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Faculteit Bedrijfseconomische Wetenschappen

master in de toegepaste economische wetenschappen

Masterthesis

The influence of entrepreneurial alertness on the intention to start a new business

Anke Wijnen

Scriptie ingediend tot het behalen van de graad van master in de toegepaste economische wetenschappen, afstudeerrichting innovatie en ondernemerschap

PROMOTOR :

Prof. dr. Pieter VANDEKERKHOF

BEGELEIDER :

De heer Maarten COLSON



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www.uhasselt.be
Universiteit Hasselt
Campus Hasselt:
Martelarenlaan 42 | 3500 Hasselt
Campus Diepenbeek:
Agoralaan Gebouw D | 3590 Diepenbeek

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Disclaimer

This master thesis was written during the COVID-19 crisis in 2020-2021. This global health crisis might have had an impact on the (writing) process, the research activities, and the research results that are at the basis of this thesis.

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Anke Wijnen

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The influence of entrepreneurial alertness on the intention to start a new business.

Anke Wijnen

Promotor: Prof. dr. Pieter Vandekerckhof

Copromotor: Maarten Colson

Master thesis – Master of Science in Business Economics, Innovation and Entrepreneurship – 2021

Abstract

The main purpose of this master thesis is to research the influence of entrepreneurial alertness on the intention to start a new business. A research model incorporating the intention-based theory of planned behavior is used to obtain a better understanding of the relation between alertness and the subsequent intention to engage in entrepreneurial behavior. Conclusions are drawn by testing a mediation model using a unique Belgian dataset of 1681 adults. Statistical results of the regression analyses revealed that alertness is a crucial component in the entrepreneurial process. Furthermore, attitude toward the behavior, subjective norms, and perceived behavioral control fully and significantly mediate the influence of alertness on entrepreneurial intention.

Keywords

Entrepreneurial alertness, entrepreneurial intention, theory of planned behavior, attitude toward the behavior, subjective norms, perceived behavioral control, opportunity recognition, entrepreneurship.

1 Introduction

Entrepreneurs play a critical role in the economy (Valliere, 2013). As Schumpeter and Opie (1934) suggested, they are themselves “the originators of change”. This change is driven by the recognition of opportunities (Sharma, 2019; Tang, Kacmar, & Busenitz, 2012; Valliere, 2013). An individual’s ability to see opportunities better than others, is defined as entrepreneurial alertness (Gaglio & Katz, 2001). Together with entrepreneurial intentions, these are widely acknowledged as vital elements for success in today’s society. Entrepreneurial alertness and intentions make crucial contributions as predictors of entrepreneurial behavior and subsequent economic growth, by facilitating the creation of

new jobs and encouraging innovation (Hu, Wang, Zhang, & Bin, 2018; Obschonka, Hakkarainen, Lonka, & Salmela-Aro, 2017). Given its increasing importance, understanding these drivers of entrepreneurship has become progressively more fundamental as expressed by Bueckmann-Diegoli, Garcia de los Salmones Sanchez, and San Martin Gutierrez (2020) and Neneh (2019), among others.

Entrepreneurial alertness has been gaining traction in being an important determinant of the intention to start a new business (e.g., Bueckmann-Diegoli et al. (2020); Hu et al. (2018); Hu and Ye (2017); C. Li et al. (2020); Neneh (2019); van Gelderen et al. (2008)). How alert an individual is to entrepreneurial opportunities, dates back to a classical construct

(Kirzner, 1973) and has been predominantly studied within the context of new venture emergence (R. A. Baron & Ensley, 2006) as something that sets apart entrepreneurs from non-entrepreneurs (Gaglio & Katz, 2001; Kirzner, 1979). The entrepreneurial intention to start a new business is only possible when an opportunity is identified (Minniti, 2004). In this view, this opportunity construct provides additional insights into the complex process of entrepreneurship. The literature on entrepreneurship has experienced an expansive growth since the works of Icek Ajzen (1991) and Lars Kolvereid (1996a, 1996b). Following their view in understanding the entrepreneurial process, this thesis focuses on intentions which are argued to be the first step of performing actual entrepreneurial behavior (Ajzen, 1985, 1991; Fishbein & Ajzen, 1975; Krueger, Reilly, & Carsrud, 2000). As such, in order to analyze the underlying processes between alertness and the development of intentions, this study uses Ajzen's (1991) theory of planned behavior. In this intention-based model, the intention to start a new business is regarded as resulting from attitude toward the behavior, perceived behavioral control, and subjective norms (Ajzen, 1985, 1991) and has been confirmed as the reference theory by a growing number of studies (Autio, H. Keeley, Klofsten, G. C. Parker, & Hay, 2001; Kolvereid, 1996a, 1996b; Krueger et al., 2000; Liñán & Chen, 2009; Shook, Priem, & McGee, 2003; van Gelderen et al., 2008). Nevertheless, despite current research acknowledging the influence of alertness on intentions (Bueckmann-Diegoli et al., 2020; Hu et al., 2018; Hu & Ye, 2017; C. Li et al., 2020; Neneh, 2019; van Gelderen et al., 2008), studies exploring the relationship between entrepreneurial alertness and these behavioral antecedents to intention are lacking. The limited attention given to entrepreneurial alertness in the formation of attitude toward the behavior, perceived behavioral control, and especially subjective norms, is an important gap in the field

(Bueckmann-Diegoli et al., 2020; Lu & Wang, 2018; van Gelderen et al., 2008). This lesser studied influence leaves many questions regarding alertness as a key antecedent to entrepreneurial intentions unanswered.

While the opportunity construct has previously been disregarded in the formation of these determinants of intention, possibly due to its ambiguous understanding (Tang et al., 2012), in the context of this research its inclusion is assumed to significantly increase intention (Bueckmann-Diegoli et al., 2020; Fishbein & Ajzen, 2010). Hence, this master thesis aims to answer the following research question: "what is the influence of entrepreneurial alertness on the intention to start a new business?". In order to address this gap in existing research, this study is based on Tang, Kacmar, and Busenitz's (2012) conceptualization of alertness and Ajzen's (1991) theory of planned behavior. Specifically, by expanding the current knowledge on the mechanisms of these constructs using a unique Belgian dataset representative of the general population.

This master thesis contributes to the entrepreneurial research from the perspective of alertness, by looking at how more alert individuals could influence the attitude toward the behavior, perceived behavioral control, and subjective norms. As such, it provides an understanding of the importance of the opportunity construct in determining entrepreneurial intentions.

This master thesis is organized as follows. After this introduction, the second section discusses the theoretical framework of this paper and the hypotheses are introduced in function of the research model. The third section describes the methodology, including the explanation of the sample and study measures. The fourth section presents the results from the mediation analyses, which will be interpreted in the discussion in the fifth section. Finally, the research findings are summarized in a comprehensive conclusion.

2 Literature review and hypotheses development

2.1 Theory of planned behavior in an entrepreneurial context

The literature views entrepreneurship as an intentional behavior (Kautonen, van Gelderen, & Fink, 2015), considering that intentions are the first step in the process to start a new business (Ajzen, 1985, 1991; Krueger et al., 2000). As a result of the difficulty in predicting and explaining behavior (Krueger et al., 2000), researchers seeking to determine the mechanisms behind entrepreneurial behavior are drawn to Ajzen's (1991) theory of planned behavior (TPB), an extension of the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975).

TPB is perceived as the reference theory in entrepreneurial intention research since the paper by Krueger (1993). Research by Shook et al. (2003) and complementary insights by Fayolle, Gailly, and Lassas-Clerc (2006) proved extremely relevant in providing an understanding of the different intention frameworks. The comparison of Bird's (1988) model of implementing entrepreneurial ideas, Shapero's (1982) entrepreneurial event, and Ajzen's (1987) theory of planned behavior further led to the adaption of TPB by entrepreneurship scholars (Shook et al., 2003). Moreover, the theoretical specification of TPB is comprehensive and consistent, as many researchers have specified and employed the model over the years in an entrepreneurial context (e.g., Autio et al. (2001); Fayolle et al. (2006); Kolvereid (1996a, 1996b); Krueger et al. (2000); Liñán and Chen (2009); Shook et al. (2003); van Gelderen et al. (2008)). As such, Bandura's social cognitive theory (1977b, 1986) is not employed in the context of this thesis.

The central idea of the theory of planned behavior is that intentions are considered the best predictor of behavior (Ajzen, 1985, 1991; Fishbein & Ajzen, 1975; Krueger et al., 2000). In other

words, the stronger an individual's cognitive (Hu & Ye, 2017) intention is to engage in entrepreneurial activities, the more likely it is that the actual entrepreneurial behavior will be performed (Ajzen, 1991). Intention models such as TPB may be applied to any behavior that could be perceived as planned behavior (Liñán & Fayolle, 2015). Within the entrepreneurial context, intentions indicate an individuals' effort (Ajzen, 1991; Liñán, 2004; Liñán & Chen, 2009), motivation (Ajzen, 1991), or readiness to start a new business (Krueger et al., 2000; Neneh, 2019; Obschonka et al., 2017; Thompson, 2009). Accordingly, this most commonly used intention-based model in the entrepreneurship literature functions as the theoretical framework of this master thesis to understand entrepreneurial intentions.

2.2 Entrepreneurial alertness

Entrepreneurial intentions (EI) are not the start of the entrepreneurial process. The individual characteristic entrepreneurial alertness precedes the intention to start a new business (e.g., Bueckmann-Diegoli et al. (2020); Hu et al. (2018); Hu and Ye (2017); C. Li et al. (2020); Neneh (2019); van Gelderen et al. (2008)). In order to understand the dynamic entrepreneurial process (Valliere, 2013), this master thesis focuses on the individual characteristic, entrepreneurial alertness (EA). This argument is built on the insights provided by Kirzner (1973, 1979, 1985) that entrepreneurship is both the alertness to new opportunities and the actions following the discovery of that opportunity. Previous studies, however, did not reach an agreement on the relationship between entrepreneurial alertness and intentions, resulting in a number of contradictory models in the current literature. Shook et al. (2003) for example, claim that intentions precede opportunity discovery, whereas Bueckmann-Diegoli et al. (2020) and van Gelderen et al. (2008) could not establish the direction of causality. This may be explained by

Vroom's expectancy theory, since having an idea for starting a business has motivating properties (Bueckmann-Diegoli et al., 2020; van Gelderen et al., 2008; Vroom, 1964).

Entrepreneurs do not just simply discover or create opportunities (Alvarez & Barney, 2007; Ardichvili, Cardozo, & Ray, 2003; Roundy, Harrison, Khavul, Pérez-Nordtvedt, & McGee, 2017; Valliere, 2013), they are alert. Alertness is the core element for recognizing new opportunities (R. A. Baron & Ensley, 2006; Gaglio & Katz, 2001; Kirzner, 1979; McCaffrey, 2014; Roundy et al., 2017; Sharma, 2019; Tang et al., 2012; Valliere, 2013), resulting in the idea that only those who are alert can identify an entrepreneurial opportunity (Roundy et al., 2017). The concept of entrepreneurial alertness was initially introduced by Kirzner (1973) to explain why some individuals identify opportunities earlier than others. Subsequent work has expanded on Kirzner's early and later conceptions of alertness (1973, 1979, 1985, 1997, 2008), resulting in multiple definitions of the construct. R. A. Baron and Ensley (2006) for example see EA as the recognition of patterns and Valliere (2013) as the development and application of schemata. This study follows the definition stipulated in Gaglio and Katz (2001), with EA being the conscious perception of being able to see opportunities better than others. The entrepreneurial process is a complex system (Minniti, 2004) that varies among individuals (Shapero, 1982). Logically, two entrepreneurs will interpret any situation differently (Hayek, 1967). As such, Gaglio and Katz (2001) further asserted that a high level of EA leads to a heightened sensitivity to internal and external changes. By being exposed to more information (Minniti, 2004; Valliere, 2013), alert individuals are more likely to connect the dots and see entrepreneurial opportunities (R. A. Baron & Ensley, 2006; Robert Baum & Wally, 2003). This can happen automatically without consciously trying (Neisser, 1967).

EA is an essential strength for entrepreneurs (Y. Li, Wang, & Liang, 2015; Obschonka et al., 2017), since the alertness to business opportunities is fundamental in starting a new business (van Gelderen et al., 2008). By relying on the three dimensions of alertness as outlined by Tang et al. (2012), the definition of EA allows this thesis to position it as an antecedent to intentions. The inclusion of the individual characteristic, EA, is theorized to provide a more robust prediction of entrepreneurial intentions (Bueckmann-Diegoli et al., 2020; Fishbein & Ajzen, 2010). As Kirzner (1979) has argued, a part of being alert means that there will be an incentive to make decisions aimed at exploiting these entrepreneurial opportunities. Therefore, to emphasize entrepreneurial alertness as a central concept in the formation of intentions, this thesis hypothesizes the following:

Hypothesis 1: Entrepreneurial alertness significantly and positively influences entrepreneurial intention.

2.3 Mediating roles of ATB, SN, and PBC in starting a new business

In the theory of planned behavior, the intention to start a new business is in turn formed on the basis of attitude toward the behavior (ATB), subjective norms (SN), and perceived behavioral control (PBC) (Ajzen, 1985, 1991). TPB defines that the intention to start a new business will be greatest when an individual holds a favorable attitude toward a behavior and anticipates that they can perform that behavior successfully, while experiencing strong subjective norms regarding the behavior (Carr & Sequeira, 2007). These three cognitive variables, which are called motivational antecedents by Ajzen (1991), are determinants of a person's behavioral intent (Ajzen, 1991; Bueckmann-Diegoli et al., 2020; Kautonen et al., 2015; Krueger, 1993; Krueger et al., 2000). The underlying basis of the intention of starting a new

business are a function of behavioral, normative, and control beliefs regarding entrepreneurship (Ajzen, 1991; Fishbein & Ajzen, 1975).

As mentioned above, this master thesis positions EA as an antecedent to EI based on previous findings by Bueckmann-Diegoli et al. (2020), Hu et al. (2018), Hu and Ye (2017), C. Li et al. (2020), Neneh (2019), and van Gelderen et al. (2008), and uses the theory of planned behavior as a theoretical framework to better understand entrepreneurial intentions and the role of alertness in the entrepreneurial process. Since TPB has proven to be robust and relevant in predicting EI (Autio et al., 2001; Fayolle et al., 2006; Kolvereid, 1996a, 1996b; Krueger et al., 2000; Liñán & Chen, 2009; Shook et al., 2003; van Gelderen et al., 2008), the present study argues that the individual characteristic EA increases its predictive power. The ambiguous understanding of the term (Tang et al., 2012) possibly led to its previous disregard in importance. However, this perspective allows to focus on how EA could influence the antecedents of intention stipulated in the theory of planned behavior (Ajzen, 1991). Despite the attention that has been given to this field of study, the literature offers multiple contradictory perspectives on these relations. van Gelderen et al. (2008) measured EA as an antecedent to PBC, but not to ATB and SN. Lu and Wang (2018) claim that EA is actually preceded by ATB, SN, and PBC. Whereas, Bueckmann-Diegoli et al. (2020) found that the ability to recognize entrepreneurial opportunities has an impact on ATB and PBC, and vice versa. This duality resembles Kirzner's early and late works (McMullen & Shepherd, 2006).

Following these other researchers in the field, this thesis focuses on combining EA and EI using the behavioral framework of TPB. In other words, researching the mediating roles of ATB, SN, and PBC between EA and EI, and thus the lesser studied influence of EA on these mediators as proposed in Figure 1. A more detailed explanation

of the components of TPB and alertness as they relate to intention is provided in the section below.

Attitude toward the behavior

In an entrepreneurial context, the attitude toward the behavior (ATB) is defined as the degree to which someone sees being an entrepreneur as favorably or unfavorably (Ajzen, 1991; Liñán & Chen, 2009). In other words, the more positive the attitude, the stronger the individual's intention will be to start a new business (Ajzen, 1991; Armitage & Conner, 2001; Bueckmann-Diegoli et al., 2020; Kautonen et al., 2015; Krueger et al., 2000). According to Fishbein and Ajzen's (1975) theory of reasoned action, attitudes are developed from the behavioral beliefs people hold by associating venturing with certain attributes. These attributes linked to the behavior result in the personal attitude toward being an entrepreneur being valued as positive or negative (Ajzen, 2001; Autio et al., 2001; Kolvereid, 1996b). These beliefs can be influenced by many personal factors, including the alertness to opportunities. As a cognitive ability and information processing skill (Urban, 2020), this thesis conceptualizes EA as an antecedent of entrepreneurial attitudes. It is necessary to scan, search, associate, connect, evaluate, and judge the environment for critical and connectable pieces of information (Tang et al., 2012). As such, EA provides an individual with information about the market, tendencies (Bueckmann-Diegoli et al., 2020), and entrepreneurship in general, contributing in the formation of values and attitudes toward starting a business. As Liñán and Chen (2009) clarified, ATB includes not only affective, but also evaluative considerations such as advantages. The recognition of a business opportunity may thus act as an internal motivation to consider an entrepreneurial career as desirable (Bueckmann-Diegoli et al., 2020). Those behavioral beliefs therefore define whether an individual will hold a positive attitude toward business ownership or not. As such, the attitude

toward venturing is hypothesized to mediate the relationship between entrepreneurial alertness and entrepreneurial intention. Thus:

Hypothesis 2: Attitude toward the behavior will mediate the relationship between entrepreneurial alertness and entrepreneurial intentions.

Subjective norms

TPB suggests that the perceived social pressure to engage or not to engage in entrepreneurial behavior is measured by subjective norms (SN) (Ajzen, 1991; Kolvereid, 1996b; Krueger, 1993). Individuals rely on these norms to evaluate if their intent to start a new business is accepted and supported by important others, such as friends, parents, and colleagues. The reference group's approval or disapproval of the decision to become an entrepreneur results in normative beliefs (Ajzen, 1991, 2001; Carr & Sequeira, 2007; Liñán & Chen, 2009). The strength and motivation to comply with these beliefs (Ajzen, 1985, 1991) are in turn predictive of pursuing an identified opportunity or not (Carr & Sequeira, 2007).

A prominent concern raised by researchers is the traditionally weak role of SN. Autio et al. (2001), Bueckmann-Diegoli et al. (2020), Krueger et al. (2000), and (Liñán & Chen, 2009) for example could only partially confirm the TPB as proposed by Ajzen (1991) with the influence of SN on entrepreneurial intent being non-significant. Although there is support for the direct SN and EI relationship (Kautonen et al., 2015; Kolvereid & Isaksen, 2006), in the area of entrepreneurship, however, this relationship still remains unclear (Liñán & Chen, 2009). Krueger et al. (2000) even posed the question whether there are there systematic problems in measuring social norms regarding entrepreneurial populations. A possible explanation of these mixed results was given by Ajzen (1991) who stated that personal considerations tend to overshadow the influence of perceived social pressure.

This study thus aims to offer a clearer insight into SN as a mediator and antecedent to EI. According to the research on alertness, a potential entrepreneur's decision-making and own perceptions about entrepreneurship are a key component of the opportunity identification process (Gaglio & Katz, 2001). In fact, alertness differentiates entrepreneurs from others (Gaglio & Katz, 2001; Kirzner, 1979) leading to the reasoning that individuals who have identified an opportunity will have different normative beliefs. In turn, these individuals are likely to have higher levels of entrepreneurial intent, if they perceive that their venturing intentions are supported (Carr & Sequeira, 2007). This thesis extends this line of reasoning, and suggests that EA has a positive influence on SN. As such, the opinions of important others are thus hypothesized to mediate this relation:

Hypothesis 3: Subjective norms will mediate the relationship between entrepreneurial alertness and entrepreneurial intentions.

Perceived behavioral control

Individuals need to consider themselves as capable of starting a new business (Ajzen, 2002; Bueckmann-Diegoli et al., 2020). The level of confidence a person has in their ability to start a business is directly related to their perceived control in becoming an entrepreneur (Ajzen, 1991; Carr & Sequeira, 2007; Gist & Mitchell, 1992). The concept of perceived behavioral control (PBC) also includes the perceived ease or difficulty of becoming an entrepreneur (Liñán & Chen, 2009). Individuals will intend to perform the behavior of starting a new business if they believe it can be accomplished (Ajzen, 1991; Bandura, 1997; Bueckmann-Diegoli et al., 2020; Kautonen et al., 2015; Krueger et al., 2000; van Gelderen et al., 2008). According to this formulation, PBC is similar to Bandura's (1977a, 1982) concept of perceived self-efficacy (Ajzen, 1991; Krueger et al., 2000; Schlaegel & Koenig, 2014) and

Shapiro's (1982) perceived feasibility. All three concepts refer to an individual's sense of capability regarding the fulfillment of venturing behavior. Nevertheless, as opposed to self-efficacy (Ajzen, 2002), PBC includes not only the feeling of ability, but also the perception of control over the behavior (Liñán & Chen, 2009).

The control beliefs about the presence of required resources and opportunities may be based on past entrepreneurial experience, but they will usually also be influenced by information about venturing (Ajzen, 1991). As mentioned above, alertness to new opportunities is a key entrepreneurial skill. The more resources and opportunities individuals believe they possess, the greater their perceived control will be over the behavior (Ajzen, 1991). Without alertness, opportunities would be overlooked (Kirzner, 1979) and the individual would have less information available. As entrepreneurial alertness increases, perceived behavioral control and subsequent intentions are also likely to increase as well. Thus, this thesis hypothesizes the following:

Hypothesis 4: Perceived behavioral control will mediate the relationship between entrepreneurial alertness and entrepreneurial intentions.

Figure 1 illustrated below summarizes the model that will be used as a starting point for the analysis in this master thesis. This research model provides

the hypothesized effect of entrepreneurial alertness on entrepreneurial intention. Attitude toward the behavior, subjective norms, and perceived behavioral control are expected to mediate this relationship. With the inclusion of the alertness construct, Fig. 1 is an extension to the theory of planned behavior described by Ajzen (1991).

3 Data and methods

3.1 Sample

To give an answer to the research question, this master thesis uses a unique dataset from a large-scale study on entrepreneurship and the entrepreneurial climate in Flanders by RCEF and Mediahuis. The data analyzed in this study was gathered in Flanders through a survey distributed in June of 2020. 1681 complete and valid questionnaires were obtained, resulting in an equally large sample of respondents. The sample consists of 1076 (64%) males, 603 (35.9%) females, and 2 (0.1%) individuals who identify as non-binary. The age range is from 17 to 91 years old, with an average age of 53.6 and 1158 (68.9%) individuals being part of the working population (ages below 65). The employment situation of the respondents varies substantially with an average 28.6 years of work experience.

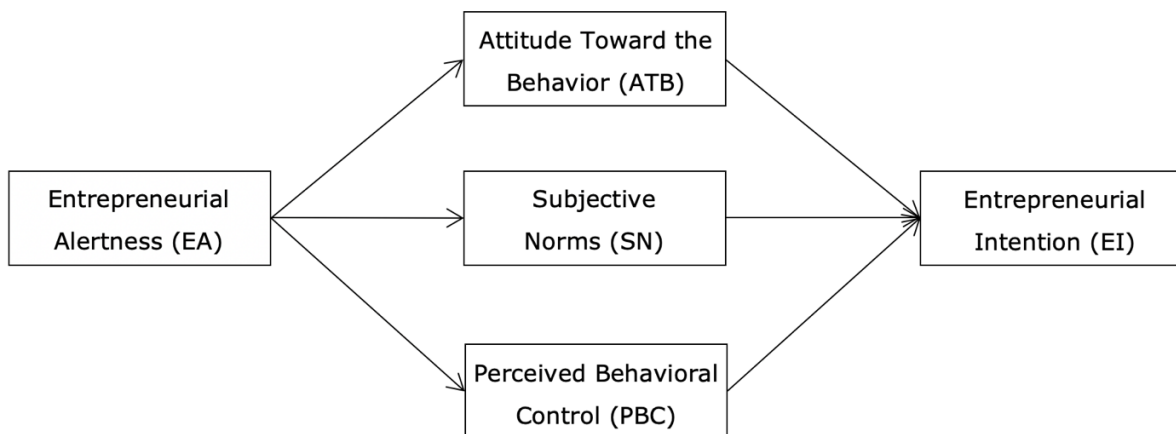


Fig. 1 Theoretical research model

A model of entrepreneurial alertness and entrepreneurial intention.

3.2 Study measures

Appendix A provides a list of the questions used to create the variables of the theoretical model in Figure 1.

Entrepreneurial intention

Following several researchers in the field (e.g., Bueckmann-Diegoli et al. (2020); Neneh (2019)), the dependent variable, entrepreneurial intention, is measured through the widely accepted scales from the entrepreneurial intention questionnaire (EIQ) from Liñán and Chen (2009). Liñán and Chen (2009) used Ajzen's theory of planned behavior to develop a standard measurement for entrepreneurial intention and its antecedents, based on an integration of psychology and entrepreneurship literature. Entrepreneurial intention is measured on a seven-point Likert scale comprised of six items indicating different aspects of intention. A sample statement is: "I am ready to do anything to be an entrepreneur". To constitute a single entrepreneurial intention score, answers on the six items are averaged with a Cronbach's alpha of 0.967 indicative of construct reliability. Regarding scale validity, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Kaiser, 1974) is first determined to assess whether a principal component analysis (PCA) would be useful. The PCA is employed to investigate the underlying structure of the items in the survey, with an eigenvalue greater than 1 as the recommended threshold by the literature (Abdi & Williams, 2010). The PCA reveals a single EI factor (KMO = 0.897) with an eigenvalue of 5.179, which accounts for 86.3% of the variance among the items.

Attitude toward the behavior, subjective norms, and perceived behavioral control

As mentioned above, this thesis uses the EIQ developed by Liñán and Chen (2009) to measure the three mediators, or antecedents of intention, captured by the theory of planned behavior

(Ajzen, 1991). In line with the EIQ, ATB, SN, and PBC are measured by five, three, and six items respectively, on a seven-point Likert scale. Responses are averaged to produce a single composite score for each variable.

Attitude toward the behavior is measured on a five-item scale (Cronbach's alpha = 0.942). PCA reveals one factor (KMO = 0.886) with an eigenvalue of 4.067, which accounts for 81.3% of the cumulative variance. Furthermore, the scale for subjective norms is comprised of three items illustrating the validation process of three reference groups (Cronbach's alpha = 0.904). Using PCA, one factor (KMO = 0.726) with an eigenvalue of 2.527 is found, which accounts for 84.2% of the variance among the items. Finally, perceived behavioral control is evaluated on the basis of six items incorporating specific efficacies and control beliefs (Cronbach's alpha = 0.952). PCA reveals one factor (KMO = 0.914) with an eigenvalue of 4.848, which accounts for 80.8% of the cumulative variance.

Entrepreneurial Alertness

As in previous alertness studies (e.g., Bueckmann-Diegoli et al. (2020); Hu et al. (2018); Hu and Ye (2017); Kadile and Biraglia (2020); C. Li et al. (2020)), the theoretically validated 13-item scale adapted from Tang et al. (2012) is used to measure the independent variable entrepreneurial alertness on a seven-point Likert scale. Tang et al. (2012) developed a measurement scale which captures the three dimensions of the alertness process: scanning and search, association and connection, and evaluation and judgment. In other words, while it may appear that a judgment is reached without a detailed analysis, entrepreneurs will typically have processed all relevant and available information. These dimensions complement each other and give the individual a foundation on which to identify new business opportunities (Tang et al., 2012). The average score of the thirteen items constituting the entrepreneurial alertness construct is used, with a

Cronbach's alpha of 0.935. A sample item for this construct is: "I see links between seemingly unrelated pieces of information". A PCA reveals EA to be loaded on two factors (KMO = 0.922) with an eigenvalue of 7.411 and 1.437, which account for 57.5% and 11.1% respectively of the variance among the thirteen items. However, regarding the item loadings, this study considers EA as one unidimensional construct.

Additional variables

This master thesis includes six additional demographic control variables, because of their possible effect on entrepreneurial intention. Two age categories (1 = younger than 35, 0 = older; M = 0.185, SD 0.388) account for the effect of age on intention, since self-employment is expected to decrease with age (Liang, Wang, & Lazear, 2018; Parker, 2004). A dummy variable captures gender (1 = male, 0 = female and non-binary; M = 0.640, SD 0.480), because according to Santos, Roomi, and Liñán (2016), and many others, men are found to exhibit higher entrepreneurial intentions than women. The last demographic variable included is the level of education (1 = higher education, 0 = lower education; M = 0.634, SD 0.482) (Cavaliere, Sasseti, & Lombardi, 2021; Hockerts, 2017; Hu et al., 2018) which affects the probability of having the intention to become an entrepreneur (Parker, 2004).

Additionally, the regression analyses are controlled for three other variables, which are also treated as dummy variables. The answer "yes" is coded as 1 and "no" coded as 0. In particular, the availability of knowledge, skills, and experience (KSE) contributes to more realistic perceptions about being an entrepreneur (Ajzen, 2002; Liñán, 2004). This may also be implied by the existence of parental role models (PRM), as it is assumed that positive effects arrive from the presence of a role model (Cavaliere et al., 2021; Geissler & Zanger, 2010; Hu et al., 2018; Liñán & Chen, 2009; Matthews & Moser, 1996; Minniti, 2004). Furthermore, the entrepreneurship literature

emphasizes the role entrepreneurial competencies in developing a strong motivation to engage in entrepreneurial behavior (Krueger et al., 2000; Obschonka, Silbereisen, & Schmitt-Rodermund, 2010). Therefore, it is expected that the level of entrepreneurial knowledge (Liñán & Chen, 2009) resulting from previous entrepreneurial experience (EE) (Ajzen, 2002) has distinct effects on intention.

4 Results

Descriptive statistics and pairwise correlations are estimated prior to hypotheses testing. Table 1 shows the descriptive statistics, mean and standard deviations, and Pearson's correlations of the study variables. With regard to entrepreneurial alertness, the mean level is 4.934 and 2.868 for entrepreneurial intention, which are comparable to prior research (Urban (2020) and Hu et al. (2018) respectively). Correlations are calculated to give an indication of the associations. As recommended by R. Baron and Kenny (1986), the mediators are significantly correlated with both the predictor and outcome variable. Specifically, the study constructs, entrepreneurial alertness, intention, attitude toward the behavior, subjective norms, and perceived behavioral control, are all significantly correlated ($p < 0.01$). Considering the relatively high levels of associations between the factors, multicollinearity diagnostics are estimated. Three correlation values are higher than the recommended cut-off value of 0.7, with 0.821 between ATB and EI, 0.806 between PBC and EI, and 0.798 between ATB and PBC. Multicollinearity proves not to be problematic, given the variable inflation factor (VIF) of each variable being lower than the acceptable threshold of 10. The highest VIF has a value of 3.216 and the mean VIF of the variables is 2.231. These values are thus regarded as not indicative of multicollinearity (Anderson, Hair, & Tatham, 1998; Gujarati, 1995; Mansfield & Helms, 1982).

Table 1. Means, standard deviations, and correlations of dependent and independent variables^a

Variable	Mean	SD	Min	Max	1	2	3	4	5	6	7	8	9	10	11
1 EI	2.868	1.830	1	7	1										
2 ATB	3.821	1.756	1	7	.821**	1									
3 SN	4.396	1.641	1	7	.458**	.502**	1								
4 PBC	3.414	1.696	1	7	.806**	.798**	.532**	1							
5 EA	4.934	1.151	1	7	.450**	.476**	.345**	.547**	1						
6 Gender	.640	.480	0	1	.116**	.120**	.018	.123**	.070**	1					
7 Age	.185	.388	0	1	.319**	.221**	.232**	.210**	.084**	-.064**	1				
8 Education	.634	.482	0	1	.103**	.073**	.113**	.126**	.220**	-.110**	.181**	1			
9 EE	.190	.389	0	1	.284**	.302**	.162**	.363**	.157**	.106**	-.153**	-0.47	1		
10 KSE	.410	.492	0	1	.517**	.477**	.328**	.644**	.356**	.113**	.123**	.079**	.361**	1	
11 PRM	.310	.464	0	1	.253**	.236**	.199**	.260**	.201**	.027	.146**	.044	.099**	.182**	1

Notes: $n = 1681$; ** $p < 0.01$

^a Pearson correlation coefficients are shown, two-tailed significance.

Table 2. Regression results of entrepreneurial alertness on entrepreneurial intention^a

Variables	b coefficient	SE	t
Constant	-.347*	.138	-2.516
<i>Predictor variable</i>			
Entrepreneurial alertness	.440**	.031	14.316
<i>Control variables</i>			
Gender	.223**	.070	3.173
Age	1.308**	.099	13.184
Level of Education	-.086	.073	-1.178
Entrepreneurial experience	.736**	.106	6.965
Knowledge, skills, and experience	1.144**	.085	13.450
Parental role models	.335**	.077	4.329

$R^2 = .443, F = 206.267, p = .000$

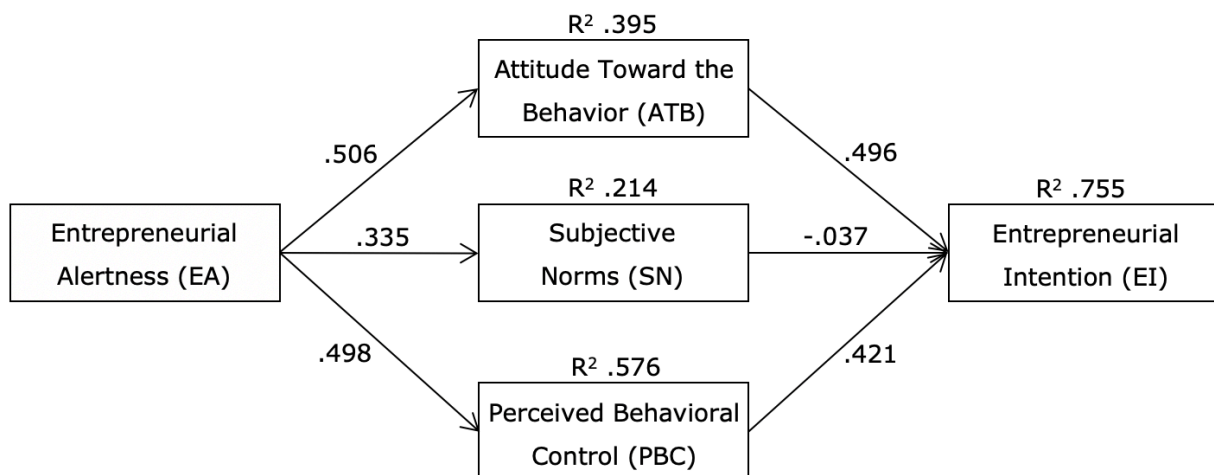
Notes: $n = 1681$; $^{\dagger}p < .10$ $*p < .05$ $**p < .01$

^a Unstandardized regression coefficients are shown.

To address the main focus of this master thesis, a mediation model is estimated (Figure 1) using the control variables of gender, age, level of education, previous entrepreneurial experience (EE), the availability of knowledge, skills, and experience (KSE), and parental role models (PRM). The hypotheses are tested using PROCESS by Hayes (2017). PROCESS tests for statistically significant direct and indirect effects through the use of a bootstrapping method. As recommended by Preacher and Hayes (2008) bootstrap confidence intervals with 5000 bootstrap resamples are calculated and the path coefficients are all in unstandardized form (Hayes, 2017). In addition, the Huber-White heteroscedasticity-

consistent standard error is used to measure the accuracy of means from the sample. Regression results for the mediation analysis of EA on EI through ATB, SN, and PBC are shown in Tables 2, 3, and 4.

Prior to analyzing the mediation model, the relation between EA and EI as stated in Hypothesis 1 is initially tested. Results in Table 2 confirm the direct and positively significant effect ($\beta = 0.440$, $t = 14.316$, $p < 0.01$) as stipulated in Hypothesis 1. Thus, entrepreneurial alertness significantly and positively predicts entrepreneurial intentions (not shown in Fig. 1). Additionally, the R-squared value of 0.443 indicates that entrepreneurial

**Fig. 2 Mediation model**

All paths are statistically significant.

alertness explains 43.3% of the variation in intention.

Based upon the results obtained from the mediation regression analysis, clear support is found for the theoretical research framework (Fig. 1), with all predicted structural relationships being statistically significant. The six separate direct paths from the mediation analysis are mentioned in Table 3, and specified in Figure 2. EA has a direct positive influence on ATB ($\beta = 0.506$, $t = 15.745$, $p < 0.01$), SN ($\beta = 0.335$, $t = 8.998$, $p <$

0.01), and PBC ($\beta = 0.498$, $t = 18.932$, $p < 0.01$). In turn, ATB ($\beta = 0.496$, $t = 17.886$, $p < 0.01$) and PBC ($\beta = 0.421$, $t = 12.305$, $p < 0.01$) have a statistically positive direct influence on EI. However, SN has a statistically negative direct effect on EI ($\beta = -0.037$, $t = -2.024$, $p < 0.05$). The R-squared value of 0.755 for intention indicates that entrepreneurial alertness, attitude toward the behavior, subjective norms, and perceived behavioral control explain 75.5% of the variation in intention.

Table 3. Mediated regression results of ATB, SN, and PBC in the relationship between EA and EI^a

Variables	b coefficient	SE	t
Mediator variable model (DV = ATB)			
Constant	.528**	.144	3.673
Entrepreneurial alertness	.506**	.032	15.745
Gender	.199**	.072	2.768
Age	.847**	.090	9.398
Level of education	-.161*	.075	-2.159
Entrepreneurial experience	.767**	.097	7.927
Knowledge, skills, and experience	.918**	.084	10.934
Parental role models	.297**	.074	4.037
<i>R² = .395, F = 223.867, p = .000</i>			
Mediator variable model (DV = SN)			
Constant	2.203**	.179	12.310
Entrepreneurial alertness	.335**	.037	8.998
Gender	-.054	.076	-.709
Age	.793**	.087	9.139
Level of education	.041	.079	.517
Entrepreneurial experience	.353**	.100	3.525
Knowledge, skills, and experience	.587**	.084	6.973
Parental role models	.296**	.075	3.935
<i>R² = .214, F = 73.616, p = .000</i>			
Mediator variable model (DV = PBC)			
Constant	-.085	.119	-.709
Entrepreneurial alertness	.498**	.026	18.932
Gender	.145*	.057	2.535
Age	.636**	.069	9.264
Level of education	.003	.061	.047
Entrepreneurial experience	.726**	.074	9.843
Knowledge, skills, and experience	1.469**	.066	22.102
Parental role models	.275**	.058	4.727
<i>R² = .576, F = 419.921, p = .000</i>			

Dependent variable model with mediators (DV = EI)			
Constant	-.492**	.102	-4.842
<i>Predictor variable</i>			
Entrepreneurial alertness	-.008	.023	-.371
<i>Mediator variables</i>			
Attitude toward the behavior	.496**	.028	17.886
Subjective norms	-.037*	.018	-2.024
Perceived behavioral control	.421**	.034	12.305
<i>Control variables</i>			
Gender	.061	.046	1.307
Age	.649**	.064	10.113
Level of education	-.006	.050	-.118
Entrepreneurial experience	.063	.075	.837
Knowledge, skills, and experience	.092	.067	1.379
Parental role models	.082	.051	1.621
$R^2 = .755, F = 624.116, p = .000$			

Notes: $n = 1681$; $^{\dagger}p < .10$ $*p < .05$ $**p < .01$

^a Unstandardized regression coefficients are shown.

The total, direct, and indirect effects can be found in Table 4. The total effect was already discussed in Hypothesis 1 and Table 2. The indirect effect of entrepreneurial alertness on entrepreneurial intention, through ATB, SN, and PBC (not shown in Fig. 2), is statistically significant ($\beta = 0.448, p < 0.05$) and confirmed by the bootstrap results. The bootstrapped 95 per cent confidence interval around the indirect effect does not contain zero (0.397, 0.501). However, entrepreneurial alertness proves not to be directly significant in the mediation model, as the LLCI (-0.053) and ULCI (0.036) does include zero, leading to the conclusion of full mediation.

Table 4 shows that Hypotheses 2, 3, and 4 can be supported. This study predicted that attitude toward the behavior mediate the relationship between entrepreneurial alertness and entrepreneurial intentions (Hypothesis 2). The findings reveal that the mediating effect of ATB on entrepreneurial intention is positive and significant ($\beta = 0.251, p < 0.05$), as the bootstrapped 95 per cent confidence interval does not contain zero (0.210, 0.296). Furthermore, support is also found for Hypothesis 3 which states that subjective

norms influence the relation between entrepreneurial alertness and intention. The results show that SN has a small negative but significant mediating effect ($\beta = -0.012, p < 0.05$) which is confirmed by the bootstrapped 95 per cent confidence interval (-.025, -.001). And finally, the mediating role of perceived behavioral control (Hypothesis 4) is also confirmed. The findings show that PBC significantly and positively mediates the influence of EA on EI ($\beta = 0.210, p < 0.05$). The bootstrapped 95 per cent confidence interval confirm the mediating effect, as it does not contain zero (0.171, 0.250).

To complete the analysis, a robustness check is performed on the working population (ages lower than 65), including all variables mentioned in the previous paragraph (not shown in Tables 3 and 4). This second mediation regression is also conducted using PROCESS by Hayes (2017). The analysis confirms the support for all four hypotheses. Alertness positively and significantly influences intention ($\beta = 0.539, t = 12.901, p < 0.01$) (H1). In addition, the indirect effect of alertness on intention, through ATB, SN, and PBC, is fully mediated and statistically significant as well

($\beta = .529, p < 0.05$), since the bootstrap results at a 95 per cent confidence interval around the indirect effect do not contain zero (0.457, 0.601). The indirect influence of EA through ATB ($\beta = 0.319, p < 0.05$) (H2), SN ($\beta = -0.017, p < 0.05$) (H3), and PBC ($\beta = 0.227, p < 0.05$) (H4) is also statistically significant. These unstandardized

effects are very similar to those of the general population, with the exception of attitude toward the behavior having a stronger influence on the relation between EA and EI. This leads to the conclusion that this model is robust. A discussion of the regression results is provided below.

Table 4. Mediated regression results of study variables on entrepreneurial intention^a

Total, direct, and indirect effects			
Total effect of EA on EI	SE	LLCI	ULCI
.440**	.031	.380	.500
Direct effect of EA on EI	SE	LLCI	ULCI
-.008	.023	-.053	.036
Indirect effect of EA on EI	Boot SE	BootLLCI	BootULCI
.448*	.027	.397	.501
EA → ATB → EI	Boot SE	BootLLCI	BootULCI
.251*	.022	.210	.296
EA → SN → EI	Boot SE	BootLLCI	BootULCI
-.012*	.006	-.025	-.001
EA → PBC → EI	Boot SE	BootLLCI	BootULCI
.210*	.020	.171	.250

Notes: $n = 1681$; [†] $p < .10$ * $p < .05$ ** $p < .01$

^a Unstandardized regression coefficients are shown. Bootstrap sample size = 5000.

LL = lower limit, UL = upper limit, CI = confidence interval

5 Discussion

The purpose of this master thesis is to examine the influence of entrepreneurial alertness on the intention to start a new business. Utilizing a unique Belgian dataset of 1681 respondents, representative of the population, this study aims to fill the gap on the limited attention given to entrepreneurial alertness in the formation of on Ajzen's (1985, 1991) attitude toward the behavior, perceived behavioral control, and especially subjective norms.

The first finding underlines the essential role of alertness in the formation of entrepreneurial opportunities. Specifically, the regression results confirm that alertness positively and significantly predicts entrepreneurial intention, thus supporting Hypothesis 1. This outcome is in line with prior studies that have also supported the direct positive influence on intention (e.g., Bueckmann-

Diegoli et al. (2020); Hu et al. (2018); Hu and Ye (2017); C. Li et al. (2020); Neneh (2019); van Gelderen et al. (2008)). A part of being alert means that there will be an incentive to have entrepreneurial intentions (Kirzner, 1979). More entrepreneurially alert individuals could thus have a higher intention to start a new business.

The second finding concerns the mechanisms behind this alertness and intention link. This master thesis provides an understanding of the role of the opportunity-related construct in the formation of entrepreneurial intentions, through the framework of Ajzen's (1991) theory of planned behavior. By performing regression analyses on this mediation model, this thesis concludes that attitude toward the behavior, subjective norms, and perceived behavioral control, have a fully mediating influence. Thus, supporting Hypotheses 2, 3, and 4. More concrete, entrepreneurial alertness is identified as a crucial antecedent to

entrepreneurial intention, by having a direct influence on these mediators. The present study's findings are discussed in the order of the underlying hypotheses testing.

First, by supporting Hypothesis 2, this study concludes that alertness positively influences intention through attitude toward the behavior. The attitude toward being an entrepreneur is more favorably (Ajzen, 1991; Liñán & Chen, 2009) when an individual is more alert. The recognition of a business opportunity thus acts as an internal motivation to consider an entrepreneurial career as desirable. This finding is in line with the recent study by Bueckmann-Diegoli et al. (2020). Subsequently, the more positive the attitude, the stronger the individual's intention will be to start a new business, as confirmed by Autio et al. (2001), Bueckmann-Diegoli et al. (2020), Kautonen et al. (2015), Krueger et al. (2000), and others. Second, the confirmed negative mediating role of subjective norms in Hypothesis 3, leads to the conclusion that alertness negatively influences intentions through subjective norms. More concrete, this thesis finds alertness to have a positive and significant influence on subjective norms. However, the negative, but small significant influence of norms on intention contradicts other researchers who have found it being non-significant (Autio et al., 2001; Bueckmann-Diegoli et al., 2020; Krueger et al., 2000; Liñán & Chen, 2009) or positive (Kautonen et al., 2015; Kolvereid & Isaksen, 2006). Even though alert individuals will feel that their intent to start a new business is accepted and supported by important others, such as friends, parents, and colleagues, the identification of a business opportunity could lead to an increase in social pressure. This higher perceived pressure results in a small negative impact on business intent. A possible explanation of the negative effect may be found in the paper by Ajzen (1991), who stated that personal considerations tend to overshadow the influence of perceived normative beliefs. Finally, by confirming Hypothesis 4, this master

thesis argues that alertness positively influences intention through perceived behavioral control. The more alert an individual is to new business opportunities (Ajzen, 1991), the more that individual will consider themselves as capable of starting a new business (Ajzen, 1991, 2002; Bueckmann-Diegoli et al., 2020; Carr & Sequeira, 2007; Gist & Mitchell, 1992). This positive and significant influence of alertness on perceived control was also found by Bueckmann-Diegoli et al. (2020) and van Gelderen et al. (2008). In turn, individuals will intend to perform the behavior of starting a new business if they believe it can be accomplished (Autio et al., 2001; Bueckmann-Diegoli et al., 2020; Kautonen et al., 2015; Krueger et al., 2000; van Gelderen et al., 2008).

The above regression analyses are controlled by a number of demographic variables. When regressing alertness on intention, without mediators, men are found to have higher entrepreneurial intent than women and these overall decrease with age. These findings are in line with Liang et al. (2018), Parker (2004), Santos et al. (2016), and others. The level of education, however, does not affect the probability of having the intention to become an entrepreneur, which is contradictory to the research by Parker (2004). Furthermore, the availability of knowledge, skills, and experience (Ajzen, 2002; Liñán, 2004), the existence of parental role models (Cavaliere et al., 2021; Geissler & Zanger, 2010; Hu et al., 2018; Liñán & Chen, 2009; Matthews & Moser, 1996; Minniti, 2004), and the level of entrepreneurial knowledge (Liñán & Chen, 2009) resulting from previous entrepreneurial experience (Ajzen, 2002) all have a positive influence on entrepreneurial intentions as expected. On the other hand, only age affects entrepreneurial intentions significantly in the mediation model. A possible explanation could be that when individuals hold a favorable attitude toward entrepreneurship and anticipate that they can perform that successfully, while experiencing subjective norms, other factors (i.e., gender, level

of education, entrepreneurial experience, knowledge, skills, and experience, and parental role models) have no influence on the intention to become an entrepreneur.

5.1 Theoretical implications

An important implication of the argument presented in this master thesis is that alertness to new business opportunities is a key strength for entrepreneurs (Y. Li et al., 2015; Obschonka et al., 2017), to develop the intention to start a new business. This thesis contributes to the entrepreneurship literature from the perspective of entrepreneurial alertness, by confirming that the opportunity construct provides additional insights into the complex process of entrepreneurship. Despite the current research acknowledging the influence of alertness on intentions (e.g., Bueckmann-Diegoli et al. (2020); Hu et al. (2018); Hu and Ye (2017); C. Li et al. (2020); Neneh (2019); van Gelderen et al. (2008)), studies exploring the relationship influence of entrepreneurially alert individuals on the attitude, perceived control, and subjective norms, regarding the intention to start a new business are lacking. As such, this master thesis focuses on and expands the current entrepreneurship research by providing an understanding of its lesser studied importance. Additionally, the theoretical research model proposed in this thesis, provides statistical support for the use of the theory of planned behavior (Ajzen, 1991) to map alertness and subsequent intentions.

5.2 Practical implications

The present study has practical implications for educators and policy makers. The findings provide further evidence for the importance of entrepreneurial competencies (Obschonka et al., 2017) such as alertness. Entrepreneurs and non-entrepreneurs need to be aware of the importance

of alertness as an opportunity identification construct. According to the social cognition theory (Fiske & Taylor, 1991), alertness represents an individual capability that can be learned and improved. Educational programs for aspiring entrepreneurs (Tang et al., 2012) may thus increase the awareness of entrepreneurial alertness in discovering opportunities with business potential.

5.3 Limitations and future research

This master thesis has some limitations that provide interesting possibilities for future entrepreneurial research on the topic. First, in entrepreneurial behavior-based models, intentions alone are not the ultimate goal of entrepreneurship (Neneh, 2019). Even when alertness enables opportunity identification (Obschonka et al., 2017) and individuals develop the intention to pursue the identified opportunity, there is no guarantee that such individuals will translate their intentions into actions (Kautonen et al., 2015; Neneh, 2019; Obschonka et al., 2017; Shirokova, Osiyevskyy, & Bogatyreva, 2016). An extension of the model presented in this study, one which includes alertness, the mediators, intentions, and behavior as proposed by Ajzen (1991), could result in an even more comprehensive model of alertness and intentions.

Second, not all individuals who demonstrate entrepreneurial alertness intend to engage in entrepreneurship (Gaglio & Katz, 2001; Obschonka et al., 2017). Meaning, some will choose entrepreneurship and others will not (Minniti, 2004). Particularly, an individual's personality plays a role in determining whether or not they will develop entrepreneurial intention to pursue the identified opportunities (Brandstätter, 2011; Obschonka et al., 2017). As such, understanding how personality traits could strengthen the proven association between alertness, intentions, and the mediators from this thesis, would be an interesting perspective.

Finally, the fact that this master thesis found a different outcome for subjective norms than other studies focusing on the theory of planned behavior (Autio et al., 2001; Bueckmann-Diegoli et al., 2020; Kautonen et al., 2015; Kolvereid, 1996b; Kolvereid & Isaksen, 2006; Krueger et al., 2000; Liñán & Chen, 2009) suggests that entrepreneurial alertness matters in intention research. Consequently, this finding provides interesting insights to the debate which calls for further research on the influence of alertness on subjective norms in an entrepreneurial context.

Conclusion

The main purpose of this master thesis is to research the influence of entrepreneurial alertness on the intention to start a new business. A research model incorporating the behavior-based theory of planned behavior is proposed to obtain a better understanding of the relation between the recognition of opportunities and the subsequent intention to engage in entrepreneurial behavior. Statistical results of the regression analyses reveal that alertness is positively and significantly related to an individual's intention in starting a business. This implies that entrepreneurial alertness is a vital component in the entrepreneurial process. Furthermore, this thesis argues that attitude toward the behavior, subjective norms, and perceived behavioral control fully and significantly mediate the influence of entrepreneurial alertness on entrepreneurial intention. These conclusions are drawn by testing a mediation model using a unique Belgian dataset of 1681 respondents. Adding to the current literature on both alertness and entrepreneurship, this master thesis provides interesting implications for theory and practice, with a further understanding of how alertness translates to intentions. Accordingly, the importance of entrepreneurial alertness is highlighted, while providing statistical support for the use of intention-based models to understand

entrepreneurial alertness and subsequent intentions.

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Appendix A

All variables and their items were measured on a seven-point Likert-scale and translated to Dutch.

EA (Tang et al., 2012)

"Please rate the following statements about yourself from 1 (total disagreement) to 7 (total agreement)."

Scanning and search

Alertness 1. I have frequent interactions with others to acquire new information.

Alertness 2. I always keep an eye out for new business ideas when looking for information.

Alertness 3. I read news, magazines, or trade publications regularly to acquire new information.

Alertness 4. I browse the internet every day.

Alertness 5. I am an avid information seeker.

Alertness 6. I am always actively looking for new information.

Association and connection

Alertness 7. I see links between seemingly unrelated pieces of information.

Alertness 8. I am good at "connecting dots."

Alertness 9. I often see connections between previously unconnected domains of information.

Evaluation and judgement

Alertness 10. I have a gut feeling for potential opportunities.

Alertness 11. I can distinguish between profitable opportunities and not-so-profitable opportunities.

Alertness 12. I have a knack for telling high-value opportunities apart from low-value opportunities.

Alertness 13. When facing multiple opportunities, I am able to select the good ones.

TPB (Liñán & Chen, 2009)

ATB

"Indicate your level of agreement with the following sentences from 1 (total disapproval) to 7 (total approval)."

Attitude 1. Being an entrepreneur implies more advantages than disadvantages to me.

Attitude 2. A career as entrepreneur is attractive for me.

Attitude 3. If I had the opportunity and resources, I'd like to start a firm.

Attitude 4. Being an entrepreneur would entail great satisfactions for me.

Attitude 5. Among various options, I would rather be an entrepreneur.

SN

"If you decided to create a firm, would people in your close environment approve of that decision? Indicate from 1 (totally disapprove) to 7 (totally approve)."

Norms 1. Your close family.

Norms 2. Your friends.

Norms 3. Your colleagues.

PBC

"To what extent do you agree with the following statements regarding your entrepreneurial capacity? Value them from 1 (total disagreement) to 7 (total agreement)."

Control 1. To start a firm and keep it working would be easy for me.

Control 2. I am prepared to start a viable firm.

Control 3. I can control the creation process of a new firm.

Control 4. I know the necessary practical details to start a firm.

Control 5. I know how to develop an entrepreneurial project.

Control 6. If I tried to start a firm, I would have a high probability of succeeding.

EI

"Indicate your level of agreement with the following statements from 1 (total disagreement) to 7 (total agreement)"

Intention 1. I am ready to do anything to be an entrepreneur.

Intention 2. My professional goal is to become an entrepreneur.

Intention 3. I will make every effort to start and run my own firm.

Intention 4. I am determined to create a firm in the future.

Intention 5. I have very seriously thought of starting a firm.

Intention 6. I have the firm intention to start a firm someday