
- Diagnostic, A. P. A. (2013). *statistical manual of mental disorders: DSM-5™*. Arlington. VA American Psychiatric Publishing.
- Everett, C. R., & Fairchild, R. J. (2015). A theory of entrepreneurial overconfidence, effort, and firm outcomes. *Journal of Entrepreneurial Finance*, 17(1), 1-27.

- Fisher, G., & Aguinis, H. (2017). Using theory elaboration to make theoretical advancements. *Organizational Research Methods*, 20(3), 438-464.
- Foa, E. B., Mathews, A., Abramowitz, J. S., Amir, N., Przeworski, A., Riggs, D. S., Filip J. C., & Alley, A. (2003). Do Patients with Obsessive–Compulsive Disorder Have Deficits in Decision-Making?. *Cognitive Therapy and Research*, 27(4), 431-445.
- Freeman, M. A., Staudenmaier, P. J., Zisser, M. R., & Andresen, L. A. (2019). The prevalence and co-occurrence of psychiatric conditions among entrepreneurs and their families. *Small Business Economics*, 53(2), 323-342.
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive therapy and research*, 14(5), 449-468.
- Gallagher, N. G., South, S. C., & Oltmanns, T. F. (2003). Attentional coping style in obsessive-compulsive personality disorder: A test of the intolerance of uncertainty hypothesis. *Personality and Individual Differences*, 34(1), 41-57.
- Gatewood, E. J., Shaver, K. G., & Gartner, W. B. (1995). A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. *Journal of business venturing*, 10(5), 371-391.
- Gilbert-Saad, A., Siedlok, F., & McNaughton, R. B. (2018). Decision and design heuristics in the context of entrepreneurial uncertainties. *Journal of Business Venturing Insights*, 9, 75-80.
- Hammond, K. R. (1996). *Human judgment and social policy: Irreducible uncertainty, inevitable error, unavoidable injustice*. Oxford University Press on Demand.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2(163-194), 105.
- Hansemark, O. C. (2003). Need for achievement, locus of control and the prediction of business start-ups: A longitudinal study. *Journal of Economic Psychology*, 24(3), 301-319.
- Hayden, E. P., Bodkins, M., Brenner, C., Shekhar, A., Nurnberger Jr, J. I., O'Donnell, B., & Hetrick, W. P. (2008). A multimethod investigation of the Behavioral Activation System in bipolar disorder. *Journal of Abnormal Psychology*, 117(1), 164.
- Haynie, J. M., Shepherd, D. A., & McMullen, J. S. (2009). An opportunity for me? The role of resources in opportunity evaluation decisions. *Journal of Management Studies*, 46(3), 337-361.

- Hayward, M. L., Shepherd, D. A., & Griffin, D. (2006). A hubris theory of entrepreneurship. *Management Science*, 52(2), 160-172.
- Hébert, R. F., & Link, A. N. (1989). In search of the meaning of entrepreneurship. *Small business economics*, 1(1), 39-49.
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: conceptualization, assessment, and association with psychopathology. *Journal of personality and social psychology*, 60(3), 456.
- Hmieleski, K. M., & Baron, R. A. (2009). Entrepreneurs' optimism and new venture performance: A social cognitive perspective. *Academy of Management Journal*, 52(3), 473-488.
- Holt, N. J., Bremner, A., Sutherland, E., Vliek, M., Passer, M., & Smith, R. (2012). *Psychology: The science of mind and behaviour*. McGraw-Hill Education.
- Hytti, U. (2010). Contextualizing entrepreneurship in the boundaryless career. *Gender in Management: An International Journal*.
- International OCD Foundation (2010). Obsessive-Compulsive Personality Disorder (OCPD).
- Invernizzi, A. C., Menozzi, A., Passarani, D. A., Patton, D., & Viglia, G. (2017). Entrepreneurial overconfidence and its impact upon performance. *International Small Business Journal*, 35(6), 709-728.
- de Janasz, S. C., de Pillis, E., & Reardon, K. K. (2007). The influence of personality traits and persuasive messages on entrepreneurial intention. *Career Development International*.
- Jollant, F., Buresi, C., Guillaume, S., Jausse, I., Bellivier, F., Leboyer, M., ... & Courtet, P. (2007). The influence of four serotonin-related genes on decision-making in suicide attempters. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*, 144(5), 615-624.
- Kapp, S. K. (2020). *Autistic community and the neurodiversity movement: Stories from the Frontline* (p. 330). Springer Nature.
- Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Wittchen, H. U., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. *Archives of general psychiatry*, 51(1), 8-19.
- Koellinger, P., Minniti, M., & Schade, C. (2007). "I think I can, I think I can": Overconfidence and entrepreneurial behavior. *Journal of economic psychology*, 28(4), 502-527.

- Lachman, R. (1980). Toward measurement of entrepreneurial tendencies. *Management International Review*, 108-116.
- Landström, H. (2017). *Advanced introduction to entrepreneurial finance*. Edward Elgar Publishing.
- LeCompte, M. D., & Goetz, J. P. (1982). Problems of reliability and validity in ethnographic research. *Review of educational research*, 52(1), 31-60.
- Lee, C., Earley, P. C., & Hanson, L. A. (1988). Are Type A's better performers?. *Journal of Organizational Behavior*, 263-269.
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry (pp. 289-331). *Beverly Hills: Sage*.
- Locke, K. D. (2000). *Grounded theory in management research*. Sage.
- Mallinger, A. (2009). The myth of perfection: Perfectionism in the obsessive personality. *American Journal of Psychotherapy*, 63(2), 103-131.
- Markman, G. D., & Baron, R. A. (2003). Person–entrepreneurship fit: why some people are more successful as entrepreneurs than others. *Human resource management review*, 13(2), 281-301.
- McClelland, D. C. (1961). *The achieving society*. Princeton, NJ: D. Van Nostrand Company. Inc., 1961.
- McClelland, D. C. (1987). Characteristics of successful entrepreneurs. *The journal of creative behavior*, 21(3), 219-233.
- Meyer, H. H., Walker, W. B., & Litwin, G. H. (1961). Motive patterns and risk preferences associated with entrepreneurship. *The Journal of Abnormal and Social Psychology*, 63(3), 570.
- Morrison, K. A. (1997). How franchise job satisfaction and personality affects performance, organizational commitment, franchisor relations, and intention to remain. *Journal of Small Business Management*, 35(3), 39.
- Moulding, R., & Kyrios, M. (2007). Desire for control, sense of control and obsessive-compulsive symptoms. *Cognitive therapy and research*, 31(6), 759-772.
- Nedeljkovic, M., & Kyrios, M. (2007). Confidence in memory and other cognitive processes in obsessive-compulsive disorder. *Behaviour Research and Therapy*, 45(12), 2899-2914.
- Nedeljkovic, M., Moulding, R., Kyrios, M., & Doron, G. (2009). The relationship of cognitive confidence to OCD symptoms. *Journal of Anxiety Disorders*, 23(4), 463-468.

- Obsessive Compulsive Cognitions Working Group. (1997). Cognitive assessment of obsessive-compulsive disorder. *Behaviour Research and Therapy*, 35(7), 667-681.
- Palich, L. E., & Bagby, D. R. (1995). Using cognitive theory to explain entrepreneurial risk-taking: Challenging conventional wisdom. *Journal of business venturing*, 10(6), 425-438.
- Podoyntsina, K., Van der Bij, H., & Song, M. (2012). The role of mixed emotions in the risk perception of novice and serial entrepreneurs. *Entrepreneurship theory and practice*, 36(1), 115-140.
- Pollak, J. (1987). Obsessive-compulsive personality: Theoretical and clinical perspectives and recent research findings. *Journal of Personality Disorders*, 1(3), 248-262.
- Pushkarskaya, H., Tolin, D., Ruderman, L., Henick, D., Kelly, J. M., Pittenger, C., & Levy, I. (2017). Value-based decision making under uncertainty in hoarding and obsessive-compulsive disorders. *Psychiatry Research*, 258, 305-315.
- Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation, and success. *European Journal of Work and Organizational Psychology*, 16(4), 353-385.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship theory and practice*, 33(3), 761-787.
- Robinson, A. T., & Marino, L. D. (2015). Overconfidence and risk perceptions: Do they really matter for venture creation decisions?. *International Entrepreneurship and Management Journal*, 11(1), 149-168.
- da Rocha, F. F., Malloy-Diniz, L., Lage, N. V., Romano-Silva, M. A., de Marco, L. A., & Correa, H. (2008). Decision-making impairment is related to serotonin transporter promoter polymorphism in a sample of patients with obsessive-compulsive disorder. *Behavioural brain research*, 195(1), 159-163.
- Sarasvathy, S. D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243-263.
- Sexton, D. L., & Smilor, R. W. (1986). The art and science of entrepreneurship. *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.

- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, *11*(4), 448-469.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of management review*, *25*(1), 217-226.
- Shepherd, D. A., Williams, T. A., & Patzelt, H. (2015). Thinking about entrepreneurial decision making: Review and research agenda. *Journal of Management*, *41*(1), 11-46.
- Shihata, S., McEvoy, P. M., Mullan, B. A., & Carleton, R. N. (2016). Intolerance of uncertainty in emotional disorders: What uncertainties remain?. *Journal of Anxiety Disorders*, *41*, 115-124.
- Smolka, K. M., Verheul, I., Burmeister-Lamp, K., & Heugens, P. P. (2018). Get it together! Synergistic effects of causal and effectual decision-making logics on venture performance. *Entrepreneurship Theory and Practice*, *42*(4), 571-604.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: techniques and procedures for developing grounded theory. Sage Publications. *Thousand Oaks, CA*.
- Tafti, M. A., Hameedy, M. A., & Baghal, N. M. (2009). Dyslexia, a deficit or a difference: Comparing the creativity and memory skills of dyslexic and nondyslexic students in Iran. *Social Behavior and Personality: an international journal*, *37*(8), 1009-1016.
- Terry-Short, L. A., Owens, R. G., Slade, P. D., & Dewey, M. E. (1995). Positive and negative perfectionism. *Personality and individual differences*, *18*(5), 663-668.
- Thornhill, A., Saunders, M., & Lewis, P. (2009). *Research methods for business students*. Prentice Hall: London.
- Tolin, D. F., Abramowitz, J. S., Brigidi, B. D., & Foa, E. B. (2003). Intolerance of uncertainty in obsessive-compulsive disorder. *Journal of anxiety disorders*, *17*(2), 233-242.
- Townsend, D. M., Busenitz, L. W., & Arthurs, J. D. (2010). To start or not to start: Outcome and ability expectations in the decision to start a new venture. *Journal of business venturing*, *25*(2), 192-202.
- Ucbasaran, D., Westhead, P., Wright, M., & Flores, M. (2010). The nature of entrepreneurial experience, business failure and comparative optimism. *Journal of business venturing*, *25*(6), 541-555.
- Vecchio, R. P. (2003). Entrepreneurship and leadership: common trends and common threads. *Human resource management review*, *13*(2), 303-327.

- Verheul, I., Wennekers, S., Audretsch, D., & Thurik, R. (2002). An eclectic theory of entrepreneurship: policies, institutions and culture. In *Entrepreneurship: Determinants and policy in a European-US comparison* (pp. 11-81). Springer, Boston, MA.
- Wasserman, N. (2012). *The founder's dilemmas: Anticipating and avoiding the pitfalls that can sink a startup*. Princeton University Press.
- Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small business economics*, 13(1), 27-56.
- Wheaton, M. G., & Ward, H. E. (2020). Intolerance of uncertainty and obsessive-compulsive personality disorder. *Personality Disorders: Theory, Research, and Treatment*.
- White, H. A., & Shah, P. (2011). Creative style and achievement in adults with attention-deficit/hyperactivity disorder. *Personality and Individual Differences*, 50(5), 673-677.
- Wiklund, J., Hatak, I., Patzelt, H., & Shepherd, D. A. (2018). Mental disorders in the entrepreneurship context: When being different can be an advantage. *Academy of Management Perspectives*, 32(2), 182-206.
- Wiklund, J., Patzelt, H., & Dimov, D. (2016). Entrepreneurship and psychological disorders: How ADHD can be productively harnessed. *Journal of Business Venturing Insights*, 6, 14-20.
- Wolfe, M. T., & Patel, P. C. (2017). Persistent and repetitive: Obsessive-Compulsive Personality Disorder and self-employment. *Journal of Business Venturing Insights*, 8, 125-137.
- Zellweger, T., Sieger, P., & Halter, F. (2011). Should I stay or should I go? Career choice intentions of students with family business background. *Journal of business venturing*, 26(5), 521-536.

Appendix A

(1) According to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition by the American Psychiatric Association (DSM-5; APA, 2013), individuals are diagnosed with OCD when they demonstrate the following diagnostic criteria:

(A.) Presence of obsessions, compulsions, or both: Obsessions are defined by (1) and (2): (1.) Recurrent and persistent thoughts, urges, or images that are experienced, at some time during the disturbance, as intrusive and unwanted, and that in most individuals cause marked anxiety or distress. AND (2.) The individual attempts to ignore or suppress such thoughts, urges, or images, or to neutralize them with some other thought or action (i.e., by performing a compulsion). Compulsions are defined by (1) and (2): (1.) Repetitive behaviors (e.g., hand washing, ordering, checking) or mental acts (e.g., praying, counting, repeating words silently) that the individual feels driven to perform in response to an obsession or according to rules that must be applied rigidly. (2.) The behaviors or mental acts are aimed at preventing or reducing anxiety or distress, or preventing some dreaded event or situation; however, these behaviors or mental acts are not connected in a realistic way with what they are designed to neutralize or prevent, or are clearly excessive. Note: Young children may not be able to articulate the aims of these behaviors or mental acts. (B.) The obsessions or compulsions are time-consuming (e.g., take more than 1 hour per day) or cause clinically significant distress or impairment in social, occupational, or other important areas of functioning. (C.) The obsessive-compulsive symptoms are not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition. (D.) The disturbance is not better explained by the symptoms of another mental disorder (e.g., excessive worries, as in generalized anxiety disorder; preoccupation with appearance, as in body dysmorphic disorder; difficulty discarding or parting with possessions, as in hoarding disorder; hair pulling, as in trichotillomania [hair-pulling disorder]; skin picking, as in excoriation [skin-picking] disorder; stereotypies, as in stereotypic movement disorder; ritualized eating behavior, as in eating disorders; preoccupation with substances or gambling, as in substance-related and addictive disorders; preoccupation with having an illness, as in illness anxiety disorder; sexual urges or fantasies, as in paraphilic disorders; impulses, as in disruptive, impulse-control, and conduct disorders; guilty ruminations, as in major depressive disorder; thought insertion or delusional preoccupations, as in schizophrenia spectrum and other psychotic disorders; or repetitive patterns of behavior, as in autism spectrum disorder).

(2) The prediction variables of the OCPD diagnosis based on the Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision by the American Psychiatric Association (DSM-IV-TR; APA, 2000) should include four or more of the following criteria:

(1) is preoccupied with details, rules, lists, order, organization, or schedules to the extent that the major point of the activity is lost; (2) shows perfectionism that interferes with task completion (e.g., is unable to complete a project because his or her own overly strict standards are not met); (3) is excessively devoted to work and productivity to the exclusion of leisure activities and friendships (not accounted for by obvious economic necessity); (4) is over-conscientious, scrupulous, and inflexible about matters of morality, ethics, or values (not accounted for by cultural or religious identification); (5) is unable to discard worn-out or worthless objects even when they have no sentimental value; (6) is reluctant to delegate tasks or to work with others unless they submit to exactly his or her way of doing things; (7) adopts a miserly spending style toward both self and others; money is viewed as something to be hoarded for future catastrophes; and (8) shows rigidity and stubbornness.

The prediction variables of the OCPD diagnosis were updated with the release of the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition by the American Psychiatric Association (DSM-5; APA, 2013): “The essential features of a personality disorder are impairments in personality (self and interpersonal) functioning and the presence of pathological personality traits. To diagnose Obsessive-Compulsive Personality Disorder, the following criteria must be met:”

(A.) Significant impairments in personality functioning manifest by: (1.) Impairments in self functioning (a or b): (a.) Identity: Sense of self derived predominantly from work or productivity; constricted experience and expression of strong emotions. (b.) Self-direction: Difficulty completing tasks and realizing goals associated with rigid and unreasonably high and inflexible internal standards of behavior; overly conscientious and moralistic attitudes. AND (2.) Impairments in Interpersonal functioning (a or b): (a.) Empathy: Difficulty understanding and appreciating the ideas, feelings, or behaviors of others. (b.) Intimacy: Relationships seen as secondary to work and productivity; rigidity and stubbornness negatively affect relationships with others. (B.) Pathological personality traits in the following domains: (1.) Compulsivity, characterized by: (a.) Rigid perfectionism: Rigid insistence on everything being flawless, perfect, without errors or faults, including one's own and others' performance; sacrificing of timeliness to ensure correctness in every detail; believing that there is only one right way to do things; difficulty changing ideas and/or viewpoint; preoccupation with details, organization, and order. (2.) Negative Affectivity, characterized by: (a.) Perseveration: Persistence at tasks long after the behavior has ceased to be functional or effective; continuance of the same behavior despite repeated failures. (C.) The impairments in personality functioning and the individual's personality trait expression are relatively stable across time and consistent across situations. (D.) The impairments in personality

functioning and the individual's personality trait expression are not better understood as normative for the individual's developmental stage or socio-cultural environment. (E.) The impairments in personality functioning and the individual's personality trait expression are not solely due to the direct physiological effects of a substance (e.g., a drug of abuse, medication) or a general medical condition (e.g., severe head trauma).

Appendix B

OCD Entrepreneurs:

(1) checking and repetitive behavior

“I think it gives me attention to detail and efficiency because I know I have to take less time to do things that may seem arbitrary, but to me, they're really important. So I would say checking is my big one. I think that's the most helpful.”

(2) overthinking and overanalyzing

“I had a really hard time overthinking: I was like, I sound ridiculous. I feel like I'm robbing people. I just feel like a bad person. But, I can't think about that. You just have to push it out. So I get two chances to look it over. And then it just has to go out and I just have to sit with the uncertainty.”

(3) needing to be in control

“I want to be the person who makes all the decisions.”

“I don't trust that I could give up control on something and then that it would be done correctly.”

(4) being risk-averse

“Like I can't live in, not knowing the thing I can know, I had to know that. So I had to make the predictions.”

(5) needing advice and reassurance

“I was kind of looking for reasons why I was correct.”

“I look for reassurance about my decisions.”

OCPD Entrepreneurs:

(1) being detail-oriented and organized

“I have to have a good eye for detail. And I need to be meticulous.”

“I love the fact that I can be organized. I love the fact that I can really crank out like I can laser focus in on something and crank it out so quickly and it can be the way I want it to be.”

(2) being perfectionists and having high standards

“Because of perfectionism, I think that the quality of my work is higher. But I think that it hinders the rate at which I can complete tasks.”

“The excessive perfectionism, I think is beneficial in that it has, you know, led to an extreme, what I consider to be kind of an extremely well thought out product.”

(3) needing to be in control

“There's no way I'd give up half my company, especially after everything I've worked for: if someone comes in and tries to change it or makes it worse, no way. It's the reason I started it.”

“Like not having a part in half of the decisions really makes me feel insecure about it. Part of the reason I have my own business as well as so I have more of that control for decision making.”

(4) self-trusting and self-efficacy

“Give me a goal, and I'll get it done. But don't tell me how to do it, kind of thing.”

“I trust myself, better to do things, than I trust other people to do things so that can be both a good thing and a bad thing because it could be a good thing because I know that I know exactly how I want things and I know how to make that happen.”

(5) being self-confident and independent

“I'd say definitely on my own, I have way more certainty but I'd say more as confidence. Like, I feel like I'm in control. I don't have anyone to report to if I want to learn something, I can learn it.”

“I generally like to be very independent and do my own thing and a lot of times I feel like I can be more efficient and accomplish my goals better in that manner.”

Appendix C



LUND UNIVERSITY
School of Economics and Management

Entrepreneurship from a Neuropsychological Approach: The Influence of OCD and OCPD on Entrepreneurial Decision-Making

By: Levi Bergstrand & Lida Minasyan

Interview Consent Form:

I have been given information about *Entrepreneurship from a Neuropsychological Approach: The Influence of OCD and OCPD on Entrepreneurial Decision-Making* and discussed the research project with *Levi Bergstrand and Lida Minasyan* who are conducting this research as a part of a Master's in *Entrepreneurship and Innovation* supervised by *Claudio Fassio and Eugenia Perez Vico*.

I understand that, if I consent to participate in this project I will be asked to give the researcher a duration of approximately *an hour* of my time to participate in the process.

I understand that my participation in this research is voluntary, I am free to refuse to participate and I am free to withdraw from the research at any time.

I understand that my identity will not be disclosed and will be kept confidential.

By signing below I am indicating my consent to participate in the research as it has been described to me. I understand that the data collected from my participation will be used for thesis and journal publications, and I consent for it to be used in that manner.

Declaration of Authorship

We, Levi Bergstrand and Lida Minasyan, hereby certify that this dissertation has been composed by us and is based on our original work unless stated otherwise. No other person's work has been used without due acknowledgment in this thesis. All references and verbatim extracts have been quoted, and all sources of information have been specifically acknowledged. This dissertation was not previously presented to another examination board and has not been published.



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