

Drivers of Individual Entrepreneurial Orientation: Comparing Intrapreneurs and Entrepreneurs

A Case Study Analysis of Locally Operating SME Insurance Intermediaries that have Undergone M&A

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Abstract

Intriguingly, it has been found that M&A can often result in performance deficits, which are attributed to various factors related to the M&A process. While the cause of this performance dip remains largely unexplained, the literature suggests that IEO might be an explaining factor. Hence, this study explored the multifaceted nature of Individual Entrepreneurial Orientation (IEO) in SMEs that were involved in M&A by answering the research question *"How do the factors that impact entrepreneurial orientation differ between intrapreneurs and entrepreneurs in SMEs?"*. This research question is answered using a mixed-methods approach, using primary data collected by field research in the form of a questionnaire and by conducting interviews. The investigation of the determining factors for IEO opened the black box of IEO determinants and identified education, decision-making, strength, autonomy and organizational culture as key predictors for IEO in SMEs. These factors were found to significantly influence one or more factors of IEO, those factors being risk-taking, innovativeness, proactivity, passion, and perseverance. In addition, a comparative intergroup analysis between entrepreneurs and intrapreneurs was conducted, though merely any significant differences were discovered. The results showed that a higher degree of passion was observed among the intrapreneurial group. The equal level of most IEO factors between intrapreneurs and entrepreneurs, and the higher level of passion of intrapreneurs provides an interesting contradiction to common believe which is recommended to explore in further studies. This study also examined the effects of mergers and acquisitions (M&A) on IEO. While M&A did not significantly influence IEO, the possibility to express IEO was impacted by organizational limitations, trust, and autonomy levels post-M&A. The findings have wider implications for the study of entrepreneurship and M&A. Thus, this research not only extends our understanding of the factors influencing IEO but also provides valuable insights for business management and industry stakeholders to develop strategies stimulating IEO in SMEs.

Keywords: IEO, M&A, Insurance Brokerages, Risk-Taking, Innovativeness, Proactivity, Passion, Perseverance

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1. Introduction

The Dutch insurance intermediary market has undergone a process of consolidation in recent years. This phase is characterized by a trend of mergers and acquisitions (M&A) among intermediaries, leading to a concentration of market power among a smaller number of larger firms. The case-study company is an insurance broker that specializes in providing non-life insurance services for individuals and businesses, as well as mortgages. In response to the consolidation trend, the case-study company has sought to capitalize on this phase by acquiring smaller, locally-rooted intermediaries. As of the beginning of 2023, the case-study company comprises between 50 and 100 subsidiaries. The local offices exploited by the case-study company are classified as small and medium-sized enterprises (SMEs). Underlying each M&A is an agreement that differs for every taken-over subsidiary, where agreements are made on ownership and management. Not all entrepreneurs

who sell their company to the case-study company leave. Many of the (former) entrepreneurs continue their activities, some of them with a limited number of shares while others are re-employed without owning any of the shares. The case-study company places a strong emphasis on reaching an agreement that enables the continuation of the strong and local entrepreneurial network.

Not only for the case-study company but rather globally, M&A has become an increasingly popular strategy for companies to grow and expand their business. M&As are also commonly used as a strategy for value creation and growth, although contrary results have been found by researchers (Corporate leadership council and McKinsey & Company, derived from Vazirani, 2012). Most M&A's have led to negative firm performance after M&A, inherited from the uncertain nature of M&A transactions and their often poorly designed strategies leading to high risk. Notably, 77 percent of the M&As that technically succeed still failed in achieving the initially stated goals (Corporate leadership council and McKinsey & Company, derived from Vazirani, 2012). These negative post-M&A effects appear on an organizational and personal level and have been identified as contributing factors to M&A failure. The existing body of literature provides evidence for moderate levels of (individual) entrepreneurial orientation ((I)EO) to dampen the negative effects of M&A (Simpson & Sariol, 2022). While EO has traditionally been studied as an organizational construct, it has more recently been studied as both an individual and organizational construct. The construct of (I)EO is suggested to help mitigate the risk involved in M&A that eventually results in M&A failure.

However, the impact of M&A on IEO is not fully understood yet. EO is linked to dampening possible negative post-M&A effects, hence leading to better performance (Simpson & Sariol, 2022). As IEO is linked to better post-M&A performance, it is crucial to understand the influence of M&A on IEO. Research to date provides evidence that organizational changes that are inherent to M&A affect IEO. A comprehensive academic assessment of the organizational changes

caused by M&A that influence IEO is lacking, as well as an intergroup assessment of IEO differences between entrepreneurs and intrapreneurs. However, despite the absence of a comprehensive academic assessment, literature provides evidence for post-M&A effects on EO that widely vary. These post-M&A effects have been found to negatively influence EO in most cases. However, again, a comprehensive overview of post-M&A effects on (I)EO is lacking.

The goal of this study is to grant insight into the previously opaque determinants of, differences between, and M&A effects on IEO of intrapreneurs and (former) entrepreneurs in SMEs. Hence, contributing to the existing literature on M&A combined with IEO, and to provide points of attention to integration managers during and after M&A to enhance or establish IEO. Consequently, the research question is: *"How do the factors that impact entrepreneurial orientation differ between intrapreneurs and entrepreneurs in SMEs?"*. Within the context of this study, the entrepreneurs are considered to be the former entrepreneurs who have sold their company either fully or partially. Although the former entrepreneur, who sold all of his or her shares, is technically transformed into an intrapreneur, this person is still considered an entrepreneur in the context of this study due to his or her entrepreneurial history. Answering the research question starts with research on determining factors of IEO, followed by differences between intrapreneurs and entrepreneurs, and finally, post-M&A changes in IEO are retrieved. The previous leads to the following sub-questions:

1. *"What are the determining factors for IEO among SMEs?"*
2. *"How does IEO differ between intrapreneurs and entrepreneurs in SMEs?"*
3. *"In what way does participating in a merger or acquisition affect the IEO of entrepreneurs in SMEs who transition into intrapreneurs within the acquiring organization?"*

Sub-questions one to three are examined by using a mixed-methods approach. The first part of the proposed mixed-methods approach is a questionnaire, while the second part of the mixed-methods approach consists of interviews. The core purpose of the questionnaire is to function as a tool

to gather quantitative data to determine IEO and the proposed independent variables. The interview is used to gain a deeper qualitative insight into the effects of M&A. Moreover, the interviews also serve as a robustness check of the conceptual framework deduced from theory. Hence, sub-questions one and two are based on the questionnaire, whereas the interviews are the fundament of answering sub-question three.

The present study contributes to the existing body of knowledge on M&A and entrepreneurial orientation by providing quantitative research on factors that influence IEO as presented by Santos et al. (2020) in the context of sub-question one, as well as exploring intergroup differences between intrapreneurs and entrepreneurs in the context of sub-question two. Furthermore, a qualitative understanding of the perception and experiences encountered by individuals within the case study company is provided in the context of sub-question three, being insurance intermediary companies involved in M&A. The study will also aim to identify any patterns or commonalities in sub-questions one to three among the experiences of different entrepreneurs and intrapreneurs. The findings of this research have important implications for companies that are considering M&A as a strategy for growth, as well as for the intrapreneurs and entrepreneurs within the acquired company. Furthermore, the study will also contribute to the field of entrepreneurship by clarifying how M&A can impact IEO and on what factors integration managers should focus on to enhance individual entrepreneurship. The study will also be relevant for academics and practitioners in the field of strategic management, as it will provide insights into how companies can navigate and succeed in the M&A environment.

The practical relevance of this thesis is twofold. First, this study provides valuable insights for companies considering or having recently undergone M&A. The findings of this study support companies and integration managers by enhancing their understanding of the potential impact of M&A on IEO within an acquired company, and how to retain and support intrapreneurs and entrepreneurs with their

entrepreneurial mindset. This information is particularly useful for companies that are looking to maintain or increase post-M&A firm performance by enhancing IEO. Second, the findings of this study are also valuable for individuals within an acquired company. The study will provide insights into how M&A can impact IEO, and how they can navigate and succeed in their new M&A environment. This information is particularly useful for individuals who have an entrepreneurial mindset and want to continue to identify and pursue new opportunities within the acquired company. Furthermore, the insights generated by this study may also be relevant for policymakers and regulators who are interested in understanding the effects of M&A on the workforce and the economy.

First, the current state of the literature is given in section two; theoretical framework. Derived from the available literature and the background of the situation, the conceptual framework is provided in section three. Section four provides the methodology used in this research. Section five provides the statement of results, whereas the sixth section discusses the result. Following up on the discussion, sections seven, eight, nine and ten mention implications, limitations, the conclusion, and recommendations.

2. Theoretical framework

This theoretical framework provides a comprehensive but concise overview of the current position of research on M&A, (I)EO, and the effects of M&A on (I)EO. First, a specific summation of knowledge on the topic of IEO is stated, where a specific look is taken into the impact, factors, and influencing variables. Following up on the knowledge of IEO, available literature on intergroup differences between intrapreneurs and entrepreneurs is stated. Finally, the limited amount of research on the effects of M&A on IEO is stated.

2.1 (Individual) entrepreneurial orientation

Research on EO is embraced by researchers as a supercharger for the identification and seizure of new opportunities in business environments and is found

as an antecedent for innovation and growth. As a key driver for organizational performance, the topic has been extensively researched concerning the thriving factors behind the construct of EO. EO is multidimensional and found to be explained by various factors.

The academic community has extensively explored the implications of EO. Numerous effects of EO have been highlighted in the existing literature by several studies. Often recurring, EO has been linked to positively affect firm performance. Further specifying these effects on firm performance, (I)EO is found to affect profitability, growth, sustainable performance, technological opportunism, innovation performance, and product innovation (Matos, 2021; Tang et al., 2008; Yadegaridehkordi et al., 2023; Cho & Lee, 2020; Urban and Maphumulo, 2021). To a more personal extent, entrepreneurial abilities have been found to explain behavior in the workplace (Bolton & Lane, 2012). Of specific relevance to this study is the finding of Hunt (2021). Hunt (2021) linked moderate levels of EO to generating positive returns for the acquiring firm, whereas low and high levels of EO are linked to the destruction of value.

Despite the clear effects of EO, the extensively researched topic of EO has divided researchers since the fundamentals of EO were laid. In the late 20th century, the fundamentals for current research were formed (Miller, 1983; Covin & Slevin, 1989; Lumpkin & Dess, 1996). Early research had a main focus on organizational-level EO, whereas in more recent years EO on the individual level is more extensively being researched. Preliminary, initial studies focused on EO as an organizational construct (Miller, 1983; Covin & Slevin 1989; Lumpkin & Dess, 1996). Although Miller (1983) already proposed the concept of EO on the individual level, it was not up to the 21st century that scholars showed an interest in IEO. Recently, the topic of EO has gained a lot of attention and has been researched extensively on an organizational and personal level and in different dimensions. Although an in-depth review of organizational EO is beyond the scope of this research as this study focuses on IEO, the fundamentals of IEO originate from organizational

entrepreneurial orientation (OEO).

In all those years of research on (I)EO, there have

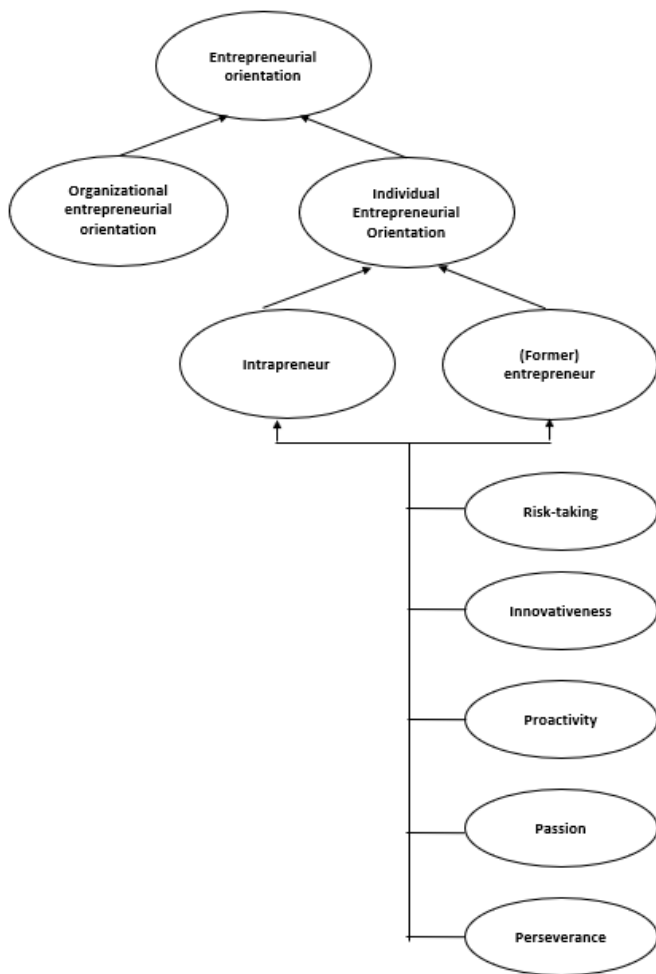


Figure 1: EO model

been many attempts to achieve consensus on the definition of IEO. However, little consensus is achieved, indicating the need for more research to face this lack of consensus on the (I)EO construct. Commonly, the all-encompassing EO term is referred to as the ability of organizations to capture opportunities to improve firm performance. The sub-level of EO, IEO, is generally referred to as the EO on the individual level where an individual's abilities are used for business strategy. In recent years however, researchers have shown a growing interest in EO as a multi-dimensional construct that contains individual as well as organizational EO (Bolton & Lane, 2012; Ferreira et al., 2016; Badoiu et al., 2020). The existence of IEO is acknowledged by Covin & Slevin (2014) and found to interrelate with OEO (Niemann et al., 2022). The call by Covin and Slevin (2014)

regarding more research and agreement on the construct of EO remains in dispute.

The characteristics of (I)EO have been researched extensively. The fundamental work of Miller (1983) and research to date overwhelmingly use the organizational as well as the IEO construct as risk-taking, innovativeness, and proactivity. However, follow-up research provided little consensus about additional factors that belong to the core of OEO. Due to the rise of IEO as opposed to OEO, the concept of intrapreneurial orientation has gained more attention as opposed to EO, although the literature on this bifurcation in IEO remains scarce. Covin & Slevin (2014) recommended additional research on the EO construct as derived from the lack of consensus on the definition of the construct in literature.

The research of Bolton & Lane (2012) provided a solid ground for follow-up research as requested by Covin & Slevin in 2014. Gerschewski et al. (2016) and Santos et al. (2020) identified and confirmed the IEO construct to consist of five variables: proactiveness, innovativeness, risk-taking, passion, and perseverance as an extension of the framework of Bolton & Lane (2012) and is visually presented in Figure 1. Niemann et al. (2022) explain organizational drivers and personal drivers as interrelating and as the cause of IEO. The division between these outer and inner drivers is fundamental and presented in Figure 2. In the context of this case study, entrepreneurs who have just sold their company and have become intrapreneurs are also referred to as entrepreneurs. The EO construct is to be divided into an outer and inner dimension. The inner dimension exists out of personality and experience (Carrier, 1996; Padi et al., 2022), whereas the outer dimension exhibits proper organizational mechanisms for the mobilization and utilization of resources (Yang et al., 2018; Badoiu et al., 2020).

Taking a closer look at the model as proposed by Santos et al. (2020), the five factors represent IEO (Figure 2). These five factors of IEO are characterized by their unique set of predictor variables which are considered the independent variables, categorized into outer drivers and inner drivers. More specifically,

outer drivers represent external influences on IEO that can be altered by the organization, while inner drivers are related to personal beliefs, backgrounds, and other personal characteristics. Literature provides evidence for predicting variables on IEO that arise from personality as well as organizational characteristics. The interdependent relationship between the inner and outer dimensions is expected to influence innovativeness, risk-taking, proactivity, passion, and perseverance in the model of Santos et al. (2020).

1. Risk-taking is generally identified as the willingness to engage in activities with uncertain outcomes. Several factors have been found to influence risk-taking. Demographic factors (Falk & Matulich, 1976), social and cultural factors (Kreiser et al., 2010), autonomy (Horswill & McKenna, 1999), psychological states (Tixier et al., 2014), financial incentives (Coles et al., 2006; Schedlinsky et al., 2017), experience (Menkhoff et al., 2006), and organizational culture (Elkelish & Hassan, 2014) are identified as influential factors of risk-taking. Specifically important concerning organizational culture, authors have considered and confirmed that group influence is a tremendous influencer on risk-taking. In general, talking about opportunities in a group setting and the group influence on feeling competent is a thriving factor for risk-taking (Krueger & Dickson, 1994; Wallach et al., 1962, Woodside, 1972).
2. Innovativeness is generally referred to as the tendency to generate new ideas and the implementation of these new ideas to improve services, processes, or products. Several factors have been found to influence innovativeness, such as demographic factors (Camelo-Ordaz et al., 2011), available resources (Camelo-Ordaz et al., 2011), market conditions (Camelo-Ordaz et al., 2011), autonomy (Gebert et al., 2003), and leadership style (Dunne et al., 2015; Knight, 1965; Katrinli et al., 2009; Hoang et al., 2020; Camelo-Ordaz et al., 2011).
3. Proactivity is generally referred to as the tendency to take initiative and act in advance of a future situation, rather than simply responding to it. Proactivity contains social and cultural factors (Kreiser et al., 2010), leadership style (Martin et

al., 2013), and organizational culture (Wanberg & Kammeyer-Mueller, 2000). Key findings that emerge from research about proactivity arise from employees' affect towards and from the organization (Fu Lam et al., 2014). However, an overly positive affect is related to impairing focus and motivation which results in hindering engagement in proactive behavior (Fu Lam et al., 2014).

4. Perseverance is referred to as persistent work on a demanding task (Buechel et al., 2018). Research on the predicting factors on perseverance provided, organizational culture (Buechel et al., 2018), motivation (Vollmeyer & Rheinberg, 2000), prior experience (Mattingly et al., 2016; DiMenichi & Richmond, 2015), autonomy (Hernández, 2020), self-confidence (Buechel et al., 2018; Gerhards & Gravert, 2016) and financial incentives (Incekara-Hafalir et al., 2023) as key factors of determination.
5. Passion is generally referred to as a strong feeling of enthusiasm or excitement for something. Passion is influenced by a variety of factors, including demographic factors (Balon et al., 2013), cultural factors as represented in the presence of role models (Fellnhöfer, 2017), autonomy (Carpentier & Mageau, 2019), and self-confidence (Lafrenière et al., 2011).

		Risk-taking	Innovativeness	Proactivity	Perseverance	Passion
Inner-level	Demographic factors	X (1)	X (8)			X (23)
	Self-confidence				X (16, 19)	
	Self-esteem					X (24)
	Prior experience				X (20, 21)	
	Motivation				X (22)	
	Strength of decision-making	X (27)				
Outer-level	Psychological states	X (2)				
	Social factors	X (3)		X (3)		
	Cultural factors	X (3)		X (3)		X (25)
	Autonomy perception	X (4)	X (9)		X (17)	X (26)
	Financial incentives	X (5,6)			X (18)	
	Organizational culture	X (7)		X (14)	X (16)	
	Market conditions		X (8)			
	Leadership style		X (8, 10, 11, 12, 13)	X (15)		
	Available resources		X (8)			

(1)	Falk & Matulich, 1976	(10)	Dunne et al., 2015	(19)	Gerhards & Gravert, 2016
(2)	Tixier et al., 2014	(11)	Knight, 1965	(20)	Mattingly et al., 2016
(3)	Kreiser et al., 2010	(12)	Katrinli et al., 2009	(21)	DiMenichi & Richmond, 2015
(4)	Horswill & McKenna, 1999	(13)	Hoang et al., 2020	(22)	Vollmeyer & Rheinberg, 2000
(5)	Coles et al., 2006	(14)	Wanberg & Kammeyer-Mueller, 2000	(23)	Balon et al., 2013
(6)	Schedlinsky et al., 2017	(15)	Martin et al., 2013	(24)	Lafrenière et al., 2011
(7)	Elkelish & Hassan, 2014	(16)	Buechel et al., 2018	(25)	Fellnhöfer, 2017
(8)	Camelo-Ordaz et al., 2011	(17)	Hernández, 2020	(26)	Carpentier & Mageau, 2019
(9)	Gebert et al., 2003	(18)	Incekara-Hafalir et al., 2023	(27)	Krueger & Dickson, 2007

Figure 2: Overview of predictor variables. The rows represent the predicted significant independent variables, the columns represent the factors of IEO, and the numbers represent the corresponding sources.

To summarize, academics have broadly researched EO

and found it to be a key driver for firm performance. EO is acknowledged to consist of IEO and OEO. Five factors are found to make up the IEO construct, of which predictor variables are explored (Figure 2). The very few published results of determining factors of IEO lead to the following sub-question:

"What are the determining factors for IEO among SMEs?"

2.2 Differences between intrapreneurs and entrepreneurs

Where initial studies started with a broad definition of EO, further studies on EO have differentiated EO into a broader scope containing IEO and OEO. Furthermore, IEO contexts are identified as intrapreneurial and entrepreneurial orientation. In general, research refers to intrapreneurs as employees within a company who act like entrepreneurs by developing and identifying new business opportunities within the company (Bager et al., 2010; Carrier, 1996; Martiarena, 2011).

Entrepreneurs, on the other hand, are individuals who start and run their businesses. Whereas entrepreneurs have dominated the topics of research in the second half of the 20th century, intrapreneurs have gained more attention of scholars in the past two decades. Moreover, the distinction between entrepreneurs and intrapreneurs leads to the emphasis on intergroup differences that are inherent to IEO.

The competencies of entrepreneurs and intrapreneurs are found to deviate from each other, establishing important recognition of the subcategories intrapreneurial and entrepreneurial orientation within IEO. However, research to date shows contrary findings regarding differences or similarities between the IEO scope of intrapreneurs and entrepreneurs. To date, intergroup differences between intrapreneurs and entrepreneurs in the context of IEO have not been researched. Intrapreneurship has been identified as a crucial factor in preventing a lack of innovation in organizations (De Lourdes Prado et al., 2012). The competencies of intrapreneurs are more focused on

competence and growth (Bager et al., 2010), with lower confidence in entrepreneurial skills but higher human capital skills (Martiarena, 2013). However, their potential is not widely acknowledged, as Martiarena (2013) found that intrapreneurs tend to fail in recognizing business opportunities despite possessing higher human capital skills. Although emphasized by De Lourdes Prado et al. (2010), research by Engle et al. (1997) has shown that intrapreneurs are less innovative compared to entrepreneurs. Adding to the contradiction, Brockhaus (1980) found no difference in risk-taking between intrapreneurs and entrepreneurs.

In conclusion, the intergroup difference between intrapreneurs and entrepreneurs in the context of IEO has not been researched to date. Literature shows preliminary evidence of intergroup differences between intrapreneurs and entrepreneurs in the context of IEO. However, the effects illustrated by the literature are either unrelated to the five-factor model of Santos et al. (2020) or lead to inconclusive results (Figure 3).

	IEO	
	Entrepreneur	Intrapreneur
Risk-taking	Inconclusive	Inconclusive
Innovativeness	Inconclusive	Inconclusive
Proactivity	Not mentioned	Not mentioned
Passion	Not mentioned	Not mentioned
Perseverance	Not mentioned	Not mentioned
Entrepreneurial skills	Higher	Lower
Focus on growth	Lower	Higher
Focus on competence	Lower	Higher
Human capital	Lower	Higher
Ability to recognize business opportunities	Higher	Lower

Figure 3: Comparison of entrepreneurs and intrapreneurs in literature

Despite the presence of preliminary evidence of intergroup differences between entrepreneurs and intrapreneurs (Figure 3), specific literature on IEO intergroup differences within the five-factor model (Santos et al., 2020) is either inconclusive or not available at all. Hence, the following sub-question is proposed:

"How does IEO differ between intrapreneurs and entrepreneurs in SMEs?"

2.3 The impact of M&A on IEO

M&A is an increasingly prominent and relevant construct that is present in worldwide daily business and is studied broadly by scholars. This interest in corporate finance and strategy has been present for several decades, and as a result, M&A has been studied to great extents. The definition of M&A has developed over the years. The papers that are used in this theoretical framework generally refer to M&A as the combination of previously independent firms into one larger firm, whereas more recent research takes specifies M&A as a construct that includes the merger of business and management processes.

In 2019, 49,849 M&A events have been conducted around the globe, representing 3.7 trillion US Dollars (Mergers and Acquisitions Statistics, IMAA as derived from Simpson & Sariol 2022). Notably, 77 percent of the M&As that technically succeed still failed in achieving their initially stated goals (Corporate leadership council and McKinsey & Company, derived from Vazirani, 2012). The failure of retrieving initially stated goals leads to value destruction, stressing the importance of a well-understood M&A trajectory. M&A is a widely studied phenomenon in the field of business and finance and is widely considered and accepted for acquiring a share or control in a company. Despite the extensive research on M&A, the understanding of the complexities of the M&A process is limited, as well as the complex interrelationships involved (Gomes et al., 2012). This highlights the need for further research in this area to better understand the dynamics of M&A and to develop effective strategies for success.

In recent years, the study of the effects of M&A on organizational performance has been a dominant topic in the field of business research. The effects of M&A are divergent, reaching from enhancing to destroying value depending on the level of uncertainty present in the market (Haleblian et al., 2009). Despite the potential benefits of M&A, such as acquired synergies, prior research has consistently found that the majority of M&As result in negative effects on firm performance. The negative effects of M&A on firm performance are inherited from the uncertain nature of M&A transactions and their often

poorly designed strategies leading to high risk (Hossain, 2021). The cause of higher risk after M&A is two-fold, rooted in the organizational changes such as changing management, leadership, integration, and potential job losses due to restructuring and their effects that in its turn reflect on personality traits. A proper strategy should take the organizational and personal effects of M&A into account, high costs and significant losses are risked otherwise. Simpson & Sariol (2022) propose a solution to dampen post-M&A negative performance by ensuring IEO, IEO is linked to dampening the negative effects on post-M&A firm performance. More specifically, the research of Simpson & Sariol (2022) linked lower levels of uncertainty after M&A to higher levels of EO.

Diving deeper into the effects on organizational performance, academic researchers have extensively examined the various factors that contribute to this lower organizational performance experienced after M&A. Causes have been identified by various post-M&A effects such as changes in management, leadership, integration, and potential job losses due to the restructuring of the organization (Gomes et al., 2012). These effects are found to influence personality traits (Teerikangas, 2010), showing the interrelatedness between organizational changes and personality traits. This links to the concept of IEO, which is based on personality traits.

In reality, M&A is often found to negatively influence firm performance, such as innovation (Clodt et al., 2006). While organizational changes can act as a catalyst for innovation and growth when employees are given new opportunities to take on more responsibilities and develop new skills, organizational changes also lead to a decrease in motivation and job satisfaction when the focus after M&A is shifted to integration and cost-cutting (Ahammad et al., 2012), as previously found by Giessner in 2011. The major findings of Giessner (2011) show that organizational changes related to M&A facilitate the decline of post-M&A employees' perception of organizational identification. Formal acknowledgment, social incentives, and organizational freedom are manifested as the thriving factors of post-merger organizational identification. Financial incentives are

often used for the alignment of interests with the (new) company's interests, although having a weak connection to organizational identification. However, the findings of the effects of financial incentives on post-M&A performance are inconclusive and need additional research. While some studies, such as Guest (2009), have found no significant effects of financial incentives on post-M&A performance, other researchers have reported more nuanced findings (Bonner et al., 2000; Zollo & Singh, 2004).

Specifically for taking-over companies in a consolidating market, the effects of M&A on IEO are specifically interesting. Hence, the central research question related to this research is:

"How do the factors that impact entrepreneurial orientation differ between intrapreneurs and entrepreneurs in SMEs?"

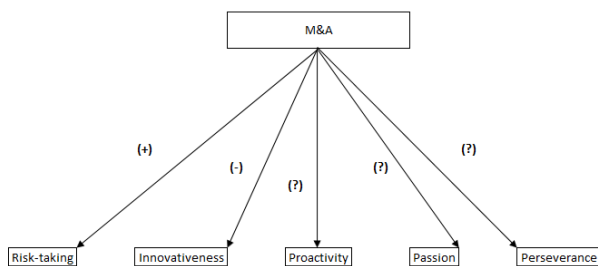


Figure 5: Effects of M&A on IEO in literature

In conclusion, research to date has failed to assess the impact of M&A on the combined five factors of IEO (Figure 4), although effects outside of IEO factors have been identified. Despite the organizational changes caused by M&A and organizational factors that have proven fundamental for IEO, it is merely risk-taking and innovativeness that has been researched separately in the context of M&A. As a following, the exact effects of M&A on the factors of IEO remain unclear. The lack of comprehensive understanding of M&A effects on IEO leads to the following sub-question:

"In what way does participating in a merger or acquisition affect the IEO of entrepreneurs in SMEs who transition into intrapreneurs within the acquiring organization?"

3. Conceptual framework

IEO has been identified as a relevant construct due to its proposed positive effects on post-M&A. While (I)EO is proposed to dampen the negative effects on post-M&A performance (Simpson & Sariol, 2022), marginal evidence is identified for post-M&A effects on IEO itself. The relationship between M&A and the corresponding effects on post-M&A IEO within the company subjected to M&A remain unclear.

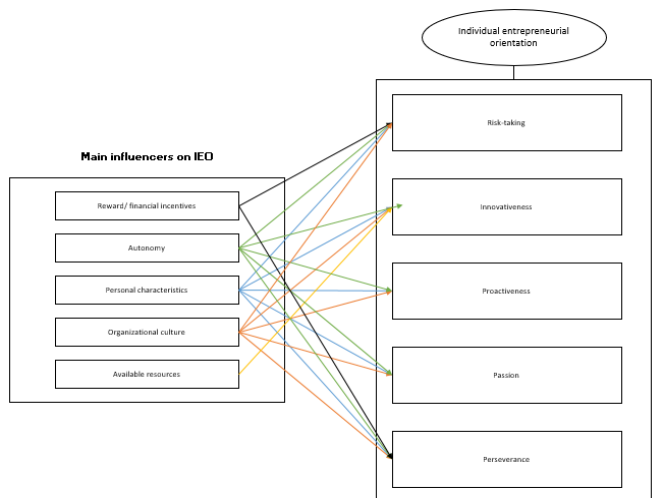


Figure 4: Conceptual model based on literature of IEO

This study aims to address the effects of M&A on the IEO that is present into M&A subjected companies after M&A. Theory leads to a trifurcation of concepts as given in the sub-questions:

1. "What are the determining factors for IEO among SMEs?"
2. "How does IEO differ between intrapreneurs and entrepreneurs in SMEs?"
3. "In what way does participating in a merger or acquisition affect the IEO of entrepreneurs in SMEs who transition into intrapreneurs within the acquiring organization?"

First of all, the determining variables of the factors of IEO among SME insurance brokerages are assessed (Figure 5). The assessment of the predictor variables, the independent variables in this study, is the fundament of understanding changes after M&A. As proposed by Santos et al. (2020), IEO is a latent variable that is assessed by five factors: risk-taking, innovativeness, proactivity, passion, and

perseverance. However, the five factors are found to be influenced by a wide range of context-influenced variables. The variables that are of specific influence on IEO within SMEs have not been determined before but are rather interesting due to the consolidating market SMEs such as Dutch insurance brokers are in. Hence, the following hypothesis is stated:

H1: The level of IEO among SMEs is significantly influenced by various context-related determinants¹.

Literature provides little agreement on the differences and similarities between intrapreneurs and entrepreneurs in relation to IEO. Available literature merely sheds light on potential differences in risk-taking and innovativeness but is inconclusive. While literature shows differences between entrepreneurs and intrapreneurs, these differences do not directly relate to IEO. The differences between entrepreneurs and intrapreneurs are not fully researched in the context of IEO in compliance with the model of Santos et al. (2020). However, general entrepreneurial skills are found to be higher in entrepreneurs. Hence, the following hypothesis is stated:

H2: Entrepreneurs score significantly higher on risk-taking, innovativeness, proactivity, passion, and perseverance than intrapreneurs².

The increasing prevalence of M&A has attracted widespread attention from academic researchers in the field of business and finance. Researchers have identified a limited number of factors that influence IEO after M&A. However, organizational changes that are inherent to M&A are linked to the influence of IEO. It is clear that the understanding of the complexities of the M&A process and the corresponding interrelationships with the factors of IEO are limited and require further research. Although it is clear that most M&As fail to achieve the initially stated goals, literature is yet to provide insight into the factors that cause a change in IEO

after M&A. There is limited evidence in the literature that indicates post-M&A effects of increased risk and decreased innovativeness, while the post-M&A effects on proactivity, passion, and perseverance remain unclear. However, due to the organizational changes inherent to M&A and the research by Giessner (2011) that shows that organizational changes related to M&A facilitate the decline of post-M&A employees' perception of organizational identification, a post-M&A decrease in proactivity, passion, and perseverance is expected. Hence, within the context of this research the following proposition is stated:

P1: As a post-M&A effect on former entrepreneurs an increase in risk-taking and a decline in innovativeness, proactivity, passion, and perseverance is expected in SMEs.

4. Methodology

4.1 Research design

The current state of knowledge on variables that affect IEO is scattered through various research papers and is lacking a comprehensive overview. Moreover, the context of IEO within consolidating SMEs remains unexplored. This research aims to achieve broader knowledge about IEO and M&A effects on IEO within SMEs. This research is conducted in a unique setting with the cooperation of one of the largest Dutch insurance intermediaries that consist of 50 to 100 SME subsidiaries. These subsidiaries are managed by either a newly introduced intrapreneur or by the (former) entrepreneur who has partially or fully sold their shares. The former entrepreneur is, in the light of this research, placed in the category of entrepreneurs due to their broad former entrepreneurial experience, in contradiction to their intrapreneurial counterparts. This setting provides a unique opportunity to analyze the company and sector-specific data. As a result, the following sub-questions with their corresponding hypotheses/ propositions are stated:

1. "What are the determining factors for IEO among SMEs?"

¹ In the context of hypothesis one, the independent variables are the inner and outer level variables as presented in figure 2, whereas the dependent variable is one of the five IEO factors: risk-taking, innovativeness, proactivity, passion, and perseverance. For each factor, the significant determinant variables are assessed individually ($\alpha = 0.05$ or $\alpha = 0.10$).

² In the context of hypothesis two, the independent variable is the dichotomy of being an intrapreneur or entrepreneur, whereas the dependent variable is risk-taking, innovativeness, proactivity, passion, and perseverance. Each factor is assessed individually ($\alpha = 0.05$).

H1: The level of IEO among SMEs is significantly influenced by various context-related determinants.

2. "How does IEO differ between intrapreneurs and entrepreneurs in SMEs?"

H2: Entrepreneurs score significantly higher on risk-taking, innovativeness, proactivity, passion, and perseverance than intrapreneurs.

3. "In what way does participating in a merger or acquisition affect the IEO of entrepreneurs in SMEs who transition into intrapreneurs within the acquiring organization?"

P1: As a post-M&A effect on former entrepreneurs an increase in risk-taking and a decline in innovativeness, proactivity, passion, and perseverance is expected in SMEs.

Sub-questions one to three are proposed to be researched by a mixed-methods field-research approach. The study will include a questionnaire for the collection of quantitative data on the EO of intra/entrepreneurs, as well as semi-structured interviews to explore explanatory factors for the quantitative findings.

The first sub-question is stated to define the variables that influence the five factors of IEO in SMEs. The five factors of IEO are measured and based (Appendix A - Questionnaire) on the research of Santos et al. (2020), while the independent variables in the five-factor model of IEO arise from the diverse literature that is present (Figure 2) and is additionally verified by the conducted interview. Given the constrained sample size, the analysis of the impact of all independent variables in one model was hindered by statistical limitations, thereby rendering its feasibility unattainable. The independent and dependent variables are measured using Likert scales, the nature of the Likert scale provides the ability to quantify the results. As the predicting variables for the levels of IEO remain unclear, sub-question one is assessed by conducting a quantitative analysis with primary data acquired from the proposed questionnaire (Appendix A - Questionnaire). In this questionnaire, data on

independent variables and the individual level of EO is acquired. These independent variables are tested for significance as an influencer on its linked IEO factor as indicated by the existing body of literature.

The second sub-question is formulated to retrieve differences between intrapreneurs and entrepreneurs. The group of entrepreneurs also contains entrepreneurs that keep working in the new company, but have sold all shares. Researchers have not found agreement on differences or similarities between these groups of intrapreneurs and entrepreneurs. Hence, this research proposes an analysis of similarities and differences between the five factors (Santos et al., 2020) extracted from intrapreneurs that originate from the company taking over and entrepreneurs that have become intrapreneurs within the same company as a result of the M&A. Sub-question two is assessed by conducting a quantitative analysis with primary data as acquired from the proposed questionnaire (Appendix A - Questionnaire), whereas a specific distinction and an intergroup comparison between intrapreneurs and entrepreneurs are made.

The third sub-question specifically aims to retrieve the thriving factors behind the post-M&A change of IEO of former entrepreneurs that have become intrapreneurs in the newly formed company after M&A. Sub-question three is assessed by conducting a qualitative analysis of primary data acquired from the proposed semi-structured interviews. The qualitative data acquired is supposed to retrieve experiences and perceptions of thriving post-M&A effects of changes in IEO.

4.2 Collecting data

The conducted research is a mixed-methods approach where the focus is on quantitative and qualitative primary data. The quantitative data acquired by the questionnaire is the fundament for the assessment of hypotheses one and two. Qualitative primary data is gathered and used to find the cause of post-M&A changes in IEO expected to find in hypothesis two of the qualitative data. The total population that was available for data collection is limited to approximately 80% of all case-study company

subsidiaries as some intrapreneurs or entrepreneurs are responsible for and running multiple subsidiaries.

Sub-question one and sub-question two both use the data collected by the questionnaire (Appendix A – Questionnaire). Data is collected from intrapreneurs and entrepreneurs within the researched case-study company. 53 respondents participated, which is approximately 70% of the available population. Of this, 21 former owners and 32 branch managers (Appendix D – Descriptive statistics independent variables) responded. Quantitative data is the fundament for hypotheses one and two, providing the raw data needed for the analysis of hypotheses one and two. Qualtrics is used to conduct the questionnaire, providing the raw data for further analysis.

Sub-question three is analyzed using the qualitative data collected from the semi-structured interviews (Appendix B – Semi-structured interview guide). The semi-structured interviews lead to insights regarding the thriving factors for change and the experience of IEO as a result of M&A in SMEs. Hence, the semi-structured interviews are conducted before the questionnaire. The approach of first conducting the semi-structured interviews is used as quality control. Whether or not the questions are understood, their clarity and quality are assessed and reviewed when the results of the questionnaire indicate problems. The semi-structured interview participants are chosen based on a sub-sample. For this, simple random sampling is used on a subset that has been distinguished by the number of years since the (former) entrepreneur joined the case-study company to explore experiences and perceptions in more detail. The semi-structured interviews were conducted until no new facts are brought up, which resulted in the analysis of four interviews. The interview questions are designed to elicit information on their experiences and perceptions of the changes that occurred as an effect of the M&A and had an impact on the IEO. The raw data retrieved from the interviews is stored as a voice recording of the interview.

4.3 Preparing data

Once the qualitative and quantitative primary data were collected, the data required preparation before it could be analyzed. The analysis of the quantitative data was executed in SPSS, statistical software produced by IBM. The results of the analysis are downloaded directly as an SPSS extension as provided by Qualtrics's services. The questionnaire data has been cleaned and prepared for analysis, which included checking for missing data, errors, and outliers. In case of outliers, irrelevant or missing data, listwise deletion techniques have been used. The last step included the transformation of data, variables 'Function' and 'Education' have been recoded.

The interview data is transcribed, coded, and analyzed using Gioia's model of grounded theory. With the Gioia method, a systematic analysis of patterns and themes regarding common experiences and perceptions in the data is identified.

4.4 Analyzing data

The questionnaire data were analyzed using descriptive statistics and inferential statistics. Descriptive statistics such as means and standard deviations are proposed for summarizing the data and providing a general overview of the data. Inferential statistics such as the Gioia method, independent samples t-tests, and multiple regression analyses are used to test hypotheses and draw conclusions about the data.

1. Hypothesis one is researched by conducting multiple regression of the independent variables on the five factors of IEO (Santos et al., 2020). The dependent variables are the five factors of IEO, testing for significant independent variables (Appendix A - Questionnaire). The coefficients, significance, and model fit are important results of the multivariate regression. The results are deemed statistically significant at the * level when $\alpha = .05$, and statistically significant at the ** level when $\alpha = 0.10$.
2. Hypothesis two is researched by conducting independent samples t-tests for each of the five factors of IEO (Santos et al., 2020). The

dataset is separated by using a dummy-variable for the function of the respondent. The differences are deemed statistically significant at the * level when $\alpha = .05$, and statistically significant at the ** level when $\alpha = 0.10$.

3. Proposition one is analyzed by using the Gioia method of grounded theory, where a systematic analysis of patterns and themes leads to the identification of common experiences and perceptions in the data.

The analysis prerequisites comply with the assumptions belonging to the corresponding statistical tests. Hence, there must be compliance with the following assumptions:

Multiple regression analysis, assumptions of hypothesis one:

1. Dependent variable scale – the data needs to be measured as a scale variable;
2. Linear relationship - checked by scatter plots and partial regression plots;
3. The constant variance of the error terms, checked by homoscedasticity of the error terms;
4. Uncorrelated error terms. The uncorrelatedness of the error terms;
5. Independence of the error terms, which is hard to check. This study assumes uncorrelatedness of the error terms;
6. No perfect multicollinearity, measured by the VIF value;
7. Normality of the error term, checked by the Shapiro-Wilk test;

Independent samples T-test, assumptions of hypothesis two:

1. The dependent variable must be measured on a continuous scale, which is met due to the use of the Likert scale for measuring the dependent variable being the five factors of IEO;
2. The independent variable must consist of two categorical variables, which is met by using the two categories of intrapreneur and entrepreneur;

3. There should be no significant outliers in the differences between the two related groups, which is checked by plotting the data in, for example, box plots.
4. The differences in the dependent variable should be approximately normally distributed, being checked by plotting the data.

Gioia-method, assumptions hypothesis three:

1. The measured item must be a social construct, which is true.
2. The participants must be knowledgeable. The participants are expected to be knowledgeable due to their experiences within the company.

Upon analysis, the descriptive statistics (Appendix C – Descriptive statistics dependent variable and D – Descriptive statistics independent variables), and the assumptions for the statistical tests (Appendix E - Assumptions) are tested and approved. Regarding the independent samples T-Test, the normality assumption was violated, leading to the partial use of the Mann-Whitney-U test for which the assumptions were fulfilled.

After collecting and preparing the data, the quantitative data related to sub-question one and two were analyzed, looking for statistical significance on the 5% level ($\alpha = 0.05$) and the 10% level ($\alpha = 0.10$). Following, the qualitative data were analyzed for recurring post-M&A events impacting the IEO of the (former) entrepreneur and a conclusion was formed.

4.5 Reliability and validity

The used mixed-methods approach provides a comprehensive approach to answering the main- and sub-questions by using the questionnaire and interview data.

The content validity is ensured by the extensive research on the effects of M&A, (I)EO, and the predicting variables on IEO in literature as well as the quality control by first conducting semi-structured interviews to assess the content validity of the questionnaire. The mixed-methods design uses both qualitative and quantitative data. The triangulation of data provides an in-depth understanding of the facets

of M&A that influence the factors of IEO by exploration, as well as a concise understanding of the influence of M&A on IEO. Also, a mixed-methods approach provides an examination of the same phenomenon from multiple perspectives and enables the validation of findings by cross-checking results from both the quantitative and qualitative data. The usage of the proven measurement model for IEO (Santos et al., 2020) in the questionnaire (Appendix A - Questionnaire) contributes to content validity. The construct validity of the survey used in sub-questions one and two is ensured by using descriptive statistics and inferential statistics. The use of Gioia's method of grounded theory used for the analysis of the qualitative results of sub-question three contributes to the validity of this study. Adding to the overall validity of the model is the approach of first conducting interviews, on which the validity of the questionnaire is assessed.

The reliability of the study is secured by a consequent approach of the questionnaire and interviews, in which content is crafted to ensure the accurate reflection of the research objectives. The approach is structured and traceable, ultimately increasing confidence in the validity of the results. In addition, answer measurement by using the Likert scale contributes to the quantifiability of results.

Furthermore, the proposed research is prone to social desirability bias and obtrusiveness as well as the sample's restriction to one company's subsidiaries that have undergone M&A. Also, the subsidiaries in the sample can still be prone to sampling bias, although the usage of simple random sampling. These biases and limitations introduce difficulties in generalizing findings to the whole population.

4.6 Ethical considerations

To ensure the rights, dignity, and well-being of participants research ethics are taken into account. Privacy, confidentiality, consent, and fair and unbiased research are prominent factors that ensure the ethics of research. The research is conducted in a safe, physical, or digital, environment. In advance of researching a participant, a consent form is handed

over. Without agreement on the consent form, the person cannot participate in the research. The ethics of this research was assessed and approved by the research ethics committee of the University of Twente, to ensure proper research ethics.

Privacy and confidentiality are ensured during and after the study. Although the results cannot be fully anonymized, the results will not be discussed with others nor be traceable to the specific participant. Also, the research is conducted physically and digitally, stressing the importance of data management and security. The data is stored locally as well as in the cloud to ensure the accessibility and security of the data.

Before the data gathering, the participant is asked for his/ her consent for participating in the research and processing and storage of their data for one year. The consent form contains accurate information about the aims of the study, privacy, confidentiality, and data security. Moreover, the consent form emphasizes that participants are not coerced or deceived into participating.

5. Results

The results of sub-question one to three are discussed individually. Sub-question one and two start are analyzed, followed by the statement of statistical results. While the results are mentioned in this section, the corresponding assumptions and a further breakdown of the summarized results as well as descriptive statistics are presented in Appendix C, D, E, F, G, H, and I.

5.1 Contextual determinants of IEO

In tables 1 to 5, the results from the multiple regression analysis are presented. First, the assumptions were checked (Appendix E - Assumptions) and approved. The multiple regression analysis is conducted to determine the relationship between the independent variables as presented in the literature and consequently the conceptual model, and the dependent variable.

The proposed model in table 1 for the dependent variable 'risk-taking' has an explained variance of

0.233 (R Square = 0.233), indicating that about 23.3% of the variation in risk-taking is explained by the model. In the proposed model, education ($\beta = 0.114$, $p < 0.05$), the strength of decision-making ($\beta = 0.652$, $p < 0.05$), and autonomy ($\beta = 0.277$, $p < 0.05$) are found to significantly contribute to predicting the dependent variable 'risk-taking' at the 5% level ($\alpha = 0.05$). The independent variables Age ($\beta = -0.012$, $p > 0.05$), Gender ($\beta = 0.424$, $p > 0.05$), Marital status ($\beta = 0.088$, $p > 0.05$), Psychological state ($\beta = -0.008$, $p > 0.05$), Country born ($\beta = -0.008$, $p > 0.05$), Incentives ($\beta = 0.$, $p > 0.05$) and Organizational culture ($\beta = 0.137$, $p > 0.05$) did not reach statistical significance in the model, suggesting that they do not have a significant linear relationship with the dependent variable 'risk-taking' in this study.

The proposed model in table 2 for the dependent variable 'proactivity' has an explained variance of 0.147 (R Squared = 0.147), indicating that about 14.7% of the variation in proactivity is explained by the model. In the proposed model, Country born ($\beta = 1.145$, $p > 0.05$), Organizational culture ($\beta = 0.208$, $p > 0.05$), and Leadership style ($\beta = 0.079$, $p > 0.05$) did not reach statistical significance in the model at the 5% ($\alpha = 0.05$). nor the 10% ($\alpha = 0.10$). level, indicating that they do not have a significant linear relationship with the dependent variable 'proactivity' in this study.

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	2,041	1,522		1,341	,186	-1,018	5,101		
	Country_born	1,145	,734	,208	1,560	,125	-.330	2,620	,976	1,025
	Organizational_culture	,208	,155	,238	1,339	,167	-.104	,520	,552	1,813
	Leadership_style	,079	,116	,122	,683	,498	-.153	,311	,544	1,840

a. Dependent Variable: Proactivity

Table 3: Proactivity model

The proposed model in table 4 for the dependent variable 'passion' has an explained variance of 0.227 (R Square = 0.227), indicating that about 22.7% of the variation in passion is explained by the model. In the proposed model, Education ($\beta = 0.158$, $p < 0.10$) and Role models ($\beta = 0.333$, $p < 0.10$) are found to significantly contribute to predicting the dependent variable 'passion' at the 10% level ($\alpha = 0.10$). The independent variables Age ($\beta = -0.19$, $p > 0.05$), Gender ($\beta = 0.112$, $p > 0.05$), Marital status ($\beta = -0.167$, $p > 0.05$), and Self-esteem ($\beta = -0.037$, $p > 0.05$) did not reach statistical significance in the model, suggesting that they do not have a significant linear relationship with the dependent variable 'passion' in this study.

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	4,465	1,506		2,965	,005	1,430	7,500		
	Age	-.019	,019	-.176	-.965	,330	-.058	,020	,553	1,808
	Gender	,112	,509	,035	,219	,827	-.914	1,137	,707	1,415
	Education_corrected	,158	,091	,264	1,744	,088	-.025	,341	,766	1,306
	Marital_status	-.167	,232	-.105	-.719	,476	-.635	,301	,829	1,206
	Self_esteem	-.037	,156	-.035	-.239	,812	-.353	,278	,841	1,189
	Role_models	,333	,175	,311	1,910	,063	-.018	,685	,684	1,506

a. Dependent Variable: Passion

Table 4: Passion model

The proposed model in table 2 for the dependent variable 'innovativeness' has an explained variance of 0.120 (R Square = 0.120), indicating that about 12% of the variation in innovativeness is explained by the model. In the proposed model, education ($\beta = 0.137$, $p < 0.05$) is found to significantly contribute to predicting the dependent variable 'innovativeness' at the 5% level ($\alpha = 0.05$). The independent variables Age ($\beta = -0.002$, $p > 0.05$), Gender ($\beta = -0.002$, $p > 0.05$), Marital status ($\beta = -0.027$, $p > 0.05$), Autonomy ($\beta = -0.023$, $p > 0.05$), Market ($\beta = 0.064$, $p > 0.05$), Leadership style ($\beta = 0.062$, $p > 0.05$), and Resources ($\beta = 0.124$, $p > 0.05$) did not reach statistical significance in the model, suggesting that they do not have a significant linear relationship with the dependent variable 'innovativeness' in this study.

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3,658	1,247		3,093	,004	1,341	6,376		
	Age	-.002	,015	-.031	-.159	,874	-.033	,028	,561	1,782
	Gender	-.002	,426	-.001	-.005	,996	-.862	858	,630	1,587
	Education_corrected	,137	,066	,216	2,087	,043	,005	,269	,916	1,091
	Marital_status	-.027	,185	-.023	-.146	,884	-.400	,346	,816	1,223
	Autonomy	-.023	,153	-.029	-.149	,883	-.331	,286	,563	1,776
	Market	,064	,165	,059	,390	,699	-.369	,397	,905	1,105
	Leadership_style	,062	,163	,090	,381	,705	-.266	,390	,374	2,674
	Resources	,124	,175	,150	,711	,481	-.229	,477	,471	2,125

a. Dependent Variable: Innovativeness

Table 2: Innovativeness model

Model		Coefficients ^a					95.0% Confidence Interval for B		Collinearity Statistics	
		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3.744	.741		5.051	.000	2.252	5.236		
	Confidence	.071	.121	.094	.587	.560	-.172	.314	.650	1.540
	Work_experience	.002	.009	.033	.216	.830	-.017	.021	.736	1.360
	Motivation	.297	.194	.256	1.534	.132	-.093	.687	.601	1.665
	Autonomy	-.143	.121	-.192	-1.163	.243	-.387	.100	.633	1.580
	Incentives	-.177	.154	-.163	-1.154	.255	-.487	.132	.834	1.200
	Organizational_culture	.288	.158	.330	1.825	.075	-.030	.606	.510	1.962

a. Dependent Variable: Perseverance

Table 5: Perseverance model

While addressing the research sub-question "What are the determining factors for IEO among SMEs?" along with its corresponding hypothesis (H1): The level of IEO among SMEs is significantly influenced by various context-related determinants, intriguing insights about the determinants of IEO in SMEs have been unveiled. Four out of five models revealed significant relationships (Figure 6 and Appendix F – Results sub-question one) with a subset of independent variables, although not uniformly across all dimensions. The main predictors of IEO were education, the strength of decision-making, and autonomy for the dependent variable 'risk-taking', education for the dependent variable 'innovativeness', and organizational culture for the dependent variable 'perseverance'. In contrast, the tested independent variables do not demonstrate a statistically significant influence on the dependent variable 'proactivity', further stressing the complex dynamics of IEO.

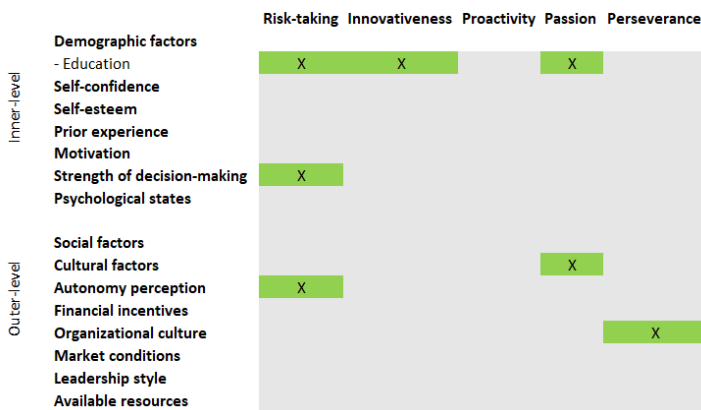


Figure 6: Significant predictors of IEO

5.2 Comparative analysis of intra- and entrepreneurs

To compare the results of intra- and entrepreneurs, an independent samples T-test is conducted. First, the assumptions are checked. The assumptions are met for risk-taking, innovativeness, and proactivity. However, the normality assumption for dependent

variables passion and perseverance are violated. The central limit theorem does not hold due to the limited group sample size. Hence, the Mann-Whitney-U test is conducted for variables passion and perseverance.

In table 6, the independent T-test finds no evidence at the 5% level ($\alpha = 0.05$) nor the 10 % level ($\alpha = 0.10$) that the dependent variables show statistically significant intergroup differences.

Independent Samples Test										
		Levene's Test for Equality of Variances				t-Test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	Lower
Risk-taking	Equal variances assumed	.001	.862	-.730	49	.469	-.17473	.23938	-.65575	.30629
	Equal variances not assumed			-.748	43.824	.459	-.17473	.23375	-.64588	.28642
Innovativeness	Equal variances assumed	.511	.478	.557	51	.580	.12612	.22628	-.32816	.58039
	Equal variances not assumed			.535	37.030	.596	.12612	.23567	-.35129	.60361
Proactivity	Equal variances assumed	.237	.628	-.248	51	.805	-.05308	.21387	-.49244	.37629
	Equal variances not assumed			-.249	43.214	.805	-.05308	.21348	-.49350	.37735

Table 6: Independent samples T-test risk-taking, innovativeness, and proactivity

In table 7, the conducted Mann-Whitney-U test finds a statistically significant intergroup difference for passion ($U = 213,500$, $p < 0.05$) at the 5% level ($\alpha = 0.05$), while the Mann-Whitney-U test finds no significant intergroup difference for perseverance ($U = 329,000$, $p > 0.05$).

Test Statistics ^a		Test Statistics ^a	
Perseverance		Passion	
Mann-Whitney U	329,000	Mann-Whitney U	213,500
Wilcoxon W	560,000	Wilcoxon W	444,500
Z	-.128	Z	-2,236
Asymp. Sig. (2-tailed)	.898	Asymp. Sig. (2-tailed)	.025

a. Grouping Variable: Function_Dummy

a. Grouping Variable: Function_Dummy

Table 7: Mann-Whitney-U test Perseverance and Passion

While addressing the research sub-question "How does IEO differ between intrapreneurs and entrepreneurs in SMEs?" along with its corresponding hypothesis (H2): "Entrepreneurs score significantly higher on risk-taking, innovativeness, proactivity, passion, and perseverance than intrapreneurs", our comparative analysis of the IEO characteristics between intrapreneurs and entrepreneurs within SME insurance brokers reveals a nuanced picture. The statistical tests that have been applied do not find support for a broad intergroup difference in risk-taking, innovativeness, proactivity, or perseverance (Appendix G – Results sub-question two). These findings challenge the hypothesis that intrapreneurs score significantly higher across all tested IEO dimensions. Interestingly, however, is that a

statistically significant difference was found for passion ($U = 213.500$, $p < 0.05$), where intrapreneurs score significantly higher on passion than entrepreneurs.

5.3 Effect of M&A on IEO

The results of the M&A are visually represented in appendix H. In terms of risk-taking and proactivity, the findings suggest that there are no significant changes after participating in a merger or acquisition.

However, there is a distinct shift noted in the sphere of innovation. While the capacity to innovate seems to remain, the focus seems to shift from a broad entrepreneurial perspective in the former situation to a narrower, organizationally provided back-office innovation in the new organization. One of the interview participants summarizes this finding very well: *“When you are a stand-alone insurance intermediary, you are not solely an insurance advisor. (...) Your job will also include HR, IT, bookkeeping, and administration. You cannot fall back on anything or anyone. Your self-sustainability and self-reliance are extremely high. However, when you join the group (the case study company, red.), you will let these parts of your job go as it will be centralized. You can focus on serving the customer. Hence, innovation arises in your customer care and efficiency”*.

The passion of the former entrepreneurs seems to remain consistent post-acquisition, albeit with a horizontal shift. One of the participants in the interviews mentioned: *“My passion remains unaffected at first glance. However, my passion has now shifted. Now that I can let things go, I have more time to go back to the roots of my passion; to focus on content”*. The passion seems to become more focused on their core interest areas, implying a potential realignment of their professional focus within the new organizational structure.

The issue of perseverance presented mixed results, with indications of perseverance remaining at the same level, decreasing, or even increasing in some instances. One of the participants mentioned: *“My perseverance has increased since the M&A. Due to the introduced organizational limitations I am*

experiencing restrictions, showing the need for me to be stubborn and be more perseverant”, while another quote shows the opposite: *“Now that I have sold my business partially, I have found more peace in just accepting things as how they are”*. This could be attributed to individual differences and personal adaptations to the new circumstances brought by the merger or acquisition.

Importantly, the results seem to point towards a perceived constraint on entrepreneurial activities due to the new organizational structure. While the core post-M&A problems do not directly relate to the five-factor model of Santos et al. (2020), this constraint appears to stem from organizational limitations, generalist approaches, and a lack of agility, autonomy, communication, and trust. These findings marginally suggest that some of the facets of IEO factors risk-taking and perseverance are affected as a result of the post-M&A organizational changes although not mentioned by the interview participants, as organizational culture is a statistically significant predictor of perseverance and autonomy is a statistically significant predictor of risk-taking.

When controlling for trust and communication, the results seem to change to some extent. However, there is not enough evidence to prove that communication and trust statistically influence the factors of IEO (Appendix I – Controlling IEO for communication and trust), as the statistical significance of communication and trust is low ($p > 0.10$). As there is no literature supporting the inclusion of the independent variables trust and communication to be included in the model and the lack of statistical significance, independent variables trust and communication are omitted from the model.

The case-study company seems to add value by facilitating innovation in back-office processes, but for these individuals to truly flourish as intrapreneurs, the findings suggest they require greater trust and autonomy. *“The group (the case-study company, red.) can provide a solution by providing human capital or automated processes distantly. (...) By doing this, time is created meaning there is more slack for us to be proactive and increase profitability”*, but this is

contradictory to how the case-study company is putting its strengths into practice: *"There are two kinds of trust, the first includes having access to someone's money while the second kind is the one where you have to ask for everything. In my experience, the second kind of trust is what we get. Although there is trust, it is not enough to express my entrepreneurial abilities"*.

While addressing the research sub-question *"In what way does participating in a merger or acquisition affect the IEO of entrepreneurs in SMEs who transition into intrapreneurs within the acquiring organization?"* along with its corresponding proposition (P1): *"As a post-M&A effect on former entrepreneurs an increase in risk-taking and a decline in innovativeness, proactivity, passion, and perseverance is expected in SMEs"*, it seems that the post-M&A environment in SMEs is complex. The risk-taking and proactivity of former entrepreneurs appear to remain unaffected. Regarding innovation, there appears to be a partial exclusion of innovation by the (former) entrepreneur, as back-office innovation is mostly excluded (Appendix H – Results sub-question three). In addition, there seems to be a discernible change in passion areas. Also, post-M&A effects on perseverance appear to vary widely, possibly indicating personal adaptation mechanisms that are at play as a response to the post-M&A environment.

6. Discussion

This study aims to identify how the factors that impact IEO differ between intrapreneurs and entrepreneurs. To answer this research question, the following three sub-questions are discussed.

1. *"What are the determining factors for IEO among SMEs?"*
2. *"How does IEO differ between intrapreneurs and entrepreneurs in SMEs?"*
3. *"In what way does participating in a merger or acquisition affect the IEO of entrepreneurs in SMEs who transition into intrapreneurs within the acquiring organization?"*

To answer the main research question, the sub-questions have been thoroughly analyzed. Grounded on extant literature, the findings of this research are generally surprising.

6.1 The determining factors of IEO

Existing literature has highlighted the effects of EO as it is linked to profitability, growth, sustainable performance, technological opportunism, innovation performance, and product innovation (Matos, 2021; Tang et al., 2008; Yadegaridehkordi et al., 2023; Cho & Lee, 2020; Urban and Maphumulo, 2021). While Hunt (2021) linked moderate levels of EO to generating positive returns for the acquiring firm, low and high levels of EO are linked to the destruction of value. However, this IEO is a multi-dimensional construct that has been constructed by five variables, risk-taking, innovativeness, proactivity, passion, and perseverance (Santos et al., 2020). This combination of drivers makes up the IEO construct (Niemann et al., 2022).

The existing body of literature indicates various factors that influence the five factors of IEO. Hypothesis one: *"The level of IEO among SMEs is significantly influenced by various context-related determinants"* was found to be partially supported by the results. In general, for every factor of IEO, there were none to a few independent variables showing enough evidence to significantly influence the model that rises from the literature.

Starting with risk-taking: education, the strength of decision-making, and autonomy were identified as significant predictors for the dependent variable risk-taking, which is one of the five core components of IEO. These results align with the established understanding that demographic factors like education equip individuals with the necessary knowledge to take calculated risks (Falk & Matulich, 1976). In addition, the strength of decision-making (Krueger & Dickson, 2007) is confirmed to statistically significantly influence the risk-taking of an individual, indicating the necessity of the ability to take decisions to be risk-taking. In a similar vein, autonomy is proven to influence the amount of risk-taking as well. It aligns with the sense of control engendered by autonomy and robust decision-making to enable individuals to plunge into uncertain waters (Horswill & McKenna, 1999). However, the other variables that are identified

in the existing body of literature to influence risk-taking lack evidence for statistical significance. This might imply that the propensity to take risks is more reliant on internal individual characteristics than external factors in this context.

Turning to innovativeness, which is another pillar of IEO, there is solely education that influences innovativeness as a significant determinant. This aligns with the belief that education stimulates the creativity of a person (Camelo-Ordaz et al., 2011). The insignificant influence of the other independent variables of the theoretical framework requires further exploration of the dynamism of IEO within SMEs.

Remarkably, the model provided by the theoretical framework did not show any significant determinants for proactivity in the tested sample, stressing the complexity of the IEO concept. While previous research has linked proactivity to leadership style and organizational culture (Martin et al., 2013; Wanberg & Kammeyer-Mueller, 2000), these determinants are found to be statistically insignificant in this study. This suggests that, in the context of SMEs, other factors that are not considered in this study potentially drive proactivity.

Passion is found to be statistically significantly influenced by the education level and the presence of role models, despite at a less stringent level ($\alpha = 0.10$). The impact that education makes on passion underscores the very importance of knowledge acquisition that contributes to fueling enthusiasm and excitement about one's work (Balon et al., 2013). Moreover, the presence of influencing role models within the organization highlights the need for inspirational figures to cultivate the passion of individuals within the organization. However, the literature indicates that demographic variables and self-esteem should significantly influence passion. Contrary to the findings from these studies, other demographical variables and self-esteem lacked significance in this study. These results imply the enhancement of passion by knowledge acquisition,

but strongly question the relationship between demographic variables or self-esteem with passion.

Lastly, organizational culture was found to be a significant predictor of perseverance. This finding aligns with the theory that supportive and encouraging work environments can stimulate persistency while working on demanding tasks. However, independent variables that are associated with perseverance, such as motivation and self-confidence, did not reach statistical significance.

Overall, the results of sub-question one indicate a set of specific determinants that reveal the intricate dynamics of IEO within SME insurance brokerages. It is noticeable that each dimension of IEO is influenced by a unique set of determinants, explicitly showing the multidimensional nature of IEO. As such, it would be imprudent to address IEO as a monolithic construct without taking into consideration the complexities that arise from its context. A plausible explanation for these findings is the organizational and industry-specific contexts Dutch SME insurance brokers are operating in. While most statistically significant predictor variables are unique and thus not recurring among the five factors of IEO, education is recurring in the context of risk-taking, innovativeness, and passion. The cause for unique statistically significant independent variables is hard to establish without more context. The repetition of education as a statistically significant predictor is noteworthy. This repetition of education as a statistically significant predicting variable is potentially explained by the education and qualification that is demanded to work as an insurance advisor in the Dutch insurance industry. While there is this absolute minimum education level before one may operate in the Dutch insurance industry, higher education may still lead to a better understanding, interpretation, and execution, explaining the relationship between higher education and higher IEO scores.

The results show that higher education is related to higher predictions of IEO factors risk-taking, innovativeness, and passion. These findings imply the

demand for higher education for a relatively better understanding of contexts, boosting IEO scores.

6.2 Comparative analysis between the IEO of entrepreneurs and intrapreneurs

The outcomes presented in this study were somewhat unexpected considering the existing body of literature. Sub-question two: *“How does IEO differ between intrapreneurs and entrepreneurs in SMEs?”* was hypothesized to be answered by (H2): *“Entrepreneurs score significantly higher on risk-taking, innovativeness, proactivity, passion, and perseverance than intrapreneurs”*, contrary to the findings of this study. The findings of this study show no evidence of significant differences between intrapreneurs and entrepreneurs in SMEs, except for passion.

These results support the research findings of Brockhaus (1980). There are no differences in risk-taking tendencies between entrepreneurs and intrapreneurs. While theory indicates the presence of intrapreneurs as a crucial factor for the prevention of lacking innovation in organizations, we found no evidence that intrapreneurs and entrepreneurs have different tendencies to innovate, hence our findings suggest that entrepreneurs and intrapreneurs exhibit similar levels of innovativeness and proactivity. These results are in contrast with the widely accepted notion that entrepreneurs possess greater innovative and proactivity skills.

Despite the widely accepted notion that entrepreneurs possess higher entrepreneurial skills than intrapreneurs, this study highlights that one does not outperform the other in terms of IEO, except for passion. The data showed a significant distinction between intrapreneurs and entrepreneurs when it comes to passion. Intrapreneurs are found to have significantly higher levels of passion. This is in line with the idea that intrapreneurs are driven by a commitment to the organization’s mission and vision, whereas the (former) entrepreneur sold his business.

Although the lack of statistically significant intergroup differences, the descriptive statistics of intrapreneurs

and entrepreneurs in SMEs provide important insights into IEO. Moderate levels of IEO have been linked to dampening the negative effects of M&A (Simpson & Sariol, 2022), suggesting to help mitigate the risk involved in M&A that eventually results in M&A failure. Looking at the descriptive statistics, the results show that the score of the five factors ranges between 5.0 and 5.8 on a seven-point Likert scale, indicating a higher than moderate tendency on IEO. Assuming this is true, this higher-than-moderate tendency entails a higher risk of not-dampening the negative effects of M&A (Simpson & Sariol, 2022). When assuming this is not true, either post-M&A negative effects are dampened when IEO scores are moderate or the risk of not-dampening post-M&A negative effects remains the same as IEO scores are lower than moderate.

This study underscores the complexity of intrapreneurial and entrepreneurial behavior in the SME insurance broker sector, where many smaller stand-alone businesses are taken over. The market is considered to be in a consolidation phase, stressing the importance of consciousness of intrapreneurial and entrepreneurial differences. The results show no difference between intrapreneurs and entrepreneurs, except for passion. This finding is not surprising and is potentially rooted in the characteristics of the dataset. The data subset of entrepreneurs is identified by entrepreneurs who have fully or partially sold their shares in the company, not without reason. This reason for fully or partially selling the shares in the company is expected to be related to the results of this study as passion is lower for the (former) entrepreneur. In addition, of primary interest are the higher than moderate scores on IEO. These higher-than-moderate scores enlarge the risk of not-dampening the post-M&A lack of performance but rather increase the risk of lacking post-M&A performance (Simpson & Sariol, 2022). Hence, the taking-over company needs to (re)assess the IEO capacities of hired intrapreneurs and entrepreneurs. Without this (re)assessment, the taking-over company is at risk of hiring intrapreneurs or (former) entrepreneurs with higher or lower than moderate IEO capacities, increasing the post-M&A risk of lacking performance.

6.3 Effect of M&A on IEO

The results as shown in this study nuance our understanding of the impact M&A has on the IEO of former entrepreneurs within SMEs. In contrast to the initial proposition: *“As a post-M&A effect on former entrepreneurs an increase in risk-taking and a decline in innovativeness, proactivity, passion, and perseverance are expected in SMEs”*, the outcome is more nuanced. The findings of this study show that it is the post-M&A environment that changes rather than the IEO of the (former) entrepreneur. The results show that the (former) entrepreneurs mention no change in their IEO perception, but feel limited due to the new organizations' characteristics.

The risk-taking and proactivity levels possessed by the former entrepreneurs did not appear to change post-M&A. This information is rather important to counter the general expectation of a reduced appetite for proactivity and risk in a post-M&A environment. The results suggest that the propensity of former entrepreneurs to take risks and proactively seek opportunities remains largely consistent as compared to pre-M&A.

However, the way innovativeness is expressed faces change. Whereas the (former) entrepreneur had to innovate on every aspect themselves, the newly formed organization provides innovation processes of which innovation on efficiency is most prevalent. This development contributes to the (former) entrepreneurs' focus on more stringent issues that require innovation. In other words, the taking-over company is a source where innovation takes place, creating a shift in the innovative area of attention of the (former) entrepreneur. This study's findings partially support the findings of Cloudt et al., 2006, who highlighted that M&A often leads to an ultimate decrease in innovation. This case study shows that there is a local decline in innovation, but reveals that process-related innovation is centralizing.

Passion was also found resilient to M&A, but noted a shift in focus. The former entrepreneur reports that the work they are passionate about is returning to them, rather than having to do tasks they have never liked to do but belonged to being an entrepreneur.

This, however, shows that although the passion of the entrepreneur is shifting or increasing, the results of sub-question two show that the passion of entrepreneurs is still significantly lower than that of their counterparts, the intrapreneurs.

The results for the IEO factor Perseverance were not consistent, indicating potential personal adaptations to the new circumstances brought on by the M&A. Whereas one adapts to show larger perseverance to reach goals, others just (partially) drop out.

A main comment on the post-M&A changes in IEO has shown to be the organizational restriction introduced by the M&A, according to the former entrepreneurs. Organizational limitations, generalist approaches, a lack of agility, and a lack of autonomy are profoundly mentioned as core limitations to expressing IEO in the newly formed, post-M&A, organizational landscape.

In addition, the former entrepreneurs mention autonomy, trust, and support of back-office processes as a core facility that they experience to contribute to post-M&A performance. These findings marginally suggest that some of the facets of IEO factors risk-taking and perseverance are affected as a result of the post-M&A organizational changes, as organizational culture is a statistically significant predictor of perseverance and autonomy is a statistically significant predictor of risk-taking. The found post-M&A organizational changes can potentially dampen the ability of (former) entrepreneurs to express IEO, despite their intrinsic intentions remaining unchanged. These results are not surprising. Whereas SMEs are generally characterized by lower bureaucracy, larger organizations often tend to introduce higher levels of bureaucracy and formality. The characteristics of bureaucracy and formality imply less agility and autonomy.

Overall, the results show that (former) entrepreneurs do not experience a change in IEO as an effect of M&A, with an exception for passion. However, a major implication experienced by (former) entrepreneurs is that it is not the change in IEO but rather the ability to express their IEO capacity that is a result of M&A. The newly formed organizational structure introduces

difficulties for the (former) entrepreneur in being agile and autonomous, supposed to arise from an increase in bureaucracy and formality.

6.4 Central research question

To come back to the central research question: *"How do the factors that impact entrepreneurial orientation differ between intrapreneurs and entrepreneurs in SMEs?"*, there is no unequivocal answer. The results and discussion imply that there is no universal theoretical framework for IEO that functions for every industry or company. However, the results of this study show statistical significance for predicting factors on IEO in SMEs. Although some predicting variables are found to statistically significantly influence IEO, no significant differences in IEO between entrepreneurs and intrapreneurs were found except for passion. The lack of statistically significant differences between intrapreneurs and entrepreneurs implies a large intergroup IEO equality. The results of this study furthermore lacked evidence for post-M&A effects on the IEO of the (former) entrepreneur but provided evidence for post-M&A effects on the ability to express IEO. These results show that it is rather the new organization that imposes new limitations on the practical expression of IEO.

7. Implications

7.1 Theoretical implications

The results of this study provide several theoretical contributions. First, this research extensively contributes to the existing body of literature on IEO by the investigation of determinants within SMEs, more specifically: Dutch SME insurance brokerages. The analyzed five dimensions; risk-taking, innovativeness, proactivity, passion, and perseverance are influenced by a specific set of deemed universal factors, while not all expected independent variables have shown statistical significance.

Furthermore, this study also revealed that there are no significant differences in IEO characteristics possessed by intrapreneurs and entrepreneurs, except for the passion of intrapreneurs. Contrary to the dominant belief that entrepreneurs have higher

entrepreneurial skills than entrepreneurs, the results of this study suggest that there is no significant intergroup difference concerning risk-taking, innovativeness, proactivity, and perseverance traits.

Lastly, the results of this study provide a nuanced perspective on the effects of M&A on IEO. The results provide evidence that the IEO traits of a person do not change, while the ability to put IEO traits into practice is influenced by M&A. These insights can lead to a more comprehensive theoretical framework that connects M&A, IEO, and organizational changes to gain a deeper understanding of the dynamics that are involved in M&A processes.

7.2 Practical implications

From a practical point of view, this study offers several insights. Within SMEs, education, decision-making strength, and autonomy play a crucial role in stimulating risk-taking behavior and innovativeness, which may be leveraged to nurture an organizational environment that promotes these factors, further enhancing risk-taking and innovativeness. This study provides reason for taking-over companies to provide an environment where these named facets can flourish controllably, as there is an indication of higher than moderate IEO scores. These higher-than-moderate scores are found to introduce risks of not-dampening negative post-M&A effects on firm performance.

Moreover, the absence of significant differences between intrapreneurs and entrepreneurs in the context of IEO demands reassessing the added value of, often expensive, employment of former entrepreneurs compared to intrapreneurs. Combined with the heightened passion of intrapreneurs, intrapreneurs can prove to be of more value than former entrepreneurs. This finding has significant implications on the perceived added value of the retainment of the former entrepreneur, which is perhaps more expensive than hiring an intrapreneur when considering and comparing pay and earnings. The findings imply that an intrapreneur is having the same entrepreneurial abilities but with higher passion. In other words, the acquiring company must rethink the added value of entrepreneurial involvement and

relate to the cost and profit ratio of this entrepreneurial involvement. In other words, intrapreneurs might lead to higher performance due to the same or higher levels of IEO, introducing a better cost and profit ratio. While this research mainly focuses on personal characteristics, external characteristics must be taken into account. It is not solely a person's characteristics, it is also the access to resources like networks and many other kinds of resources. In other words, this study only shows findings based on the differences of inputs in personal characteristics. This study recommends that future researchers use an approach that takes into account external networks and resources to gain a broader and clearer understanding of the role that external characteristics play in the assessment of the perceived benefit of employing former entrepreneurs.

Regarding M&A, this study indicates that post-M&A organizational changes limit the ability of former entrepreneurs to express IEO, despite the little impact the M&A has on their IEO. A strong piece of advice is to (re)design post-M&A integration processes in a way that dampens the organizational limitations and its general, in-agile approaches and to enhance autonomy and maintain trust while creating a more efficient back-office process. To incorporate this advice, the M&A process must be reformed to focus more on the specific needs and talents of the to-be-integrated subsidiary and to find possibilities to put these needs and talents into practice. In this journey, mutual trust can arise which provides the core fundament for autonomy and incorporating more agile processes, both leading to a better expression of IEO. While doing so, transparency and effective communication are proposed as an effective mechanism to incorporate back-office processes which are referred to as a strength. In conclusion, the insights of this study support decision-making processes related to M&A and post-M&A integration.

7.3 Directions for future research

This study provides a fundamental understanding for future research in several directions. First, future studies can contribute to the literature by exploring all predicting variables of the five dimensions of IEO.

This would result in a better prediction of IEO, enhancing the explained variance by the models of this study.

Secondly, the heightened passion amongst intrapreneurs that has been discovered in this study provides a viable ground for future research. It deeply questions the drivers of entrepreneurs and intrapreneurs, future research could explore what fuels this passion and how it can be used by organizations.

Third, this study provides ground for future research on M&A strategies. The results of this study show that the strategies involved in M&A can result in an environment where personal abilities cannot fully flourish. Hence, future research on the post-M&A impact on the ability to express personal strengths is recommended.

Finally, this study focused on intrapreneurs without entrepreneurial experience and entrepreneurs who have fully or partially sold their shares in their company. Future research should also focus on entrepreneurs of stand-alone SMEs who have not sold their shares to isolate differences between entrepreneurs who were willing to (partially) sell their shares as opposed to entrepreneurs not willing to (partially) sell shares, possibly including other countries or industries to provide further insights into the universality of this study's findings.

8. Limitations

This study faced several limitations which have a potential impact on the research's reliability, validity, and generalizability.

The first challenge encountered is the sample size of the analysis. The relatively small sample size of 53 participants limited the statistical power of the research. The relatively small sample size impeded the ability to draw more significant conclusions about distinct groups. The limited sample size also prohibited a check of all independent variables on each factor of IEO to look for possible significant predictors for the model that have not been brought up by literature yet.

Second, the research design inherently brings limitations. This study provides in-depth and context-specific insights, leading to a potential compromise on the generalizability of findings. The ‘entrepreneurs’ that are referred to in this study have partially or fully sold their shares in the previous stand-alone SME insurance intermediary, potentially influencing the results due to the presence of a specific sub-sample of entrepreneurs. Furthermore, this study did not include a time-series analysis, limiting the understanding of a potential time and cause-effect relationship.

Third, bias is introduced as this research is conducted as a case study as data of only one company consisting of several subsidiaries are analyzed in this study. Hence, broad generalization of findings across different companies or industries might prove to be difficult. Future research could aim to explore a broader diversity of companies to help validate and generalize findings.

At last, the nature of this research made the results prone to social desirability bias due to the obtrusive nature of the study. It is recommended that future studies consider these biases and design measures to mitigate these effects.

9. Conclusion

This study identified and compared the distinctive drivers of IEO in and between intrapreneurs and entrepreneurs in SMEs by using a mixed-methods approach. The results of this study provide new insights into the impacting factors of IEO, differences between entrepreneurs and intrapreneurs, and the effects of M&A on IEO.

Our case study exploration of IEO determinants among a SME insurance broker found that the level of IEO is significantly influenced by several factors. The most prominent factors that have been found to influence IEO are education, strength of decision-making, autonomy, and organizational culture. Each factor of IEO – risk-taking, innovativeness, proactivity, passion, and perseverance – is influenced by a unique set of determinants where deviance is acknowledged between theory and practice within SMEs. The

findings underscore that existing models do not fully capture all variables that significantly influence IEO.

Contrary to the hypothesis that intrapreneurs would score higher on the IEO dimension than entrepreneurs, this study has found negligible inter-group differences between intrapreneurs and entrepreneurs, with an exception for passion. The passion of intrapreneurs is statistically significantly higher, supporting the idea that intrapreneurs are driven by their commitment to the organization’s mission and vision. Nevertheless, the results of this study challenge the prevailing assumption of entrepreneurs being in the possession of greater skills, which could provide fertile ground for future research to further investigate the underlying reasons for similarities and differences.

The impact of M&A on IEO showed nuanced results. The initial hypothesis expected a post-M&A decline in IEO, while the study found a contrasting result indicating IEO remained mostly consistent post-M&A. However, there is a strong indication that M&A imposes organizational restrictions that limit the expression of IEO of the former entrepreneur. This highlights the need for the taking over company to foster an environment that supports the entrepreneurial drive of the acquired company, to prevent the dampening of positive post-M&A effects.

In conclusion, this study underscores the complexity of IEO within SMEs encountering consolidation, and the need to enhance environments that stimulate IEO in a post-M&A landscape. This study shows differences and similarities between intrapreneurs and entrepreneurs, and the factors that impact them, which are key insights to enhance IEO in SMEs. The insights acquired by this study provide viable ground to reshape policies and practices that drive the IEO environment for SME Brokerages in the Netherlands and beyond.

10. Recommendations

Pre-M&A, major cultural changes are recommended to be incorporated into the taking-over company. An agile and autonomous work environment should be fostered, encouraging agility and flexibility in

responding to changes and is expected to vacate the organizational limitations in the expression of IEO. Within this context, employees will experience more freedom and flexibility to explore new ideas, make decisions, and respond quickly to market opportunities, empowering autonomy and proactivity.

During the M&A trajectory, identifying the IEO scores of the former entrepreneur before integration is fundamental to assess a potential mismatch between the expected moderate levels of IEO or to prevent a lack of passion within the newly formed organization. Of great importance is assessing the passion and motivation of the former entrepreneur, which must be carefully assessed. Based on this passion and motivation analysis, provide opportunities to the former entrepreneur that specifically fits this person's range of passion. By doing so, the passion and thus the (IEO) performance of the former entrepreneur is expected to increase.

Additionally, a strong recommendation for relatively easy improvements is to make better use of the perceived strengths of the M&A during the M&A trajectory. For example, the centralization and innovation on back-office processes to increase efficiency is perceived as very valuable, and is recommended to incorporate as soon as possible in the M&A trajectory.

A post-M&A recommendation is to provide proper education and, most prominently, proper guidance. As this study found an indication that IEO scores are found to be generally higher than moderate, but also when IEO scores appear to be lower than moderate, education and guidance provide proper tools to reduce the risk of not-dampening the negative effects of post-M&A performance and give integration managers more control on post-M&A performance and risk.

As it is considered an impactful incorporation with an expected large effect on risks and post-M&A performance, it is advised to start with incorporating the assessment of IEO scores and assess needs. This is to be followed by the provision of customized work

environments where needed to enhance passion and thus performance. In addition, the IEO scores are directly of use to assess whether or not the (former) entrepreneur or intrapreneur is in need of education or guidance, limiting the risk of not dampening post-M&A negative effects on performance.

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Appendix A – Questionnaire

The independent influencing variables are solely based on the framework as provided in Figure 2. The level of entrepreneurship is measured as provided in the measurement model of Santos et al. (2020).

Code	Question	Answer range		
Introductory questions (influencing variables)				
Age	What is your age?	Open question (0 when rather not told)		
Feelings	How are you feeling today?	1, bad	To	7, perfectly fine
Gender	What is your gender?	Male, Female, other		
Marital_status	What is your marital status?	Single, Married, Living together with partner		
Education	What is your highest achieved educational level?	Elementary school, high school, MBO, bachelor, master, other, none		
Income	What is your income?	Open question (zero when rather not told)		
Work_experience	How many years did you work in the same or comparable role?	Open question (99 when rather not told)		
Motivation	How motivated do you feel at work?	1, absolutely not	To	7, absolutely
Self_esteem	Do you believe you are inferior to other in the organization?	1, absolutely not	To	7, absolutely
Country_Born	What country(ies) have you lived in longer than 5 years?	Open question		
Convidence	I am convinced I can successfully fulfill my job	1, absolutely not	To	7, absolutely
Role_models	The organization provides role models to me	1, absolutely not	To	7, absolutely
Psychological_state	How have you been feeling lately?	1, very unhappy		7, very happy
Substantive questions, rather generic (influencing variables)				
Strength_decisionmaking	Are you strong in making decisions?	1 (absolutely not)	To	7 (absolutely)
Incentives	Do you get any additional bonuses?	Yes/ no/ rather not say		
Market	How challenging is the current market?	1 (very challenging)	To	7 (not challenging at all)
Results	What was the EBIT of the subsidiary you are responsible for?	Open numerical question		
Central questions, dependent variable				

R1	I like to venture into the unknown and make risky decisions	1 (strongly disagree)	to	7 (strongly agree)
R2	I am willing to invest a great deal of time and/or money into something that can give high returns	1 (strongly disagree)	to	7 (strongly agree)
R3	I tend to act boldly in risky situations	1 (strongly disagree)	to	7 (strongly agree)
I1	I often like to try new and unusual activities	1 (strongly disagree)	to	7 (strongly agree)
I2	In general, I prefer a strong emphasis on innovative approaches rather than previously tested and used approaches.	1 (strongly disagree)	to	7 (strongly agree)
I3	I prefer, when I learn something new, to try to do it my way than to do it like everyone else does.	1 (strongly disagree)	to	7 (strongly agree)
I4	I am in favour of trying out new approaches to problem solving rather than using methods that others often use.	1 (strongly disagree)	to	7 (strongly agree)
PR1	I usually act in anticipation of future problems, needs or changes.	1 (strongly disagree)	to	7 (strongly agree)
PR2	I tend to plan projects in advance	1 (strongly disagree)	to	7 (strongly agree)
PR3	I would rather get up and put projects in motion than sit around waiting for someone else to do it	1 (strongly disagree)	to	7 (strongly agree)
PA1	I have a passion for finding good business opportunities, developing new products or services, exploiting business applications and creating new solutions for existing problems and needs.	1 (strongly disagree)	to	7 (strongly agree)
PA2	I am passionate about the process of gathering the financial, human and social resources (e.g. contacts and partnerships) needed to create a new business.	1 (strongly disagree)	to	7 (strongly agree)
PA3	I have a passion for envisioning, growing and expanding my business.	1 (strongly disagree)	to	7 (strongly agree)

PA4	I am passionate about what I do, and, when I am away from my business, I cannot wait to return	1 (strongly disagree)	to	7 (strongly agree)
PE1	I have achieved goals that took me some time to reach.	1 (strongly disagree)	to	7 (strongly agree)
PE2	I have overcome setbacks to meet major challenges.	1 (strongly disagree)	to	7 (strongly agree)
PE3	I always finish what I start.	1 (strongly disagree)	to	7 (strongly agree)
PE4	Setbacks do not discourage me	1 (strongly disagree)	to	7 (strongly agree)
PE5	In many complex situations, I persist in achieving my goals despite seeing others give up.	1 (strongly disagree)	to	7 (strongly agree)

Appendix B – Semi-structured interview guide

Goal: "Explore the experienced factors that changed risk-taking, innovativeness, proactivity, passion, and perseverance"

Required materials: None

1. Welcome
 - i. Short introduction of researcher, participant, and consent
 - ii. Introduction to the research topic
 - iii. Consent for recording & processing
2. Questions
 - a. Introduction of participant
 - b. Conduct the questionnaire verbally (only the central questions) and add the following follow-up questions:
 - i. Was there anything that changed during M&A that influenced your risk-taking?
 1. What are the causes of the change? Or, why was there no change?
 2. Is there anything that the case-study company can do to better the environment for risk-taking?
 - ii. Was there anything that changed during the M&A that influenced your innovativeness?
 1. What are the causes of the change? Or, why was there no change?
 2. Is there anything that the case-study company can do/ could have done to improve the environment for innovativeness?
 - iii. Was there anything that changed during the M&A that influenced your proactivity?
 1. What are the causes of the change? Or, why was there no change?
 2. Is there anything that the case-study company can do/ could have done to improve the environment for proactive behavior?
 - iv. Was there anything that changed during the M&A that influenced your passion?
 1. What are the causes of the change? Or, why was there no change?
 2. Is there anything that the case-study company can do/ could have done to improve your passion?
 - v. Was there anything that changed during the M&A that influenced your perseverance?
 1. What are the causes of the change? Or, why was there no change?
 2. Is there anything that the case-study company can do/ could have done to improve your passion?
 - c. Test the questions related to the independent variables+ ask about organizational identification
3. Candidate questions
 - i. Are there any questions that you want to ask me?
 - ii. Is there anything left you want to add to the conversation?
4. Reflection
 - i. Were there any difficulties understanding the questions?
 - ii. What are some tips/ tops?
5. Wrap-up

Thank you again for participating in this interview. The interview will be transcribed and sent to you for confirmation. Results will be anonymized and confidential.

Appendix C – Descriptive statistics dependent variable

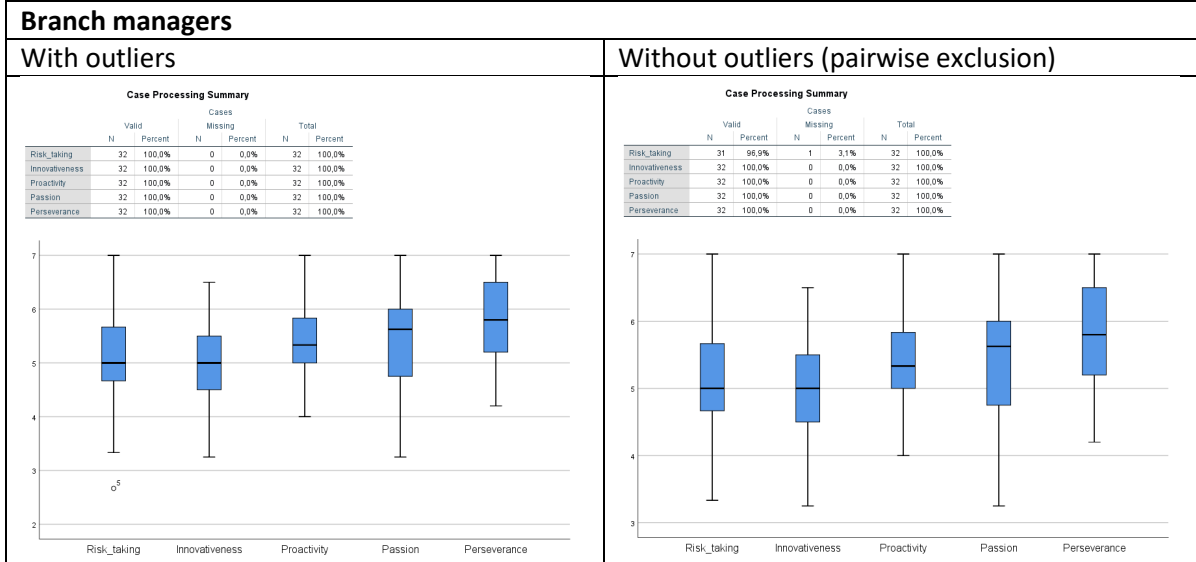
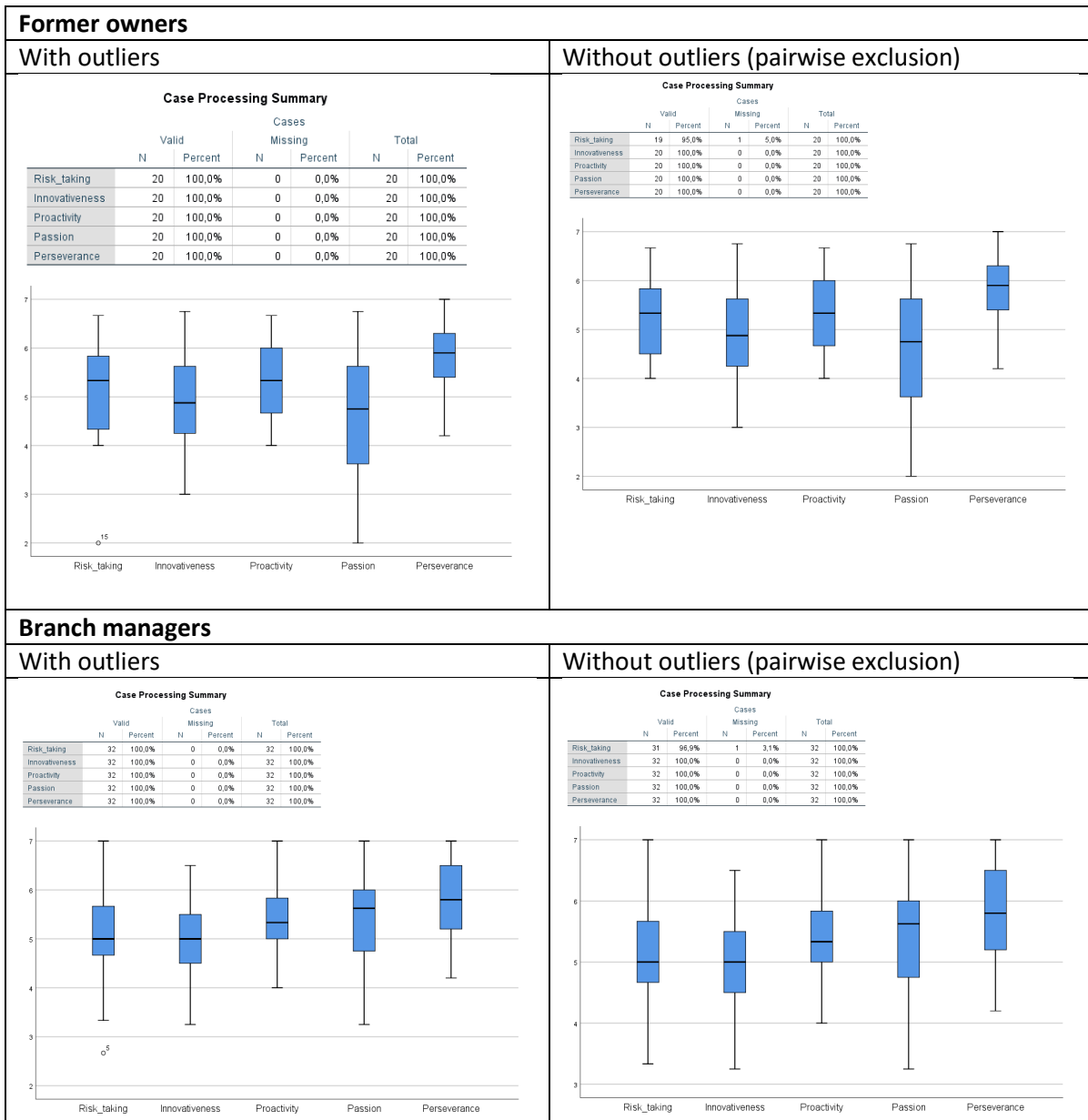
First, the descriptive statistics of the dependent variable are shown. The five factors of IEO are measured using the questionnaire as provided by the research of Santos et al. (2020). After computing the variables into the score represented by the five factors, the results are controlled for outliers. The last table shows the descriptive statistics without outliers.

Descriptive statistics

With outliers						
Descriptive Statistics						
	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
R1	53	2	7	4,91	,162	1,181
R2	53	2	7	5,19	,148	1,075
R3	53	2	7	5,02	,163	1,185
I1	53	2	7	5,11	,163	1,187
I2	53	2	6	4,58	,141	1,027
I3	53	2	7	5,08	,145	1,053
I4	53	2	7	5,25	,145	1,054
PR1	53	3	7	5,32	,145	1,052
PR2	53	3	7	5,08	,150	1,089
PR3	53	3	7	5,70	,144	1,049
PA1	53	2	7	5,19	,191	1,388
PA2	53	1	7	5,02	,206	1,500
PA3	53	3	7	5,70	,141	1,030
PA4	53	1	7	4,53	,203	1,475
PE1	53	1	7	5,75	,155	1,125
PE2	53	3	7	5,96	,159	1,160
PE3	53	3	7	5,68	,149	1,088
PE4	53	3	7	5,77	,125	,912
PE5	53	4	7	5,85	,122	,886
Risk_taking	51	3,33	7,00	5,1438	,11632	,83068
Innovativeness	53	3,00	6,75	5,0047	,10994	,80038
Proactivity	53	4,00	7,00	5,3648	,10366	,75466
Passion	53	2,00	7,00	5,1085	,15380	1,11966
Perseverance	53	4,20	7,00	5,8038	,10356	,75395
Valid N (listwise)	51					

Descriptive statistics former owners							Descriptive statistics branch managers						
Descriptive Statistics							Descriptive Statistics						
	N	Minimum	Maximum	Mean		Std. Deviation		N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic		Statistic	Statistic	Statistic	Std. Error	Statistic	
R1	21	2	7	5,05	,234	1,071	R1	32	2	7	4,81	,222	1,256
R2	21	2	7	5,14	,287	1,315	R2	32	3	7	5,22	,160	,906
R3	21	2	7	5,10	,238	1,091	R3	32	2	7	4,97	,222	1,257
I1	21	2	7	5,05	,271	1,244	I1	32	2	7	5,16	,206	1,167
I2	21	2	6	4,43	,202	,926	I2	32	2	6	4,69	,193	1,091
I3	21	3	7	4,95	,223	1,024	I3	32	2	7	5,16	,191	1,081
I4	21	4	7	5,29	,209	,956	I4	32	2	7	5,22	,199	1,128
PR1	21	4	7	5,48	,214	,981	PR1	32	3	7	5,22	,194	1,099
PR2	21	3	6	5,14	,261	1,195	PR2	32	3	7	5,03	,182	1,031
PR3	21	3	7	5,57	,235	1,076	PR3	32	3	7	5,78	,184	1,039
PA1	21	2	7	4,76	,337	1,546	PA1	32	2	7	5,47	,215	1,218
PA2	21	1	7	4,38	,405	1,857	PA2	32	3	7	5,44	,185	1,045
PA3	21	3	7	5,33	,242	1,111	PA3	32	4	7	5,94	,162	,914
PA4	21	1	6	4,10	,365	1,670	PA4	32	2	7	4,81	,226	1,281
PE1	21	1	7	5,67	,303	1,390	PE1	32	4	7	5,81	,165	,931
PE2	21	3	7	5,86	,287	1,315	PE2	32	4	7	6,03	,188	1,062
PE3	21	4	7	5,76	,153	,700	PE3	32	3	7	5,62	,228	1,289
PE4	21	4	7	5,81	,190	,873	PE4	32	3	7	5,75	,168	,950
PE5	21	4	7	5,86	,186	,854	PE5	32	4	7	5,84	,163	,920
Risk_taking	20	4,00	6,67	5,2500	,17417	,77893	Risk_taking	31	3,33	7,00	5,0753	,15590	,86799
Innovativeness	21	3,00	6,75	4,9286	,19605	,89841	Innovativeness	32	3,25	6,50	5,0547	,13078	,73981
Proactivity	21	4,00	6,67	5,3968	,16526	,75733	Proactivity	32	4,00	7,00	5,3438	,13511	,76428
Passion	21	2,00	6,75	4,6429	,27580	1,26385	Passion	32	3,25	7,00	5,4141	,16096	,91053
Perseverance	21	4,20	7,00	5,7905	,16064	,73614	Perseverance	32	4,20	7,00	5,8125	,13735	,77699
Valid N (listwise)	20						Valid N (listwise)	31					

Outlier check



Descriptive statistics corrected for outliers

(Former) entrepreneurs, computed scores										
Descriptive Statistics										
	N	Minimum	Maximum	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Risk_taking	20	4,00	6,67	5,2500	,17417	,77893	-,105	,512	-,876	,992
Innovativeness	21	3,00	6,75	4,9286	,19605	,89841	,078	,501	,031	,972
Proactivity	21	4,00	6,67	5,3968	,16526	,75733	,023	,501	-,878	,972
Passion	21	2,00	6,75	4,6429	,27580	1,26385	-,435	,501	-,674	,972
Perseverance	21	4,20	7,00	5,7905	,16064	,73614	-,676	,501	,142	,972
Valid N (listwise)	20									

Intrapreneurs, computed scores										
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Descriptive Statistics

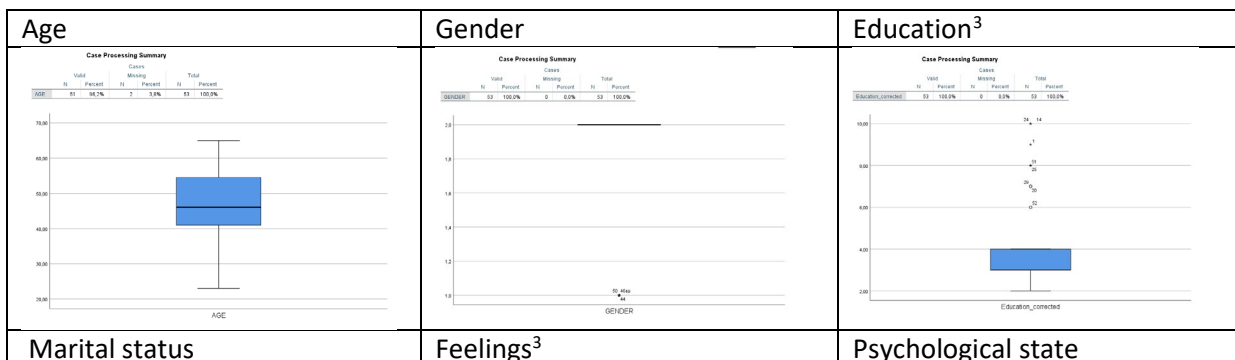
	N Statistic	Minimum Statistic	Maximum Statistic	Mean		Std. Deviation Statistic	Skewness		Kurtosis	
				Statistic	Std. Error		Statistic	Std. Error	Statistic	Std. Error
Risk_taking	31	3,33	7,00	5,0753	,15590	,86799	,074	,421	,428	,821
Innovativeness	32	3,25	6,50	5,0547	,13078	,73981	-,371	,414	,084	,809
Proactivity	32	4,00	7,00	5,3438	,13511	,76428	,370	,414	-,183	,809
Passion	32	3,25	7,00	5,4141	,16096	,91053	-,560	,414	-,013	,809
Perseverance	32	4,20	7,00	5,8125	,13735	,77699	-,448	,414	-,766	,809
Valid N (listwise)	31									

Appendix D – Descriptive statistics independent variables

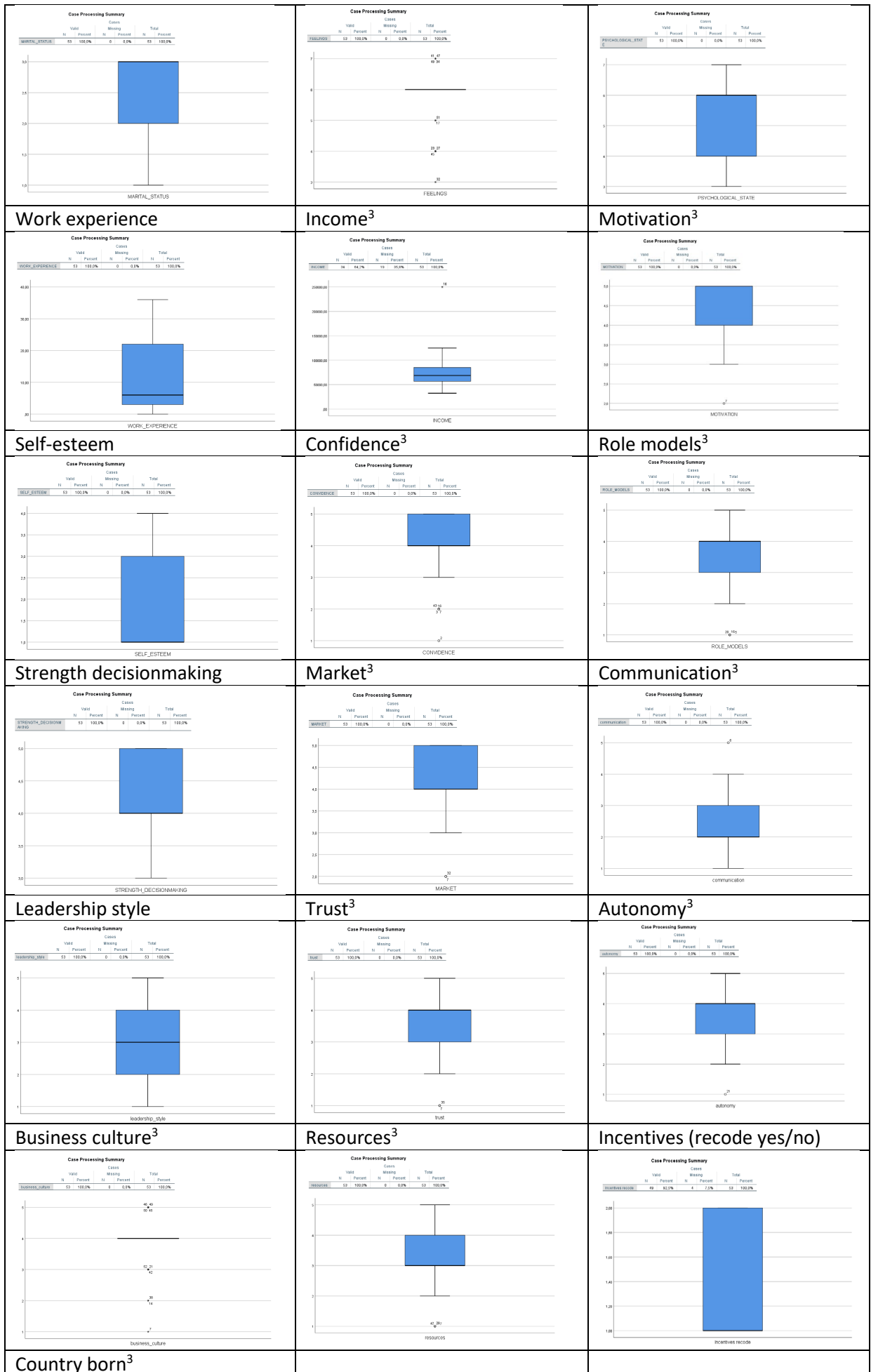
Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Age	51	23,00	65,00	46,3725	1,43594	10,25468
Gender	53	1	2	1,87	,047	,342
Education_corrected	53	2,00	10,00	4,0943	,25594	1,86325
Marital_status	53	1	3	2,53	,096	,696
Psychological_state	53	3	7	5,32	,142	1,034
Function_dummy	53	1,00	2,00	1,3962	,06783	,49379
Work_experience	53	,00	36,00	12,4811	1,64171	11,95181
Motivation	53	2	5	4,66	,089	,649
Self_esteem	53	1	4	1,75	,142	1,036
Convidence	53	1	5	4,19	,138	1,001
Role_models	53	1	5	3,45	,141	1,030
Strength_decisionmaking	53	3	5	4,36	,081	,591
Market	53	2	5	4,13	,101	,735
Communication	53	1	5	2,53	,139	1,012
Leadership_style	53	1	5	2,98	,160	1,168
Trust	53	1	5	3,74	,145	1,059
Autonomy	53	1	5	3,53	,139	1,012
Organizational_culture	53	1	5	3,94	,119	,864
Resources	53	1	5	3,19	,132	,962
Incentives	53	1	4	1,57	,095	,694
Country_born	53	1	2	1,98	,019	,137
Risk_taking	51	3,33	7,00	5,1438	,11632	,83068
Innovativeness	53	3,00	6,75	5,0047	,10994	,80038
Proactivity	53	4,00	7,00	5,3648	,10366	,75466
Passion	53	2,00	7,00	5,1085	,15380	1,11966
Perseverance	53	4,20	7,00	5,8038	,10356	,75395
Valid N (listwise)	49					

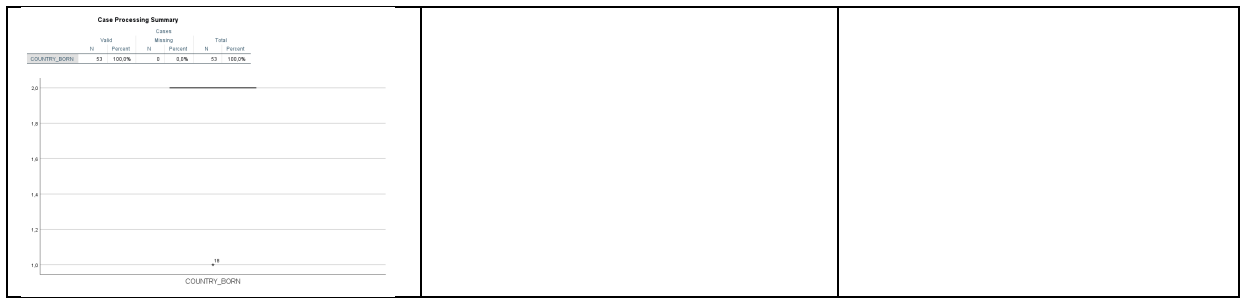
Descriptive statistics former owners							Descriptive statistics branch managers						
Descriptive Statistics							Descriptive Statistics						
	N	Minimum	Maximum	Mean	Std. Deviation	Std. Deviation		N	Minimum	Maximum	Mean	Std. Deviation	Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic		Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
Age	21	43,00	65,00	54,0952	1,24385	5,70004	Age	30	23,00	58,00	40,9667	1,68801	9,24563
Gender	21	2	2	2,00	,000	,000	Gender	32	1	2	1,78	,074	,420
Education_corrected	21	2,00	10,00	4,5714	,55451	2,54109	Education_corrected	32	3,00	8,00	3,7812	,20933	1,18415
Marital_status	21	1	3	2,76	,136	,625	Marital_status	32	1	3	2,38	,125	,707
Psychological_state	21	4	7	5,33	,211	,966	Psychological_state	32	3	7	5,31	,193	1,091
Function_dummy	21	2,00	2,00	2,0000	,00000	,00000	Function_dummy	32	1,00	1,00	1,0000	,00000	,00000
Work_experience	21	1,00	36,00	21,5952	2,36281	10,82776	Work_experience	32	,00	32,00	6,5000	1,48718	8,41274
Motivation	21	2	5	4,67	,174	,796	Motivation	32	3	5	4,66	,096	,545
Self_esteem	21	1	4	1,81	,235	1,078	Self_esteem	32	1	4	1,72	,181	1,023
Convidence	21	1	5	3,90	,275	1,261	Convidence	32	2	5	4,37	,133	,751
Role_models	21	1	4	2,81	,214	,981	Role_models	32	2	5	3,88	,147	,833
Strength_decisionmaking	21	3	5	4,43	,130	,598	Strength_decisionmaking	32	3	5	4,31	,105	,592
Market	21	2	5	3,95	,176	,805	Market	32	2	5	4,25	,119	,672
Communication	21	1	5	2,33	,232	1,065	Communication	32	1	4	2,66	,172	,971
Leadership_style	21	1	5	2,71	,277	1,271	Leadership_style	32	1	5	3,16	,191	1,081
Trust	21	1	5	3,67	,261	1,197	Trust	32	1	5	3,78	,172	,975
Autonomy	21	1	5	3,48	,264	1,209	Autonomy	32	2	5	3,56	,155	,878
Organizational_culture	21	1	5	3,76	,217	,995	Organizational_culture	32	2	5	4,06	,134	,759
Resources	21	1	5	3,29	,220	1,007	Resources	32	1	5	3,13	,166	,942
Incentives	21	1	4	1,95	,146	,669	Incentives	32	1	3	1,31	,105	,592
Country_born	21	2	2	2,00	,000	,000	Country_born	32	1	2	1,97	,031	,177
Risk_taking	20	4,00	6,67	5,2500	,17417	,77893	Risk_taking	31	3,33	7,00	5,0753	,15590	,86799
Innovativeness	21	3,00	6,75	4,9286	,19605	,89841	Innovativeness	32	3,25	6,50	5,0547	,13078	,73981
Proactivity	21	4,00	6,67	5,3968	,16526	,75733	Proactivity	32	4,00	7,00	5,3438	,13511	,76428
Passion	21	2,00	6,75	4,6429	,27580	1,26385	Passion	32	3,25	7,00	5,4141	,16096	,91053
Perseverance	21	4,20	7,00	5,7905	,16064	,73614	Perseverance	32	4,20	7,00	5,8125	,13735	,77699
Valid N (listwise)	20						Valid N (listwise)	29					

Outlier check



³ The leverage points in the independent (control) variables are neglected as they are deemed to represent true outliers.





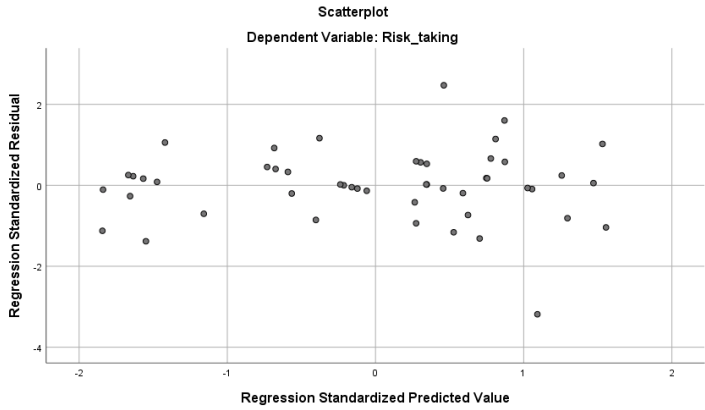
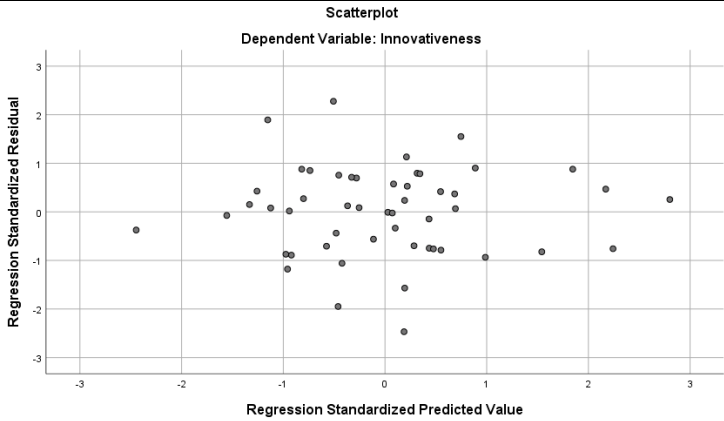
Appendix E - Assumptions

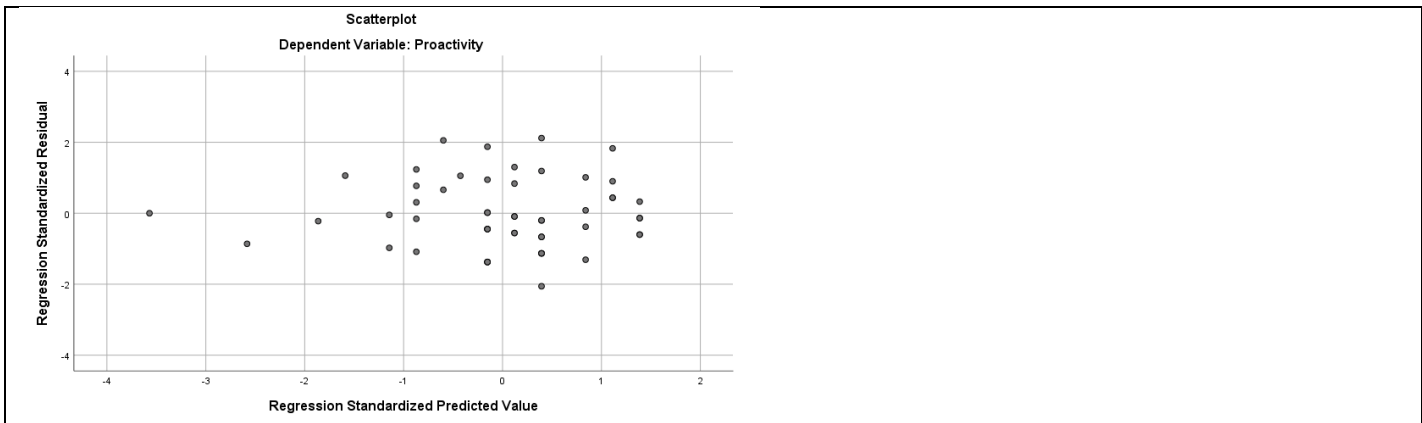
Hypothesis number: one

Measured by: multiple regression

Assumptions:

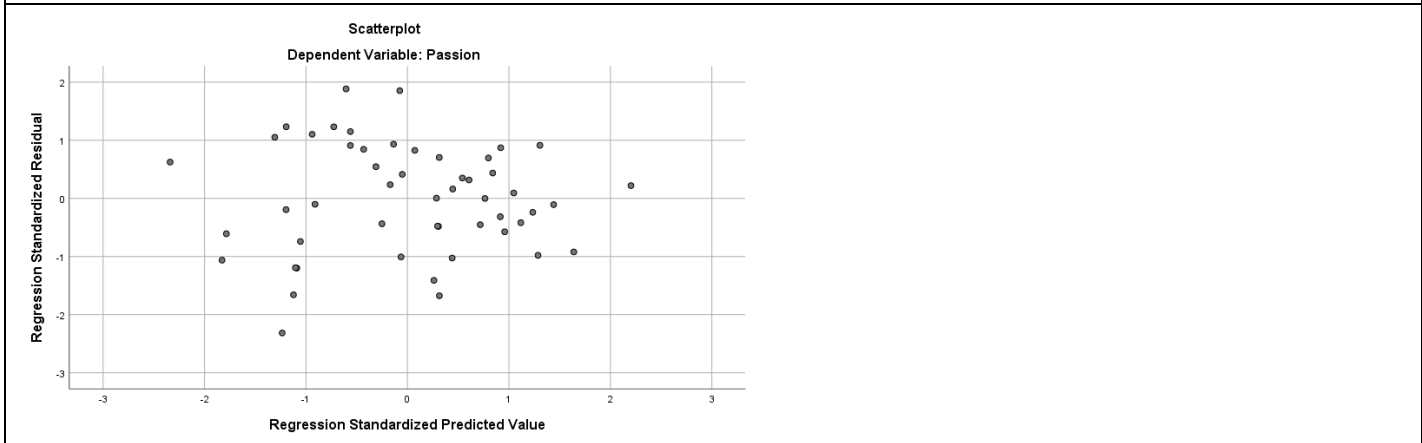
1. Dependent variable scale – the data needs to be measured as a scale variable; Assumption one is met due to the use of the Likert-scale. The problem that arises when using ordinal data in regression, being that the distance between points is unclear, is disregarded by using the Likert-scale consequently.
2. Linear relationship - checked by scatter plots and partial regression plots and;
3. Constant variance of the error terms, checked by homoscedasticity of the error terms;
4. Uncorrelated error terms. The uncorrelatedness of the error terms;

Risk-taking

Conclusion linearity: The results indicate linearity Conclusion homoscedasticity: The results look approximately homoscedastic Conclusion correlation of error terms: The error terms are not correlated
Innovativeness

Conclusion: The results indicate linearity Conclusion homoscedasticity: The results look approximately homoscedastic Conclusion correlation of error terms: The error terms are not correlated
Proactivity



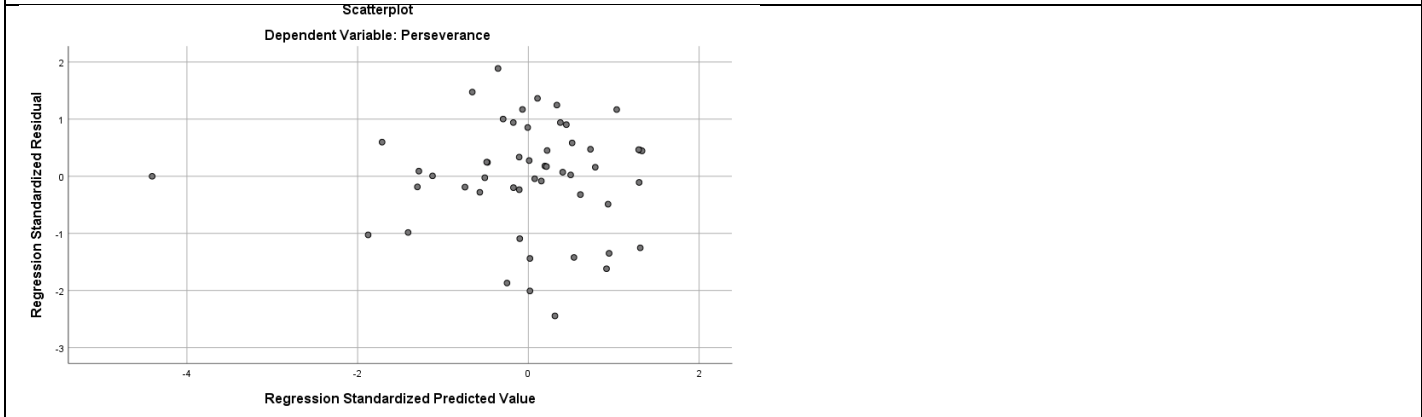
Conclusion: The results indicate linearity
 Conclusion homoscedasticity: The results look approximately homoscedastic
 Conclusion correlation of error terms: The error terms are not correlated

Passion



Conclusion: The results indicate linearity
 Conclusion homoscedasticity: The results look approximately homoscedastic
 Conclusion correlation of error terms: The error terms are not correlated

Perseverance



Conclusion: The results indicate linearity
 Conclusion homoscedasticity: The results look approximately homoscedastic
 Conclusion correlation of error terms: The error terms are not correlated

- 5. Independence of the error terms, which is hard to check. This study assumes uncorrelatedness of the error terms;
- 6. No perfect multicollinearity, measured by the VIF value;

Risk-taking

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Coefficients Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-.830	1.814		-.017	.987	-3.702	3.642		
	Age	-.012	.012	-.146	-.955	.345	-.036	.013	.569	1.757
	Gender	.424	.318	.184	1.331	.191	-.221	1.069	.701	1.427
	Education_corrected	.114	.003	.260	2.141	.039	.006	.222	.908	1.102
	Marital_status	.088	.157	.076	.558	.580	-.231	.406	.710	1.408
	Strength_decisionmaking	.852	.181	.452	3.601	.001	.385	1.018	.846	1.182
	Psychological_state	-.008	.104	-.010	-.075	.940	-.218	.202	.727	1.375
	Country_born	.008	.678	-.001	-.012	.991	-1.379	1.364	.948	1.054
	Autonomy	.217	.122	.248	2.271	.029	.030	.324	.570	1.154
	Incentives	.137	.148	.114	.931	.358	-.161	.436	.086	1.129
	Organizational_culture	.061	.140	.065	.433	.667	-.223	.344	.591	1.691

a. Dependent Variable: Risk_taking

Collinearity Diagnostics ^a												
Model	Dimension	Eigenvalue	Condition Index	(Constant)	Age	Gender	Education_corrected	Marital_status	Variance Proportions		Organizational_culture	
									Strength_decisionmaking	Psychological_state		Country_born
1	1	10.483	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.182	7.570	.00	.00	.00	.49	.00	.00	.01	.00	.03
	3	.145	8.851	.00	.00	.00	.28	.00	.00	.00	.00	.04
	4	.116	9.456	.00	.04	.01	.07	.15	.00	.00	.00	.07
	5	.052	14.111	.00	.06	.04	.03	.44	.02	.03	.00	.09
	6	.029	18.904	.00	.09	.05	.00	.03	.04	.43	.00	.34
	7	.026	19.884	.00	.00	.22	.00	.17	.00	.13	.00	.24
	8	.019	23.354	.00	.48	.49	.02	.04	.08	.00	.11	.00
	9	.016	25.440	.01	.21	.01	.09	.03	.14	.34	.06	.08
	10	.009	33.853	.03	.10	.14	.00	.11	.70	.04	.15	.03
	11	.002	74.191	.96	.01	.03	.00	.03	.02	.02	.77	.00

a. Dependent Variable: Risk_taking

Conclusion: The presented VIF-values are lower than 5.0, indicating that there are no signs of perfect multicollinearity.

Innovativeness

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Coefficients Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3.858	1.247		3.093	.004	1.341	6.376		
	Age	-.002	.015	-.031	-.159	.874	-.033	.028	.561	1.782
	Gender	-.002	.426	-.001	-.005	.996	-.862	.858	.630	1.587
	Education_corrected	.137	.066	.316	2.087	.043	.005	.269	.916	1.091
	Marital_status	-.027	.185	-.023	-.146	.884	-.400	.346	.818	1.223
	Autonomy	-.023	.153	-.029	-.149	.883	-.331	.286	.563	1.776
	Market	.064	.165	.059	.390	.699	-.269	.397	.905	1.105
	Leadership_style	.062	.163	.090	.381	.705	-.266	.390	.374	2.674
	Resources	.124	.175	.150	.711	.481	-.229	.477	.471	2.125

a. Dependent Variable: Innovativeness

Collinearity Diagnostics ^a												
Model	Dimension	Eigenvalue	Condition Index	(Constant)	Age	Gender	Education_corrected	Marital_status	Variance Proportions			Resources
									Autonomy	Market	Leadership_style	
1	1	8.442	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.243	5.898	.00	.00	.00	.24	.01	.02	.00	.06	.02
	3	.134	7.941	.00	.03	.00	.59	.08	.01	.00	.04	.00
	4	.053	12.637	.00	.08	.08	.00	.16	.18	.09	.05	.03
	5	.041	14.350	.01	.01	.00	.03	.68	.00	.23	.10	.00
	6	.035	15.473	.00	.02	.09	.06	.00	.00	.01	.28	.68
	7	.031	16.450	.00	.05	.02	.00	.05	.73	.22	.13	.02
	8	.014	24.484	.02	.79	.54	.04	.01	.00	.01	.33	.20
	9	.007	34.764	.97	.02	.27	.04	.00	.06	.44	.01	.04

a. Dependent Variable: Innovativeness

Conclusion: The presented VIF-values are lower than 5.0, indicating that there are no signs of perfect multicollinearity.

Proactivity

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Coefficients Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	2.041	1.522		1.341	.186	-1.018	5.101		
	Country_born	1.145	.734	.208	1.560	.125	-.330	2.620	.976	1.025
	Organizational_culture	.208	.155	.238	1.339	.187	-.104	.520	.552	1.813
	Leadership_style	.079	.116	.122	.683	.498	-.153	.311	.544	1.840

a. Dependent Variable: Proactivity

Collinearity Diagnostics ^a										
Model	Dimension	Eigenvalue	Condition Index	(Constant)	Country_born	Organizational_culture	Leadership_style	Variance Proportions		
								Country_born	Organizational_culture	Leadership_style
1	1	3.886	1.000	.00	.00	.00	.00	.00	.00	.00
	2	.093	6.450	.01	.01	.00	.48			
	3	.018	14.510	.01	.02	1.00	.50			
	4	.002	41.615	.98	.97	.00	.02			

a. Dependent Variable: Proactivity

Conclusion: The presented VIF-values are lower than 5.0, indicating that there are no signs of perfect multicollinearity.

Passion

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	4,465	1,506		2,965	,005	1,430	7,500		
	Age	-,019	,019	-,176	-,985	,330	-,058	,020	,553	1,808
	Gender	,112	,509	,035	,219	,827	-,914	1,137	,707	1,415
	Education_corrected	,158	,091	,264	1,744	,088	-,025	,341	,766	1,306
	Marital_status	-,167	,232	-,105	-,719	,476	-,635	,301	,829	1,206
	Self_esteam	-,037	,156	-,035	-,239	,812	-,353	,278	,841	1,189
	Role_models	,333	,175	,311	1,910	,063	-,018	,685	,664	1,506

a. Dependent Variable: Passion

Collinearity Diagnostics ^a										
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions						
				(Constant)	Age	Gender	Education_corrected	Marital_status	Self_esteam	Role_models
1	1	6,429	1,000	,00	,00	,00	,00	,00	,00	,00
	2	,242	5,159	,00	,00	,00	,04	,02	,63	,01
	3	,159	6,358	,00	,00	,00	,45	,00	,13	,12
	4	,101	7,963	,00	,04	,00	,30	,08	,14	,21
	5	,045	11,919	,00	,09	,11	,01	,79	,01	,02
	6	,016	19,860	,00	,67	,74	,09	,05	,09	,04
	7	,008	28,969	,99	,19	,13	,11	,06	,00	,61

a. Dependent Variable: Passion

Conclusion: The presented VIF-values are lower than 5.0, indicating that there are no signs of perfect multicollinearity.

Perseverance

Coefficients ^a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3,744	,741		5,051	,000	2,252	5,236		
	Convindence	,071	,121	,094	,507	,560	-,172	,314	,650	1,540
	Work_experience	,002	,009	,033	,216	,830	-,017	,021	,736	1,360
	Motivation	,297	,194	,256	1,534	,132	-,093	,687	,601	1,665
	Autonomy	-,143	,121	-,192	-1,183	,243	-,387	,100	,633	1,580
	Incentives	-,177	,154	-,163	-1,154	,255	-,487	,132	,834	1,200
	Organizational_culture	,288	,158	,330	1,825	,075	-,030	,606	,510	1,962

a. Dependent Variable: Perseverance

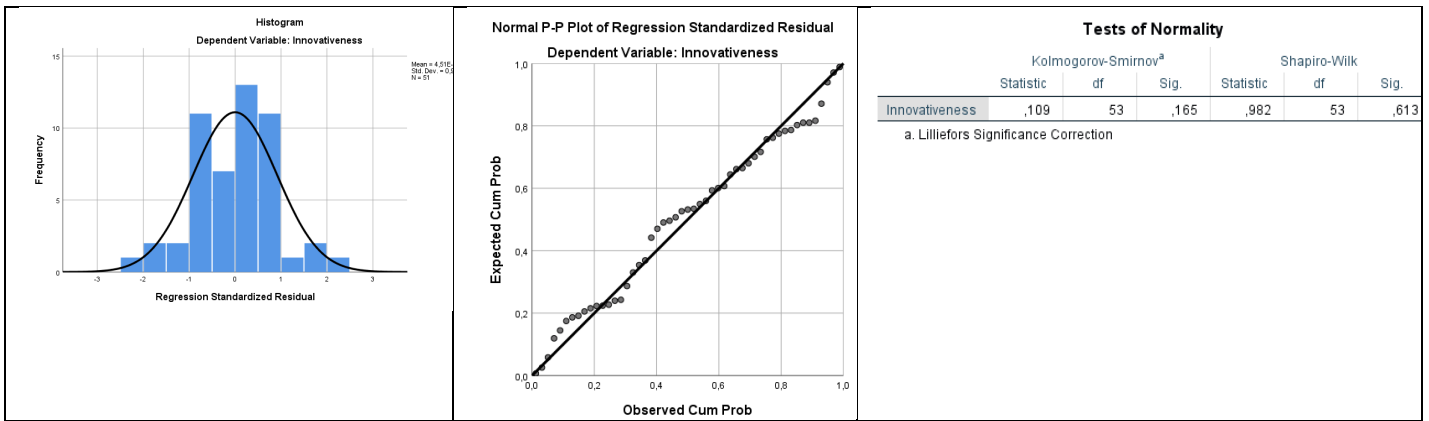
Collinearity Diagnostics ^a										
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions						
				(Constant)	Convindence	Work_experience	Motivation	Autonomy	Incentives	Organizational_culture
1	1	6,306	1,000	,00	,00	,01	,00	,00	,00	,00
	2	,476	3,640	,00	,00	,60	,00	,00	,01	,00
	3	,121	7,208	,00	,00	,21	,00	,03	,90	,01
	4	,046	11,660	,03	,19	,00	,01	,60	,08	,01
	5	,026	15,671	,16	,70	,05	,02	,14	,00	,10
	6	,017	19,277	,22	,01	,13	,03	,23	,01	,86
	7	,008	27,786	,58	,10	,00	,94	,00	,00	,03

a. Dependent Variable: Perseverance

Conclusion: The presented VIF-values are lower than 5.0, indicating that there are no signs of perfect multicollinearity.

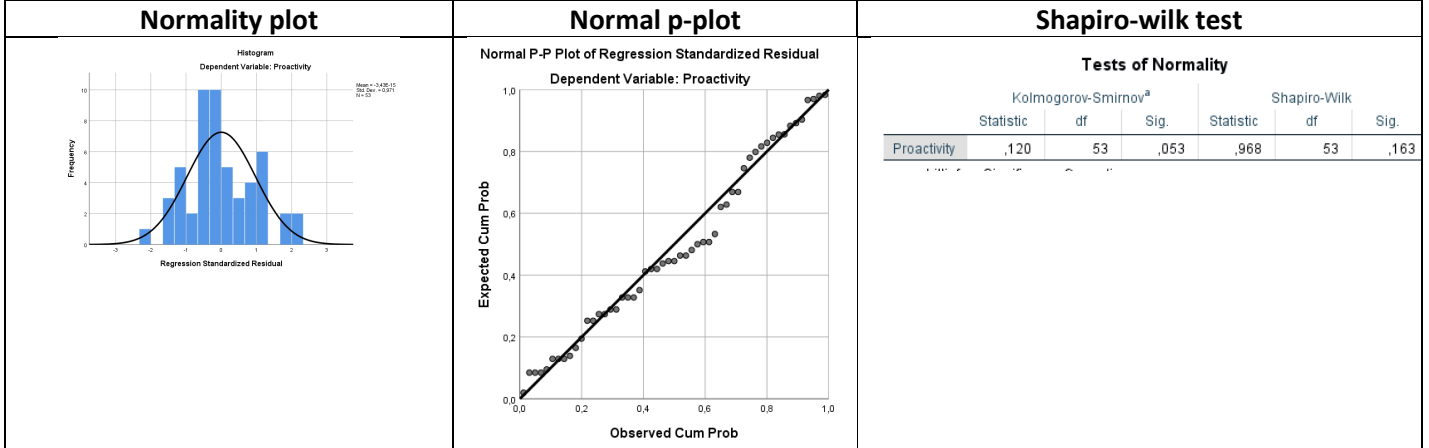
7. Normality of the error term, checked by the Shapiro-Wilk test and visually represented by a normality plot of the residuals;

Risk-taking																												
Normality plot	Normal p-plot	Shapiro-wilk test																										
		<table border="1"> <thead> <tr> <th colspan="6">Tests of Normality</th> </tr> <tr> <th rowspan="2"></th> <th colspan="3">Kolmogorov-Smirnov^a</th> <th colspan="3">Shapiro-Wilk</th> </tr> <tr> <th>Statistic</th> <th>df</th> <th>Sig.</th> <th>Statistic</th> <th>df</th> <th>Sig.</th> </tr> </thead> <tbody> <tr> <td>Risk_taking</td> <td>,118</td> <td>51</td> <td>,076</td> <td>,977</td> <td>51</td> <td>,422</td> </tr> </tbody> </table> <p>a. Lilliefors Significance Correction</p>	Tests of Normality							Kolmogorov-Smirnov ^a			Shapiro-Wilk			Statistic	df	Sig.	Statistic	df	Sig.	Risk_taking	,118	51	,076	,977	51	,422
Tests of Normality																												
	Kolmogorov-Smirnov ^a			Shapiro-Wilk																								
	Statistic	df	Sig.	Statistic	df	Sig.																						
Risk_taking	,118	51	,076	,977	51	,422																						
Conclusion: There is no evidence to reject the hypothesis that the error term is not normally distributed ($p > 0.05$)																												
Innovativeness																												
Normality plot	Normal p-plot	Shapiro-wilk test																										



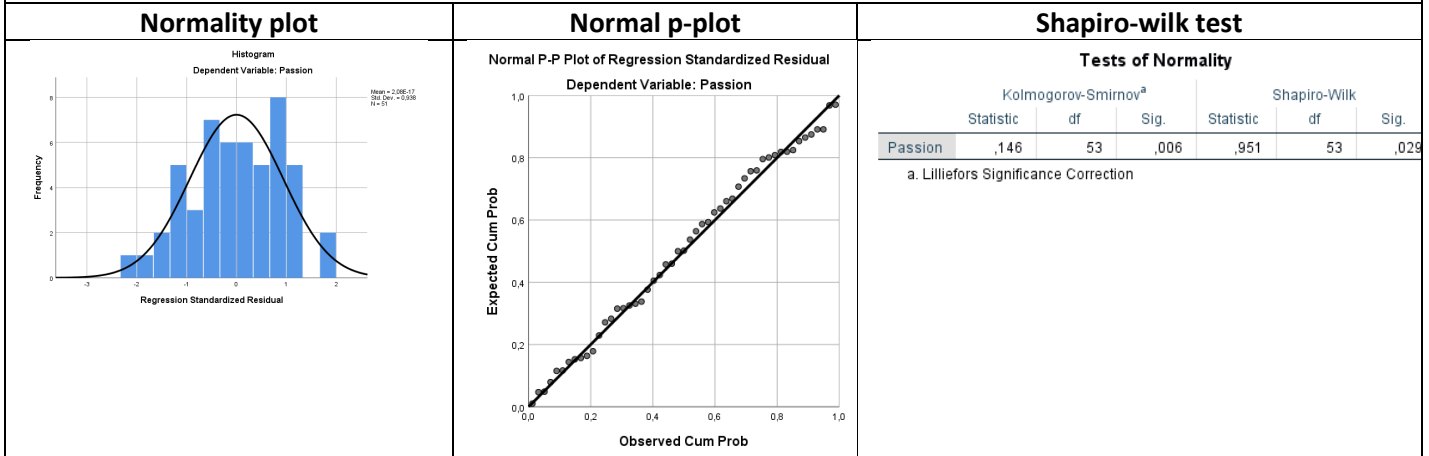
Conclusion: There is no evidence to reject the hypothesis that the error term is not normally distributed ($p > 0.05$)

Proactivity



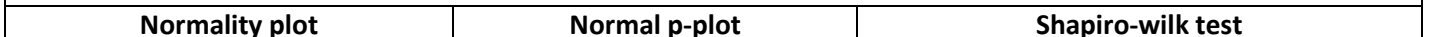
Conclusion: There is no evidence to reject the hypothesis that the error term is not normally distributed ($p > 0.05$)

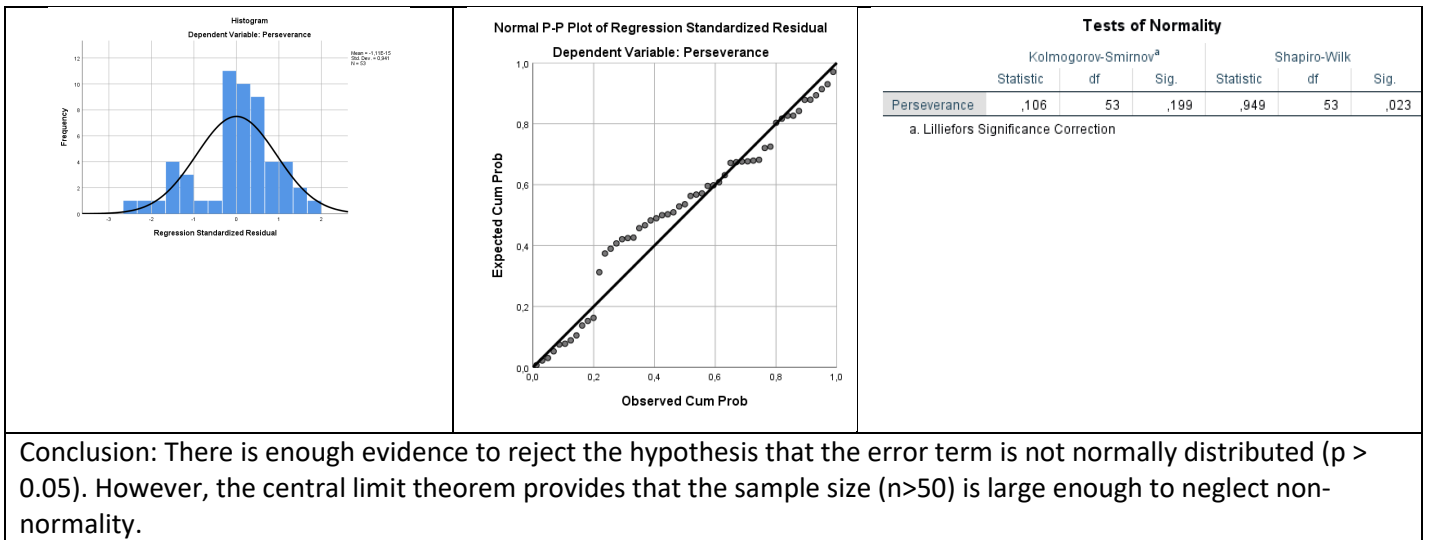
Passion



Conclusion: There is enough evidence to reject the hypothesis that the error term is not normally distributed ($p > 0.05$). However, the central limit theorem provides that the sample size ($n > 50$) is large enough to neglect non-normality.

Perseverance





Hypothesis number: two

Measured by: independent samples T-test

Assumptions:

1. The dependent variable must be measured on a continuous scale, which is met due to the use of the Likert scale for measuring the dependent variable being the five factors of IEO;
2. The independent variable must consist of two categorical variables, which is met by using the two categories of intrapreneur and entrepreneur;
3. There should be no significant outliers in the differences between the two related groups, which is checked by plotting the data in, for example, box plots. The assumption is met, as visually presented in appendix C.
4. The differences in the dependent variable should be approximately normally distributed, being checked by plotting the data. This assumption is violated, and as the dataset is divided into subgroups the central limit theorem is not applicable. Hence, the Mann-Whitney U test is a suitable, non-parametric, solution. To conduct the Mann-Whitney U test, assumptions must be checked:
 - a. The sample drawn from the population is random, which is met due to the nature of the questionnaire.
 - b. Independence within the samples and mutual independence is assumed, which is met due to the nature of the questionnaire.
 - c. An ordinal measurement scale is assumed, which is met due to the use of the Likert-scale.

Hypothesis number: three

Measured by: Gioia-method

Assumptions:

1. The measured item must be a social construct, which is true.
2. The participants must be knowledgeable, the participants are expected to be knowledgeable due to their experiences within the company.

Appendix F – Results sub-question one

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-,030	1,814		-,017	,987	-3,702	3,642		
	Age	-,012	,012	-,146	-,955	,345	-,036	,013	,569	1,757
	Gender	,424	,318	,184	1,331	,191	-,221	1,069	,701	1,427
	Education_corrected	,114	,053	,260	2,141	,039	,006	,222	,908	1,102
	Marital_status	,088	,157	,076	,558	,580	-,231	,406	,710	1,408
	Strength_decisionmaking	,652	,181	,452	3,601	,001	,285	1,018	,846	1,182
	Psychological_state	-,008	,104	-,010	-,075	,940	-,218	,202	,727	1,375
	Country_born	-,008	,678	-,001	-,012	,991	-1,379	1,364	,948	1,054
	Autonomy	,277	,122	,348	2,271	,029	,030	,524	,570	1,754
	Incentives	,137	,148	,114	,931	,358	-,161	,436	,886	1,129
	Organizational_culture	,061	,140	,065	,433	,667	-,223	,344	,591	1,691

a. Dependent Variable: Risk_taking

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3,858	1,247		3,093	,004	1,341	6,376		
	Age	-,002	,015	-,031	-,159	,874	-,033	,028	,561	1,782
	Gender	-,002	,426	-,001	-,005	,996	-,862	,858	,630	1,587
	Education_corrected	,137	,066	,316	2,087	,043	,005	,269	,916	1,091
	Marital_status	-,027	,185	-,023	-,146	,884	-,400	,346	,818	1,223
	Autonomy	-,023	,153	-,029	-,149	,883	-,331	,286	,563	1,776
	Market	,064	,165	,059	,390	,699	-,269	,397	,905	1,105
	Leadership_style	,062	,163	,090	,381	,705	-,266	,390	,374	2,674
	Resources	,124	,175	,150	,711	,481	-,229	,477	,471	2,125

a. Dependent Variable: Innovativeness

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	2,041	1,522		1,341	,186	-1,018	5,101		
	Country_born	1,145	,734	,208	1,560	,125	-,330	2,620	,976	1,025
	Organizational_culture	,208	,155	,238	1,339	,187	-,104	,520	,552	1,813
	Leadership_style	,079	,116	,122	,683	,498	-,153	,311	,544	1,840

a. Dependent Variable: Proactivity

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	4,465	1,506		2,965	,005	1,430	7,500		
	Age	-,019	,019	-,176	-,985	,330	-,058	,020	,553	1,808
	Gender	,112	,509	,035	,219	,827	-,914	1,137	,707	1,415
	Education_corrected	,158	,091	,264	1,744	,088	-,025	,341	,766	1,306
	Marital_status	-,167	,232	-,105	-,719	,476	-,635	,301	,829	1,206
	Self_esteem	-,037	,156	-,035	-,239	,812	-,353	,278	,841	1,189
	Role_models	,333	,175	,311	1,910	,063	-,018	,685	,664	1,506

a. Dependent Variable: Passion

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	3,744	,741		5,051	,000	2,252	5,236		
	Convidence	,071	,121	,094	,587	,560	-,172	,314	,650	1,540
	Work_experience	,002	,009	,033	,216	,830	-,017	,021	,736	1,360
	Motivation	,297	,194	,256	1,534	,132	-,093	,687	,601	1,665
	Autonomy	-,143	,121	-,192	-1,183	,243	-,387	,100	,633	1,580
	Incentives	-,177	,154	-,163	-1,154	,255	-,487	,132	,834	1,200
	Organizational_culture	,288	,158	,330	1,825	,075	-,030	,606	,510	1,962

a. Dependent Variable: Perseverance

Appendix G – Results sub-question two

Risk-taking, innovativeness, and pro-activity

Group Statistics

	Function_Dummy	N	Mean	Std. Deviation	Std. Error Mean
Risk_taking	1,00	31	5,0753	,86799	,15590
	2,00	20	5,2500	,77893	,17417
Innovativeness	1,00	32	5,0547	,73981	,13078
	2,00	21	4,9286	,89841	,19605
Proactivity	1,00	32	5,3437	,76428	,13511
	2,00	21	5,3968	,75733	,16526

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Risk_taking	Equal variances assumed	,001	,982	-,730	49	,469	-,17473	,23936	-,65575	,30629
	Equal variances not assumed			-,748	43,824	,459	-,17473	,23375	-,64588	,29642
Innovativeness	Equal variances assumed	,511	,478	,557	51	,580	,12612	,22628	-,32816	,58039
	Equal variances not assumed			,535	37,030	,596	,12612	,23567	-,35138	,60361
Proactivity	Equal variances assumed	,237	,628	-,248	51	,805	-,05308	,21387	-,48244	,37629
	Equal variances not assumed			-,249	43,214	,805	-,05308	,21346	-,48350	,37735

Perseverance

Mann-Whitney Test

Ranks

	Function_Dummy	N	Mean Rank	Sum of Ranks
Perseverance	1,00	32	27,22	871,00
	2,00	21	26,67	560,00
Total		53		

Test Statistics^a

Perseverance	
Mann-Whitney U	329,000
Wilcoxon W	560,000
Z	-,128
Asymp. Sig. (2-tailed)	,898

a. Grouping Variable: Function_Dummy

Passion

Mann-Whitney Test

Ranks

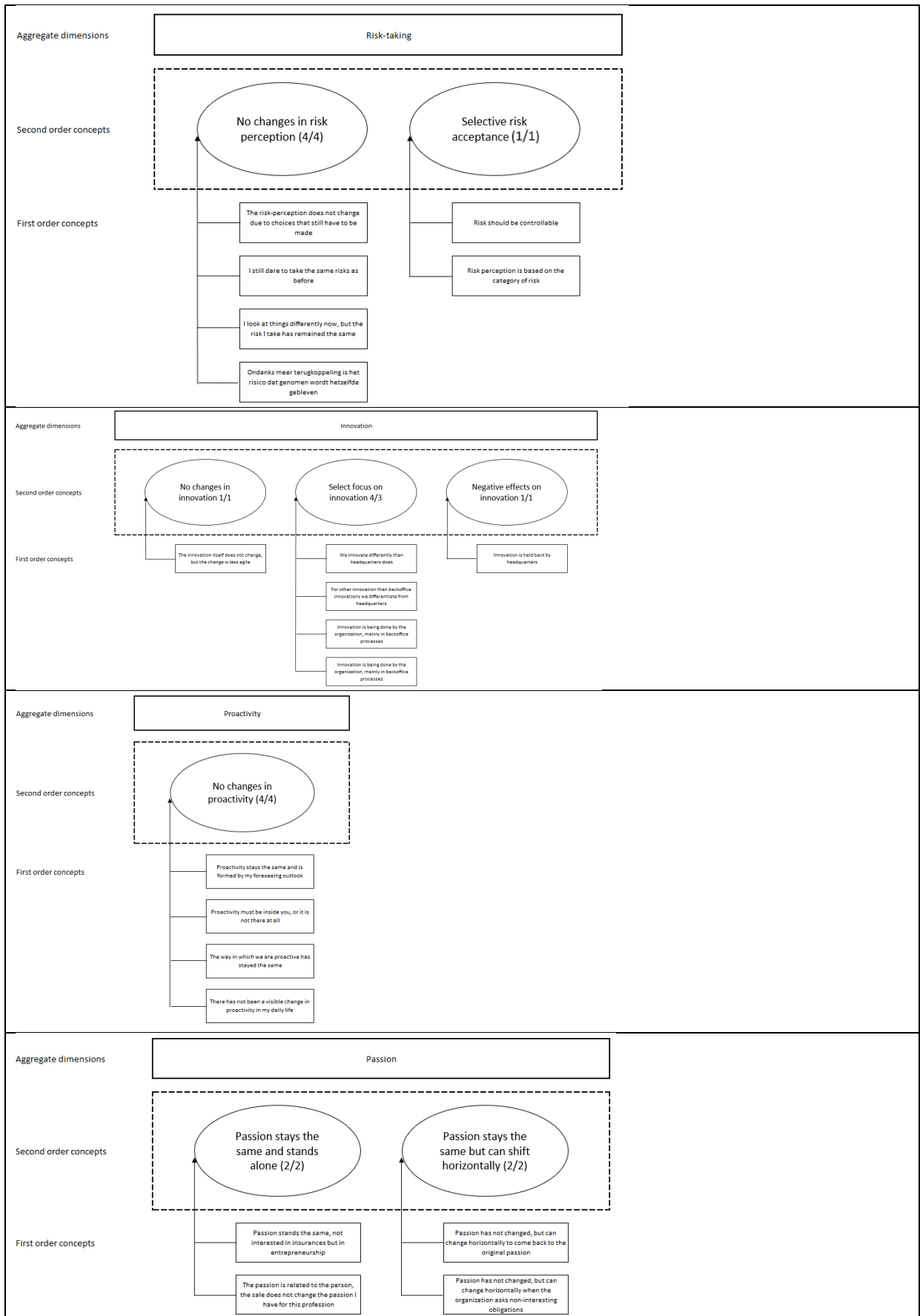
	Function_Dummy	N	Mean Rank	Sum of Ranks
Passion	1,00	32	30,83	986,50
	2,00	21	21,17	444,50
Total		53		

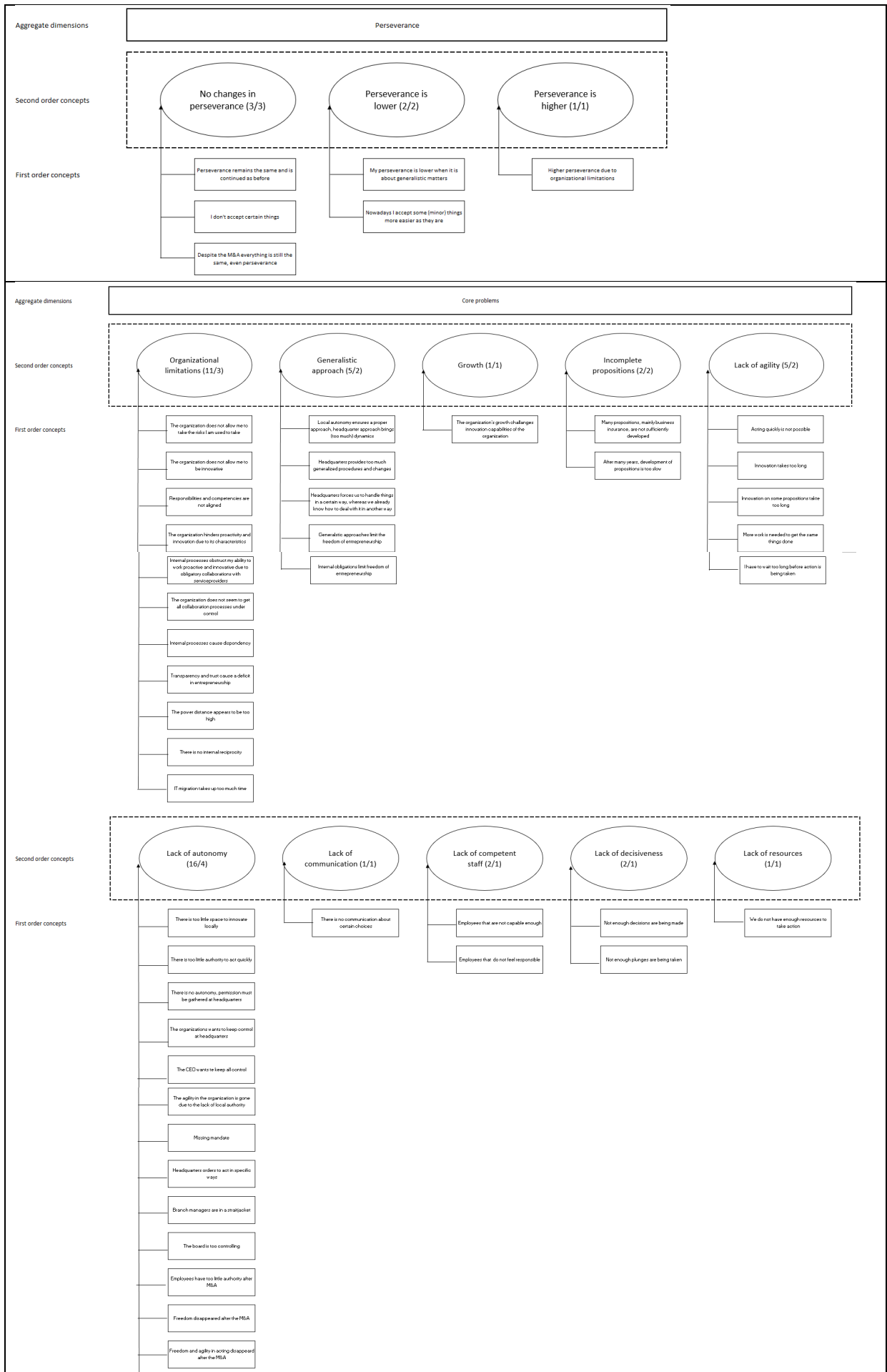
Test Statistics^a

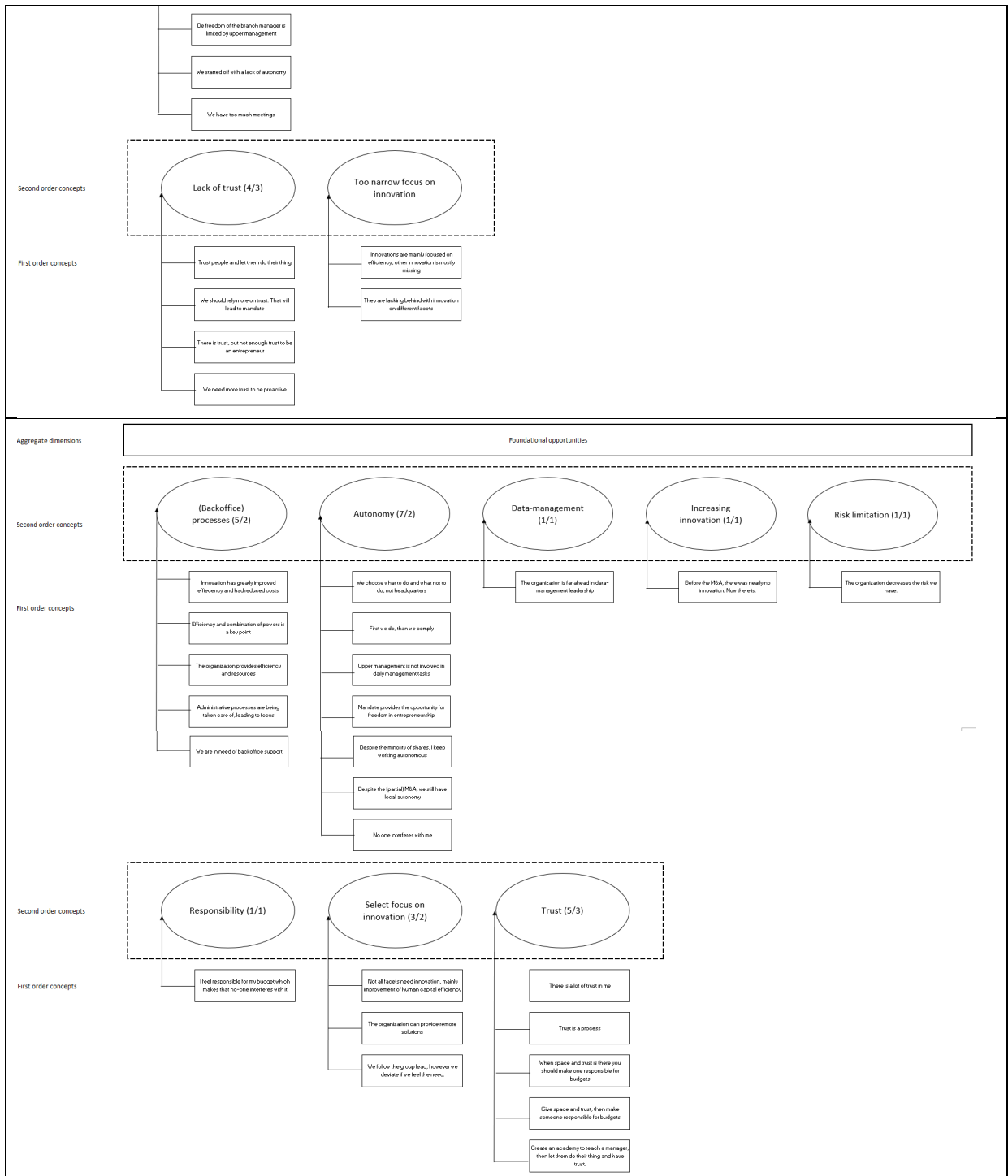
Passion	
Mann-Whitney U	213,500
Wilcoxon W	444,500
Z	-,236
Asymp. Sig. (2-tailed)	,025

a. Grouping Variable: Function_Dummy

Appendix H – Results sub-question three







Appendix I – Controlling IEO for communication and trust

Risk-taking

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	Communication, Incentives, Strength_decisionmaking, Marital_status, Education_corrected, Country_born, Gender, Trust, Psychological_state, Autonomy, Age, Organizational_culture ^b		Enter

- a. Dependent Variable: Risk_taking
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.711 ^a	.506	.341	.66214

- a. Predictors: (Constant), Communication, Incentives, Strength_decisionmaking, Marital_status, Education_corrected, Country_born, Gender, Trust, Psychological_state, Autonomy, Age, Organizational_culture

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16,149	12	1,346	3,069	.005 ^b
	Residual	15,783	36	.438		
	Total	31,932	48			

- a. Dependent Variable: Risk_taking
b. Predictors: (Constant), Communication, Incentives, Strength_decisionmaking, Marital_status, Education_corrected, Country_born, Gender, Trust, Psychological_state, Autonomy, Age, Organizational_culture

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.509	1,966		.259	.797
	Age	-.008	.014	-.105	-.612	.544
	Gender	.331	.372	.144	.891	.379
	Education_corrected	.108	.055	.246	1,952	.059
	Marital_status	.056	.163	.049	.342	.734
	Strength_decisionmaking	.632	.189	.439	3,335	.002
	Psychological_state	-.001	.106	-.001	-.009	.993
	Country_born	-.147	.707	-.026	-.208	.836
	Autonomy	.293	.133	.367	2,204	.034
	Incentives	.096	.159	.080	.604	.549
	Organizational_culture	.035	.172	.037	.203	.840
	Trust	.073	.139	.098	.529	.600
	Communication	-.100	.127	-.118	-.789	.436

- a. Dependent Variable: Risk_taking

Innovativeness

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	Communication, Market, Marital_status, Trust, Education_corrected, Gender, Autonomy, Age, Resources, Leadership_style ^b		Enter

- a. Dependent Variable: Innovativeness
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.408 ^a	.166	-.042	.82928

- a. Predictors: (Constant), Communication, Market, Marital_status, Trust, Education_corrected, Gender, Autonomy, Age, Resources, Leadership_style

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,492	10	.549	.799	.631 ^b
	Residual	27,508	40	.688		
	Total	33,000	50			

- a. Dependent Variable: Innovativeness
b. Predictors: (Constant), Communication, Market, Marital_status, Trust, Education_corrected, Gender, Autonomy, Age, Resources, Leadership_style

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4,352	1,307		3,330	.002
	Age	8,572E-5	.016	.001	.005	.996
	Gender	-.123	.457	-.053	-.269	.789
	Education_corrected	.115	.067	.266	1,717	.094
	Marital_status	-.037	.184	-.032	-.201	.842
	Autonomy	.002	.155	.002	.012	.991
	Market	.006	.170	.006	.036	.972
	Leadership_style	.148	.191	.216	.775	.443
	Resources	.184	.184	.222	1,000	.323
	Trust	.014	.169	.018	.083	.935
	Communication	-.247	.177	-.312	-1,397	.170

- a. Dependent Variable: Innovativeness

Proactivity

Variables Entered/Removed ^a			
Model	Variables Entered	Variables Removed	Method
1	Communication, Country_born, Trust, Organizational_culture, Leadership_style ^b		Enter

- a. Dependent Variable: Proactivity
b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.440 ^a	.194	.108	.71280

- a. Predictors: (Constant), Communication, Country_born, Trust, Organizational_culture, Leadership_style

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5,734	5	1,147	2,257	.064 ^b
	Residual	23,880	47	.508		
	Total	29,614	52			

- a. Dependent Variable: Proactivity
b. Predictors: (Constant), Communication, Country_born, Trust, Organizational_culture, Leadership_style

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2,724	1,567		1,738	.089
	Country_born	.955	.739	.174	1,292	.203
	Organizational_culture	.242	.158	.277	1,531	.132
	Leadership_style	.232	.154	.360	1,506	.139
	Trust	-.093	.131	-.131	-.710	.481
	Communication	-.218	.133	-.292	-1,638	.108

- a. Dependent Variable: Proactivity

Passion

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Communication, Gender, Marital_status, Trust, Education_corrected, Self_esteem, Role_models, Age ^b	.	Enter

- a. Dependent Variable: Passion
 b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,497 ^a	,247	,104	1,06137

- a. Predictors: (Constant), Communication, Gender, Marital_status, Trust, Education_corrected, Self_esteem, Role_models, Age

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15,557	8	1,945	1,726	,121 ^b
	Residual	47,314	42	1,127		
	Total	62,870	50			

- a. Dependent Variable: Passion
 b. Predictors: (Constant), Communication, Gender, Marital_status, Trust, Education_corrected, Self_esteem, Role_models, Age

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4,857	1,669		2,911	,006
	Age	-,017	,021	-,152	-,808	,424
	Gender	,042	,546	,013	,076	,940
	Education_corrected	,143	,093	,239	1,536	,132
	Marital_status	-,197	,237	-,124	-,834	,409
	Self_esteem	-,072	,180	-,067	-,401	,691
	Role_models	,373	,190	,348	1,964	,056
	Trust	,035	,182	,033	,191	,849
	Communication	-,180	,168	-,164	-1,069	,291

- a. Dependent Variable: Passion

Perseverance

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	Communication, Incentives, Convidence, Work_experience, Autonomy, Motivation, Organizational_culture, Trust ^b	.	Enter

- a. Dependent Variable: Perseverance
 b. All requested variables entered.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,519 ^a	,269	,136	,70076

- a. Predictors: (Constant), Communication, Incentives, Convidence, Work_experience, Autonomy, Motivation, Organizational_culture, Trust

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7,952	8	,994	2,024	,066 ^b
	Residual	21,607	44	,491		
	Total	29,559	52			

- a. Dependent Variable: Perseverance
 b. Predictors: (Constant), Communication, Incentives, Convidence, Work_experience, Autonomy, Motivation, Organizational_culture, Trust

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,915	,781		5,012	,000
	Convidence	,039	,123	,052	,321	,750
	Work_experience	,003	,010	,045	,294	,770
	Motivation	,262	,220	,225	1,190	,240
	Autonomy	-,097	,129	-,130	-,752	,456
	Incentives	-,190	,155	-,175	-1,225	,227
	Organizational_culture	,330	,165	,378	2,002	,051
	Trust	,056	,139	,079	,406	,687
Communication	-,159	,113	-,214	-1,408	,166	

- a. Dependent Variable: Perseverance