Cognitive style influence on entrepreneurial intent in tight and loose cultures

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Abstract

Each person has a different way of thinking, or cognitive style, which can have an effect on the entrepreneurial intent of an individual in a tight or loose culture it is important to study the potential differences in culture among the individuals and how the culture may affect individuals. Current studies only look at cognitive style and entrepreneurial intent, in this study emphasis is also placed on culture. The purpose of this study is to examine how different cognitive styles influence entrepreneurial intent in tight or loose cultures. The scales used in this research are the cognitive style index, the tight and loose culture scale and the entrepreneurial intent scale. With the data obtained in this study, three hypotheses were tested. The main results are that cognitive style has a significant effect on entrepreneurial intent: the entrepreneurial intent of someone with an intuitive cognitive style scores higher than the entrepreneurial intent of someone with an analytical cognitive style. This study also indicates that there is no significant relationship between entrepreneurial intent and tight or loose culture, or between cognitive style and tight or loose culture. This research contributed in gaining more insights on how cognitive style influences entrepreneurial intent and how it operates in a tight and loose culture.

Keywords: Cognitive style, Intuitive style, Analytical style, Entrepreneurial intent, Tight culture, Loose culture

Preface

This thesis represents the end of my school career, starting at vocational college and ending at university with a Master's in Business Administration, specializing in Entrepreneurship Innovation and Strategy. It has been a long and sometimes frustrating road, but I want to thank everyone who has helped and supported me during the process of writing this thesis and during my school career.

I would like to thank Dr. M.R. Stienstra for his excellent guidance. We always had good sessions to discuss the thesis and because of his guidance and support, the final product was completed.

Finally, I would like to thank my family and friends for their support while writing my thesis, especially my girlfriend who, despite her busy schedule, always made time for me and was always a support that I could lean on.

Enjoy reading my thesis!

Enschede, June 2021

Mardiek Margos

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1. Introduction

The subject of this research is the influence of cognitive styles on entrepreneurial intent in tight and loose cultures. This chapter begins with a short introduction to the background of the topic, then the context of the research is discussed and the research gap is detailed. The purpose of the research is further explained, along with the corresponding research questions. Finally, the contributions of the research are explained, and the chapter closes with an outline of the whole thesis.

1.1 Background

Each person has their own way of thinking and problem-solving. The term used to describe this is 'cognitive style', as stated in the article of Riding and Cheema (1991), first introduced by Allport in 1937. This includes a person's ability to solve, think, analyse, and remember (Riding & Cheema, 1991; Allison & Hayes, 1994). Each person has a different way of thinking and problem solving. Cognitive styling is more interested in *ways* of thinking than in thinking itself, meaning that cognitive styles look more at how an individual looks at problems and sees possibilities and applies solutions (Witkin, Moore, Goodenough, Cox, 1977). The cognitive style of an entrepreneur can show the extent to which an individual is willing to do something for themselves.

Cognitive style has been widely studied since the 1940s and 1950s (Masalimova et al., 2019; Kozhevnikov, 2007). 'Cognitive style' refers to an individual's ability to process, store, analyse, and use information in such a way that it is accessible (Alabduljader et al., 2020; Allison & Hayes, 1996; Indra & Richard, 1991; Allison & Hayes, 1994; Armstrong, Cools, and Sadler-smith, 2011). Studies have shown that cognitive style is a better predictor of an individual's success than general intelligence or environmental factors (Kozhevnikov, 2007). Moreover, Kozhevnikov (2007) notes that cognitive style is an essential factor in an individual's behaviour or intention and their internal communication, as well as a driver of their career possibilities. The phenomenon of entrepreneurial cognition includes the concept mentioned above, but it concerns the information that an individual absorbs and uses to exploit opportunities for 'venture creation'. The individual may use this information to develop new products or services (Mitchell et al., 2002). A framework widely used to examine the relationship between entrepreneurship and cognitive style is the Allison and Hayes (1996) cognitive styles index.

Much research has explored entrepreneurial intention. For example, Gelard and Saleh (2010) looked at the impact of contextual factors on entrepreneurial intention, taking a sample of 200 students to examine the factors that affect entrepreneurial intention. Another study looked at how different cultures respond to entrepreneurial career intentions (Moriano et al., 2011). However, they did not take cognitive styles into account or consider how these can influence career intentions. For example, Kristiansen and Indarti (2004) looked at entrepreneurial intention among Indonesian and Norwegian students, considering self-efficacy, instrumental readiness, and social status; but they did not look at cognitive styles.

Entrepreneurial intent is becoming increasingly valuable, this is seen by teaching entrepreneurship in schools to encourage students to take up entrepreneurship and stimulate the economy. In this way, it is hoped that more students will set up their own businesses when they have completed their studies (Mueller, 2011; Solesvik, Weshead, Matlay, 2014; Linan, Rodriguez-cohard, Rueda-Cantuche, 2011). According to Mueller (2011), courses on entrepreneurship, especially the content of the course and the way of teaching it, have been mentioned as a key factor in increasing entrepreneurial intent among students, with the use of scale items of Ajzen and Kovereid. Moreover, Mohamad, Lim, Yusof, and Soon (2015) found that students who take entrepreneurial courses have more likelihood to become entrepreneurs themselves.

However, conversely, Bae, Qian, Miao, and Fiet (2014) found that entrepreneurship studies have little or no effect on the student's potential to become an entrepreneur.

This current study will examine whether cognitive style has an effect on entrepreneurial intent in a tight or loose culture, with the goal of better understanding this relationship and identifying how it could be improved.

1.2 Context

This research looks at the influence of cognitive style on entrepreneurial intent. In order to operationalize entrepreneurial intent, the Theory of planned behavior will be used. The theory of planned behavior (TPB) concerns the individual's intention to engage in activities such as entrepreneurial activities . TPB assumes that someone is rational and systematically uses information to make choices (Yang, 2013). It distinguishes two *internal* factors that influence the individual's intention – attitude and perceived behavioral control (PBC) – and the external factor of subjective norms (Yang, 2013; Alabduljar, Solomon, Kang, Choi, & Al-adbuljader, 2020). Several studies have shown a strong correlation between attitude and PBC with respect to entrepreneurial intent (Vamvaka, Stoforos, Palaskas, & Botsaris, 2020; Rauch & Hulsink, 2015; Schlaegel & Koenig, 2014; Yang, 2013). TPB will be used during this research to link entrepreneurial intent with attitude and perceived behavioral control, that is done with multiple studies such as (Alabduljader et al., 2020; Mueller, 2011; Fayolle & Gaily, 2004; Yang, 2013). The scales that will be used during this research to link to TPB will be scales of Thompson (2009) and the scale of Chen, Gully, and Eden (2001) because these scales also focus on attitude and perceived behavioral control of an individual. The scales that will be excluded in this research is that of Luthje and Frank (2003) because that mostly concerns the risk taking in an individual and that will be not be done during this research. The scale of Sapp and Harrod (1993) will also be excluded during this research because that mostly concerns the control scale and the ability of an individual to control himself and that will not be researched during this study.

Although much research has been done in this area (Alabduljaber, et al., 2020; Molaei et al., 2014; Kickul et al., 2009; Mitchell et al, 2002), that focuses on the effect of cognitive styles and entrepreneurial intent. There are only a few studies that also involve the culture factor in the studies (Harry et al., 2014; Moriano et al., 2012). Harry et al., (2014) states that culture can play a significant role in defining entrepreneurial intent in an individual and what kind of cognitive style an individual prefer. In this study culture will also be involved and it will be the scale of a tight or loose culture by Gelfand et al (2011). Tight cultures are those with strict standards and strict policies on behavior that deviates from social norms, while loose cultures have looser standards and softer policies on behavior that deviates from social norms (Gelfand et al., 2011). Culture can play a role in student behavior when it comes to entrepreneurial intent, as it can influence students' intentions towards and views of entrepreneurship. This can be done by education, in an culture where entrepreneurship is looked at differently and learned through education then it can be a significant predictor of entrepreneurial intent (Turker & Selcuk, 2009; Moriano, Gorgievski, Laguna, Stephan, and Zarafshani, 2011).

1.3 Research gap

Although the influence of cognitive style on entrepreneurial intent has already been studied (Alabduljar et al., 2020; Molaei, Zali, Mobaraki, and Farsi, 2013), we do not know much about the differences between tight and loose cultures in different cognitive styles on entrepreneurial intent (Gelfand et al., 2011). Few studies have looked deeply into the cognitive styles of students and considered the influence these have on entrepreneurial intention in tight and loose cultures. This is important because this research can show that entrepreneurial intent depends heavily on the type of culture a person comes from and how this interacts with particular cognitive styles.

Also, Alabduljader et al. (2020) confirms that it is important to study the potential differences in culture among the individuals and how the culture may affect individuals. Current studies mostly resolve around cognitive styles and entrepreneurial intent and not much dept is placed on culture, and that is why during this research the emphasis will also mainly be put on a tight or loose culture. However, there are a few studies that included cultures with entrepreneurial intent, those studies primary focused on the application of the Hofstede approach (Alabduljaber et al., 2020; Moriano et al., 2012). Nevertheless, scholars criticize the validity of operationalizations of the dimensions in the Hofstede approach (Harms & Groen, 2016). even though scholars criticize this approach most studies include Hofstede, therefore not much has been looked at culture from other perspectives, in a study by Harms and Groen (2016) they do look at the tight and loose concept of Gelfand et al. (2011) but further research is needed on the effects of a tight or loose culture within entrepreneurship in order to get a better understanding and filling gaps in knowledge. Moriano et al. (2012) also indicates that the constructs used in TPB should be examined and linked to entrepreneurial intent and should look at different cultures and the differences

between them, this is a crucial piece that is still missing in this research field and is increasingly in demand (Moriano et al., 2012; Harms & Groen, 2016; Alabduljaber et al., 2020; Molaei et al., 2014).

1.4 Purpose of study

The purpose of this research is to discover whether cognitive styles influence entrepreneurial intent in tight and loose cultures. This will be investigated by looking at the factors of attitude, and PBC (Alabduliar et al., 2020; Yang 2013) in the TPB framework. The goal is to look at the different cultures and how they deal with entrepreneurial intent to identify any differences and investigate them. For this, it is necessary to obtain and analyze information on how students deal with entrepreneurial intent in tight and loose cultures and identify the effect of cognitive style on this.

This research will contribute by producing more insights into how cognitive styles influence entrepreneurial intent and how they operate in tight and loose cultures. In this way, it is better to look into the future and perhaps train students in such a way that they become more inclined to think entrepreneurially and to set-up their own businesses. This research not only looks at cognitive styles and their influence on entrepreneurial intent, but also on the effect of tight and loose cultures, and it strives for a deeper understanding of these concepts.

The research question is thus as follows:

‘How do different cognitive styles influence entrepreneurial intent in tight or loose cultures?’

The goal of my research question can be divided into the following:

- ◊ Identify the effect of cognitive styles on entrepreneurial intent
- ◊ Analyze Entrepreneurial intent in tight or loose cultures
- ◊ Analyze Cognitive styles in tight or loose cultures

1.5 Outline

The remainder of this report is divided as follows. In the next chapter, the theory underpinning this research is presented in depth. In Chapter 3, we look at the methodology of the study. In Chapter 4, the results are presented; and in Chapter 5, there is a conclusion and discussion, alongside recommendations for future researchers.

2. Theory

This chapter will discuss in more detail the concepts of this research – namely, cognitive style, entrepreneurial intent, and tight and loose cultures. A brief explanation of the frameworks used during that research will also be provided; these are the cognitive style index of Allison and Hayes (1996) and the theory of planned behaviour.

2.1 Cognitive style

In this chapter, the concept of cognitive style will be elaborated, with an explanation of the cognitive style index. In addition, more depth will be given to the intuitive and analytic styles; and, at the end of the chapter, the hypotheses to be examined later in the research will be formulated.

2.1.1 Defining cognitive style

Cognitive style has been widely studied since the 1940s and 1950s (Masalimova et al., 2019; Kozhevnikov, 2007). 'Cognitive style' refers to an individual's ability to process, store, analyse, and use information in such a way that it is accessible (Alabduljader et al., 2020; Allison & Hayes, 1996; Indra & Richard, 1991; Allison & Hayes, 1994; Armstrong, Cools, and Sadler-smith, 2011). Studies have shown that cognitive style is a better predictor of an individual's success than general intelligence or environmental factors (Kozhevnikov, 2007). Moreover, Kozhevnikov (2007) notes that cognitive style is an essential factor in an individual's behaviour or intention and their internal communication, as well as a driver of their career possibilities. The phenomenon of entrepreneurial cognition includes the concept mentioned above, but it concerns the information that an individual absorbs and uses to exploit opportunities for 'venture creation'. The individual may use this information to develop new products or services (Mitchell et al., 2002). A framework widely used to examine the relationship between entrepreneurship and cognitive style is the Allison and Hayes (1996) cognitive styles index. This is explained in more detail in the following section.

2.1.2 Defining cognitive style index

Over the years, there has been much scientific investigation of the connection among cognitive style and learning style; but there are few valid and reliable assessment instruments applicable to an organization. The cognitive style index is a framework that can overcome these issues and it has been used in many similar studies (Allison & Hayes, 1996; Murphy, Kelleher, Doucette, and Young, 1998; Alabduljader et al., 2020). There are several dimensions of cognitive styles, such as field-dependent and independent (Witkin et al., 1977) and serialist and holist (Pask & Scott,1972). Riding and Indra also name many other examples: leveler and sharpener, impulsivity and reflectivity, diverging and converging, and tolerant and intolerant (1991). However, according to a study by Riding and Rayner (1997), these dimensions have been shown to apply only in single studies and are not supported by others; hence, the choice was made not to work with them in this study.

2.1.3 Intuitive and analytical cognitive styles

In this study, cognitive styles are categorized as either intuitive or analytical. These are the two 'extremes' of cognitive style, as proposed by Allison and Hayes (1996). In between these, we have 'quasi-intuitive', 'adaptive', and 'quasi-analytic'. Intuitive types discover opportunities by being aware of ideas or indicators, which they find amongst the new and scattered information that they are able to handle in a constructive and integrated style. In contrast, analytical types are more likely to competently scan and critique information and choose strategies to act upon it (Kickul, Gundry, Barbosa & Whitcanack, 2009). Allison and Hayes (1996) also indicate that analytical personalities are more focused on detail and they tend to prefer the linear processing of information, while intuitive people are more feeling-based and prefer to look at the whole picture. A study by Hodgkinson and Smith (2003) found that intuitive and analytical types can be seen as separate extremes that are also connected; thus, an individual can be capable of both. However, in this research, we do not assume this and we rather treat the intuitive and analytical as separate.

2.2 Entrepreneurial intent

This section explains the concept of entrepreneurial intent and links it to the theory of planned behaviour concepts, PBD, and attitude, showing how it relates to this study.

2.2.1 Defining entrepreneurial intent

Much of human behaviour is planned, and people rarely act purely out of emotion. The psychology literature indicates that intention is a good predictor of planned behaviour, especially when the behaviour is rare and difficult to observe. Entrepreneurship is one concept of planned behaviour (Souitaris, Zerbinati, & Al-Laham, 2007; Katz & Gartner, 1988; Krueger & Brazeal, 1994). Entrepreneurial intention is the state of mind that causes a person to take action; it ensures that their attention and choices are focused on attaining the goal of starting a business (Mariano, Gorgievski, Laguna, Stephan, & Zarafshani, 2012; Kreuger & Brazeal, 1994: Thompson, 2009).

Several models seek to explain entrepreneurial intention, such as Shapero's entrepreneurial events and Bird's implementation of entrepreneurial ideas (Mariano et al., 2012; Fayolle & Linan, 2014). However, while these models do contribute to the investigation of entrepreneurial intent, they are less effective and widely used than the theory of planned behaviour (Mariano et al., 2012; Fayolle & Linan, 2014; Souitaris et al., 2007; Alabduljar et al., 2020; Kreuger, Reilly, & Carsrud, 2000). Entrepreneurs do not start businesses as a reflex; rather, reaching their goals requires intention, and the entrepreneur's intention determines the progress of the organization (Kreuger et al., 2000; Fini, Grimaldi, Marzocchi, & Sobrero, 2009). In this research, the theory of planned behaviour is used to give entrepreneurial

intention a clearer view. This is explored further in sections 2.2.2 and 2.2.3, and planned behavioural control and attitude are discussed in the context of this research and the cognitive style index.

2.2.2 Perceived behavioural control

Perceived behavioural control involves the perception of becoming an entrepreneur, which can be difficult or easy, as well as the actions and behavioural characteristics of the entrepreneur (Mariano et al., 2012; Ajzen, 1991; Kreuger et al., 2000; Alabduljader et al., 2020). The observational behaviour that looks at how easy or difficult an individual can become an entrepreneur or the process towards it is influenced by the resources a person has and how they engage with them and the recognizing opportunities and working with them immediately (Alabduljader et al., 2020). Perceived behavioural control is much like self-efficacy (Mariano et al., 2012; Alabduljader et al., 2020). When looking at cognition in intuition and the research therein, it is also found that the use of intent is used to connect the dots and see a connection to do something by the right means and recognize opportunities (Alabduljader et al., 2020; Kickul et al., 2009).

A study by Alabduljader et al. (2020) found that perceived behavioural control can lead to excessive self-confidence and that such individuals find it easier to start a business than others do. During this research, perceived behavioural control is linked to the questions that comprise then cognitive style index. The questions, proposed by Thompson (2009) and Chen et al. (2001) examine perceived behavioural control in relation to intent, for example asking about setting up a project for oneself, carefully planning for the future, and saving money. In Chapter 3 (on the methodology), this is explained in more detail.

2.2.3 Attitude

Attitude is a person's negative or positive perceptions of an entrepreneur or the intention to become an entrepreneur (Alabduljader et al., 2020; Mariano et al., 2012). Moreover, it can also be the way in which a person changes or improves their behaviour in relation to their entrepreneurial intent (Ajzen, 1991). According to Ajzen (1991), one's attitude is mainly determined by a set of thoughts about a subject, which are linked to certain goals and actions. Someone may have very positive or negative thoughts about entrepreneurship and the process behind it (Mariano et al., 2012).

A study by Brigham, De Castro, and Shepherd found that the greater the distance in the individual cognitive style employed during work, the less pleasure one takes in one's work and their attitude changes (2007). The intuitive cognitive style improves the individual's attitude to entrepreneurship and gives them more affinity with it. There is a cognitive fit when using the intuitive cognitive style in entrepreneurship, as Alabduljader et al. (2020) have shown (Brigham et al., 2007; Alabduljader et al.,

2020). Individuals with an analytical cognitive style need more information and facts to have a more positive attitude towards entrepreneurship and greater confidence in their career (Alabduljader et al., 2020). Like perceived behavioural control, attitude is related to cognitive style and cognitive style index and can also be assessed using the Thompson (2009) and Chen et al. (2001) questions on how an individual prepares to become an entrepreneur. For example the questions ask whether the individual uses their free time to read news articles about business life and starting one's own business.

2.3 Tight and loose cultures

In this section, we will explain the concepts of 'tight' and 'loose' cultures and provide more detail of this theory.

2.3.1 Tight cultures

A tight culture is a society that is very formal and disciplined, where there are strict norms and rules and anyone who deviates from these is severely punished. As it were, everyone 'goes by the book' (Aktas, Gelfand, and Hanges, 2016; Gelfand et al., 2011; Gelfand, Raver, and Nishii, 2006). In their 33-nation study, Gelfand et al. state that ecological and dangers formed by people leave a country wanting stricter norms and the immediate punishment of bad behaviour, thus ensuring more order and structure and greater likelihood of survival (2011). Moreover, it has also been found that the institutions and companies operating in tight cultures have little socialisation and they are more rule-oriented and more likely to suppress free expression and other freedoms (Gelfand et al., 2011). However, a study by Aktas, Gelfand, and Hanges found that a tight culture has no negative relationship with organizational functioning and that leadership can be just as effective even when there is oppression in the organization (2016).

Tight countries are also more likely to suppress opinions and ideas by, for example, controlling and regulating the media (Gelfand et al., 2011). In tight cultures such as China, innovative inventions have been confiscated by the government and the inventors given little compensation for their products. Over the years, it has grown explicitly; but it is still in a beginning phase, they undergo many obstacles along the way, and it is generally more difficult to get started (Ahlstrom & Ding, 2014). A recent study by Jackson, Gelfand, and Ember also found a positive relationship between the tightness of a culture and social unrest – for example, in the areas of policy, food shortages, and population pressure. The inhabitants of the country tend to have fewer doubts about the leader, as they stand for power and social order (2020). Based on these studies, one might consider how entrepreneurs operate in tight cultures and how people tend to view the act of launching a project for oneself in a society where everything is controlled and there are so many obstacles.

2.3.2 Loose cultures

A loose culture is a society that has low standards and few rules and which accepts and reinforces free thinking, encouraging people to develop. It can also be seen as a society that lacks discipline, direction, and formality (Aktas, Gelfand, and Hanges, 2016; Gelfand et al., 2011). The nation study by Gelfand et al. concludes that, when a country faces fewer threats and challenges, it is more inclined to set lower standards, enforce less order, and permit more latitude (2011). Moreover, countries with loose cultures encourage their people to start projects for themselves and to be more tolerant of a wider range of social behaviours (Gelfand et al., 2011).

A study by Aktas, Gelfand, and Hanges also found that, in a loose culture, people are more inclined to use innovation to achieve their goals. They come up with new and innovative ideas to continuously challenge themselves (2016). Loose cultures also leave more space for the individual so that they can make mistakes, learn from them, and thus develop themselves. In loose cultures, there is no systematic system that applies in a country: there are many possibilities (Gelfand et al., 2011).

In this research, the Gelfand concepts of tightness and looseness were chosen because every country must deal with these: every country has a tighter or looser culture than others. A country is always more inclined towards one side of the scale, and this can explain and substantiate its cultural dimensions (Tung & Verbeke, 2010). In a study by Harms and Groen, the authors also show that a tight or loose culture cannot affect entrepreneurship, but if one looks on the individual level, something else might come out and during this study that would be the case (2017). A culture that oppresses the individual can make a difference if someone dares to set something up for themselves without being constantly controlled and how a person makes those choices. Therefore, tight and loose cultures were taken into consideration during this research.

2.4 Development of hypotheses

The combination of the above concepts in this work is briefly explained in this section; and, on this basis, the hypotheses are developed.

In relation to cognitive style and entrepreneurial intent, Allison and Hayes hypothesize that intuitive and analytical cognitive styles both influence the choices a person makes and the ways in which they think (1996). Individuals can switch between different cognitive styles and use both separately, but each person has a preference for either the intuitive or the analytical and always tends more towards that side than the other (Alabduljader et al., 2020; Hodgkinson & Sadler-Smith, 2003). In this research, there is also a range between intuitive and analytical – and in between these, we have adapters – but that is not looked at during this research; rather, it is assumed to be either intuitive or analytical (Allison & Hayes, 1996).

It is generally thought that, in relation to entrepreneurial intent, individuals have more of an intuitive cognitive style than analytical (Alabduljader et al., 2020; Mitchell et al., 2002). Moreover, because entrepreneurs are in an environment in which they must respond to events, take risks, and spot opportunities, it is hypothesized that an intuitive cognitive style will be more closely correlated with entrepreneurial intent (Alabduljader et al., 2020; Mitchell et al., 2002; Kickul et al., 2009; Kreuger & Brazeal, 1994). Therefore, in this study, it is expected that students with intuitive cognitive styles will score higher for entrepreneurial intent than students with analytical cognitive styles.

Hypothesis 1a: Students with a tendency for intuitive cognitive style will show a higher amount of entrepreneurial intention.

Hypothesis 1b: Students with a tendency for analytical cognitive style will show a lower amount of entrepreneurial intention.

Entrepreneurial intent is a state of mind in which one wants to take action, is fully focused on doing so, and dares to take opportunities (Mariano et al., 2012; Kreuger & Brazeal, 1994). An entrepreneur has certain perceptions that can be transformed into behaviours and actions. They differ both from one person to another and between tight and loose cultures. In a tight culture, the future is mapped out and the individual cannot easily deviate from this plan. In a loose culture, in contrast, a person is free in their behavioural choices, and this is likely to be reflected in levels of individual entrepreneurial intent (Mariano et al., 2012; Ajzen, 1991; Kreuger et al., 2000; Alabduljader et al., 2020; Gelfand et al., 2011). In this study, it is expected that entrepreneurial intent will be less common in tight cultures, as they have stricter norms and rules and those who deviate from these are punished severely. As a result, individuals are less likely to take risks, preferring instead to choose the easier and more structured path (Gelfand et al., 2011; Aktas et al., 2016; Gelfand et al., 2006).

Hypothesis 2: Entrepreneurial intent will be less apparent in tighter cultures than in looser cultures.

All individuals employ both intuitive and analytical cognitive styles at different times, and the question is which of these the individual uses and relies upon most frequently (Alabduljader et al., 2020; Hodgkinson & Sadler-Smith, 2003; Allison & Hayes, 1996). The way in which a person thinks and the cognitive style they use is very much down to their personality and background, as well as how they store and process information (Alabduljader et al., 2020; Allison & Hayes, 1996; Indra & Richard, 1991; Allison & Hayes, 1994; Armstrong et al., 2011). It is a good predictor of general intelligence and it plays a major role in determining behaviour (Kozhevnikov, 2007). In this study, it is hypothesized that a tight culture will be associated with a more analytical cognitive style, with intuitive styles predominant in loose cultures (Allison & Hayes, 1996; Gelfand et al., 2011). This is because the analytical style is more closely associated with the strict personality who does not take risks and prefers to analyse all factors before making decisions. The intuitive style, in contrast, is more concerned with feelings; thus, such people take more risks, which is accepted and even encouraged in loose cultures (Gelfand et al., 2011; Allison & Hayes, 1996; Kickul et al., 2009).

Hypothesis 3: The intuitive cognitive style is predominant in loose cultures and the analytical style in tight cultures.

In the figure 1 below, you can see the concepts that will be discussed during this research. During the study, there will be looked at a relationship between these concepts. Moreover, this study will also take a deeper look into a tight or loose culture to find out whether culture can play a moderating role in the relationship between cognitive style and entrepreneurial intent.

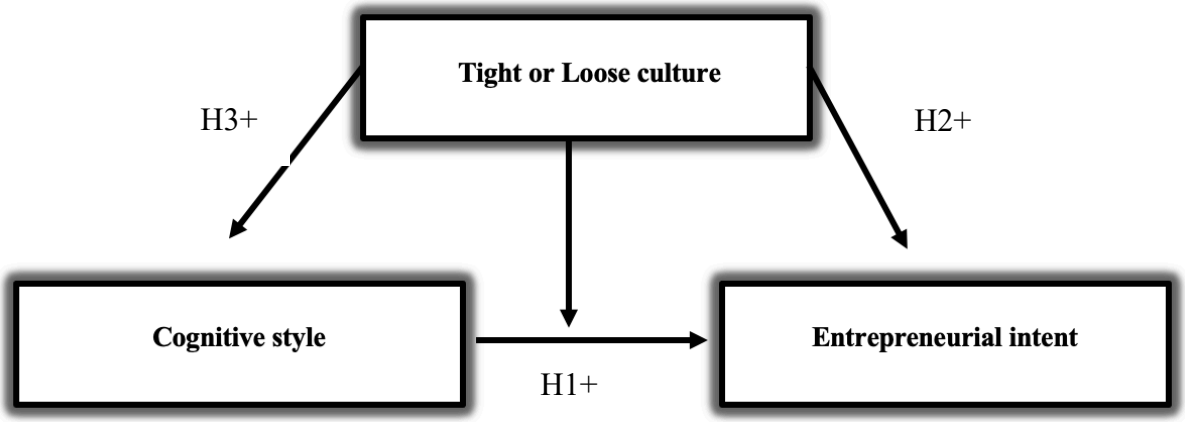

Figure 1 Conceptual model

3. Methods

In this chapter, the methods used during this research will be discussed in more detail. First, we will look at the research design and the type of research; then we will consider the methods, the sampling, and the SPSS testing performed during this research.

3.1 Quantitative research design

A quantitative research method was used in this study because the main question is a *how* question. A quantitative research is used by scientist to gain knowledge about a concept and observe cases that affect an individual. Quantitative research is used to gain knowledge about a particular group of people, a sample, it relies on the data that is gained by questioning or observing the individuals (Allen, 2017). This study seeks greater understanding of how cognitive styles can affect entrepreneurial intent and whether there are differences, in this respect, between tight and loose cultures. Therefore, it is important to look at the concepts, form appropriate hypotheses, and seek to validate these through analysis. Quantitative research is mainly concerned with testing and validating theories and explaining the relationships between variables or the impact that they variables have on one another (Lorenzetti, 2007). In this research, the variables are entrepreneurial intent, cognitive style, and tight or loose cultures.

This study employs a non-experimental research design (Rutberg & Bouikidis, 2018) because the study explores a cause-effect relationship, and the hypotheses are tested using data (Apuke, 2017). No variables are manipulated during this research, but there is an investigation of whether cognitive style can affect the entrepreneurial intent of an individual and how a tight or loose culture can affect that. No variables are manipulated during this research, but there is an investigation of whether cognitive style can affect the entrepreneurial intent of an individual and how a tight or loose culture can affect that.

3.2 Research methods

This section describes the questions asked in this research.

3.2.1 Cognitive style index

The cognitive style index (Allison & Hayes, 1996) is a questionnaire consisting of 38 questions, with each question inviting a response of “true”, “false”, or “unsure” and each answer given a score of 2, 1, or 0, respectively. Allison and Hayes (1996) note that one dimension encompasses all the dimensions from other studies and gives a clearer picture, and the cognitive style index is designed to analyse the dimension of intuitive-analytical. With the 38 questions, an individual can obtain a score of between 0 and 76. Individuals who score closer to 76 are more analytical, while a lower score indicates they are more intuitive. In this study out of the 38 qeustions , 21 items indicate an analytical style and 17 items

an intuitive style. A recent study shows that making use of a two-factor model where the styles were separated in two different scales is the most appropriate (Alabduljader et al. 2020).

3.2.2 Individual entrepreneurial intent scale

The Thompson (2009) and Chen et al. (2001) questionnaire is used in this research to explore entrepreneurial intent. Ten questions are asked concerning attitude and perceived behavioural control, giving a picture of the concept of entrepreneurial intent for use in this research. The 10 true-or-false questions can be answered using an interval scale of 1-6 (1=very untrue, 6=very true). The higher the individual's score, the stronger their entrepreneurial intent is deemed to be .

3.2.3 Gelfand's tight and loose cultures

A tight culture is defined as one in which social norms are explicit, extensive, and strictly enforced. A loose culture, in contrast, is more permissive and individualist'In this study, the "tightness" or "looseness" of the culture is measured using a 6-item Likert scale that indicates how norms and rules are maintained and pursued within a culture. Studies by Gelfand et al. (2011) and Gelfand, Nishii, and Raver (2006) used the same questionnaire to measure the tightness or looseness of various cultures, and this study uses the same six questions to identify the participants' respective cultures (Gelfand et al., 2011). The questions include the following: "In this country, if someone acts in an inappropriate way, others will strongly disapprove", and, "People in this country almost always comply with social norms". Participants can respond on a scale from 1-6: the closer to one the culture's score, the looser it is, and the closer to six, the tighter the culture is (Gelfand et al., 2011).

3.3 Sampling

To gather the data for this study, approximately 5,000 students at the University of Twente and Saxion University of Applied Sciences in the eastern Netherlands were approached. The students were contacted by email, and random sampling took place (i.e., no distinctions were made between the students). While this was a study conducted at the University of Twente, students from Saxion University of Applied Sciences were also given the opportunity to participate. These students were approached via social media and invited to participate.

Of the 5,000 students approached, 752 completed the survey (a response rate of 15%). Of these, 252 students were filtered out due to missing data, a group of 75 students was removed from the sample, due to large portions of missing data, and 13 were removed because they indicated that they were already entrepreneurs and then it is representative enough for the entrepreneurial intent. Ultimately, this left a sample size of 412.

3.4 Methods of analyses

In this section, we will look at the analyses to be conducted during this research using IBM SPSS Statistical Data, version 25. First, the Cronbach's test will measure the reliability of the research. On this test, a score of 0.7 or higher is acceptable.

Before the hypotheses are tested, we will look at whether the data are normally distributed, and the sample size is correct. This is done using the Shapiro-Wilk test, which tests the normality of the data: if the score is higher than 0.05, the data are normally distributed (Hanusz, Tarasinska & Zielinksi, 2014). To test the correlation between variables, as well as their effect on one another and the strength of their relationships, the Pearson's test can be conducted. On this test, a value of 1 indicates a positive correlation, 0 indicates no correlation, and -1 indicates a negative correlation (Benesty, Chen, Huang & Cohen, 2009).

The purpose of a factor analysis is to reduce and summarise data (Yong & Pearce, 2013). For hypothesis 1 in this study, a factor analysis is conducted to summarise and reduce the variables of cognitive style. This same is also done for entrepreneurial intent. A regression analysis can then be conducted to identify whether there is a relationship between the variables (Montgomery, Peck, Vining, 2012). A T-test will then be conducted to assess whether the hypothesis can be rejected or accepted.

For hypothesis 2, a factor analysis will be conducted first to identify whether the data on entrepreneurial intent and the tightness or looseness of the cultures can be summarised or reduced. A regression analysis can then test for a relationship, and a T-test will show whether the hypothesis can be accepted or rejected.

Hypothesis 3 concerns cognitive style and the tightness or looseness of the cultures. A factor analysis will be conducted to reduce or summarise the data, and a regression analysis will reveal whether there is a relationship between the variables. Finally, a T-test will show whether the hypothesis can be accepted or rejected.

4. Results

In this chapter, the hypotheses are accepted or rejected on the basis of regression analysis and t-test results. First, we look at the descriptive statistics of the questionnaire that was completed by the students and then look at this study's hypotheses.

4.1 Descriptive statistics

Before the data was used to analyse the hypotheses, a Cronbach's alpha test was conducted to test the reliability of the data. A Cronbach's alpha test was applied to the questions analysing entrepreneurial intent, Gelfand's question and cognitive style index questions. The analysis results are presented in Table 1. Based on the results, the Cronbach's alpha is high enough to conclude that there is high reliability, so the next steps in this research can be taken. According to Hanusz et al. (2014), a score of .7 or higher indicates it is acceptable; therefore, entrepreneurial intent and cognitive style index are acceptable, but Gelfand is just below the acceptable threshold. Nevertheless, it is included in this study. However, Taber (2017) and Sriwindono and Yahya (2012) argues that Cronbach's alpha above 0.67 can be seen as reasonable. Moreover van Griethuijsen et al. (2014) also states that 0.6 is an acceptable value and also state that the number can have an affect on the Cronbach's alpha, if the number of items increase that it would lead to a higher level of Cronbach's alpha. The Gelfand scale only has a few items, therefore it can be expected that the Cronbach's alpha might suffer from this.

Table 1 Cronbach's alpha test

Questions	***Cronbach's alpha***	***N***
Entrepreneurial intent[a]	***.796***	***10***
Cognitive style index[b]	***.810***	***38***
Gelfand	***.672***	***6***

(a) The Thompson scale has a Cronbach's alpha of .838 and the Chen scale has a Cronbach's alpha of .707
(b) Analytical style questions have a Cronbach's alpha of .725 and intuitive style questions have a Cronbach's alpha of .726

The Shapiro–Wilk test was used to check that the data was normally distributed. For this test, if the score is significant, it can be concluded that the data is normally distributed.

Table 2 Normality Test

Variables	***Shapiro–Wilk Test***
Gelfand	***.025***
Cognitive style index	***.078***
Entrepreneurial intent	***.000***

As presented in Table 2, only the cognitive style index is normally distributed. Since it is not significant ($p > 0.05$), it can be assumed that the data is normally distributed. For the Gelfand and entrepreneurial intent, it is notable that the boxplot and histogram indicate that data is normally distributed but due to

some outliers (extreme values), it emerges that it is not normally distributed. In this study, the extreme values were also included so it can be assumed that all variables are normally distributed. Parametric tests were used because it does a better job in highlighting the distribution of the data to gain a better understanding of it. It can produce reliable results even if the data isn't normal distributed (Luengo, Garcia, Herrera, 2009).

The control variables are included in table 3, which represents the sex, age, and study background. Table 3 also contains the mean, standard deviation, and correlation coefficients for all study variables using descriptive statistics.

Table 3 Correlations

Variables	*Mean*	*SD*	*Analytical*	*Intuitive*	*Gelfand*	*Intent*	*Age*	*Sex*	*Education*
Analytical	***29.03***	***5.83***	***1***	***-***	***-***	***-***	***-***	***-***	***-***
Intuitive	***14.65***	***5.53***	***.478*****	***1***	***-***	***-***	***-***	***-***	***-***
Tight/Loose	***3.88***	***.702***	***.126*****	***.005***	***1***	***-***	***-***	***-***	***-***
Intent	***34.00***	***7.44***	***-.228*****	***-.279*****	***.039***	***1***	***-***	***-***	***-***
Age	***2.57***	***.846***	***.252*****	***.118***	***.034***	***-.271*****	***1***	***-***	***-***
Sex	***1.39***	***.489***	***.074***	***.100****	***.018***	***-.139*****	***.049***	***1***	***-***
Education	***3.29***	***.673***	***.022***	***.047***	***-.030***	***.107****	***-.455****		***1***

(a) Age (1 = 31-37, 2 = 27-30, 3 = 22-26, 4 = 20-21); (b) Sex (1 = male. 2 = female); (c) Education (1 = high school, 2 = applied sciences, 3 = bachelor university , 4 = master university, 5 = PhD)
** p < .05, ** p < .01 (Pearson correlation 2-tailed)*

The statistics presented in Table 3 reveal that there is strong significant correlation between certain variables, such as the correlation between entrepreneurial intent and analytical or intuitive style (-.228, P < 0.01 ** and -.279, P < 0.01 **). However, with regard to the tight or loose culture for analytical or intuitive style questions, it is notable that there is a strong significant correlation with analytical style questions (.126, P < 0.01**) but no correlation with intuitive. There is also a correlation between age and analytical (.252**, P < 0.01**) but not with intuitive. In the following sections, the hypotheses are tested and rejected or accepted.

4.2 The impact of cognitive style on entrepreneurial intent

Hypothesis 1 is about the relationship between cognitive styles and entrepreneurial intent. For the cognitive style index, there were 21 items that analyse how analytical a person is. The more a respondent answered yes to those questions the higher the score, thus the more analytical the respondent is. The 17 remaining items were recoded to analyse how intuitive a person is. These variables were used to examine if there is a significant relationship with entrepreneurial intent. A regression analysis was used to discover how the independent variables (analytical and intuitive) regress to the dependent variable (entrepreneurial intent). Hypothesis 1a (students with a tendency for intuitive cognitive style will have a tendency for a higher amount of entrepreneurial intention) and Hypothesis 1b (students with a tendency for analytical cognitive style will have a tendency for a lower amount of entrepreneurial intention). The

education, sex, and age control variables were also taken into account. Table 4 presents the results for the relationship between cognitive styles and entrepreneurial intent. In model 1 the control variables are taken into accounts, in model 2 the independent variables.

Table 4 Relationship between cognitive styles and entrepreneurial intent with control variables[a]

		Coefficients[b]			
Model		**B**	**Std. Error**	**T**	**Sig**
1	**Entrepreneurial intent**				
	Applied education	**.663**	**1.043**	**.635**	**.525**
	Master university	**2.576**	**.740**	**3.483****	**.001**
	Male	**2.752**	**3.180**	**.865**	**.387**
	Female	**1.046**	**3.184**	**.329**	**.743**
	Age 31-37	**2.398**	**1.367**	**1.755**	**.080**
	Age 27-30	**-.142**	**1.017**	**-.139**	**.889**
	Age 22-26	**-.500**	**.799**	**-.625**	**.532**
	Age 20-21	**-1.332**	**1.520**	**-.876**	**.381**
2	**Analytical**	**-.134**	**.062**	**-2.166***	**.031**
	Intuitive	**-.279**	**.064**	**-4.337****	**.000**

*[a] Analyses are based on simple linear regression, [b] Entrepreneurial intent is a dependent variable. * P < .05, ** P < .01.*

The results presented in tables 4 reveal that analytical and intuitive have a relationship with entrepreneurial intent with and without control variables. There is a negative significant relationship between analytical cognitive style and entrepreneurial intent ($B = -.134$, $p < .05$). This means that when an individual's analytical ability increases, entrepreneurial intent decreases. Intuitive cognitive style also has a negative significant relationship with entrepreneurial intent ($B = -.279$, $p < .01$). Based on these results, support was found for hypotheses 1a and 1b. It is clear that entrepreneurial intent is higher for intuitive people ($B = -.279$, $p < .01$) than for analytical people ($B = -.134$, $p < .05$). Therefore, both hypotheses 1a and 1b can be accepted.

4.3 Presence of entrepreneurial intent in a tight or loose culture

Hypothesis 2 considers the relationship between entrepreneurial intent and a tight or loose culture. For tight and loose culture, samples from the Netherlands and Germany were used. According to Gelfand et al. (2011), the Netherlands represents a loose culture and Germany represents a tight culture. Together with entrepreneurial intent, the variables were used to investigate whether a tight or loose culture can influence an individual's entrepreneurial intent. A regression analysis was used to measure how the independent variables (tight or loose culture) influence an individual's entrepreneurial intent. This analysis was used to examine Hypothesis 2 – Entrepreneurial intent will be less apparent in tighter cultures than in looser cultures. The analysis also considered the control variables education, sex, and age. Table 5a shows the results for the relationship between tight or loose culture and entrepreneurial intent. If the control variables were considered, the results are shown in Table 5b.

Table 5 Relationship between tight and loose cultures and entrepreneurial intent with control variables[a]

		Coefficients[b]			
		B	***Std. Error***	***T***	***Sig***
Model	***Entrepreneurial intent***				
1	***Applied education***	***1.173***	***1.085***	***1.081***	***.280***
	Master university	***2.396***	***.776***	***3.088***	***.002***
	Male	***2.305***	***3.019***	***.764***	***.446***
	Female	***.018***	***3.035***	***.006***	***.995***
	Age 31-37	***3.678***	***1.461***	***2.517***	***.012***
	Age 27-30	***.830***	***1.154***	***.720***	***.472***
	Age 22-26	***.271***	***1.004***	***.270***	***.788***
	Age 20-21	***-1.166***	***1.684***	***-.692***	***.489***
2	***Loose culture***	***-1.485***	***.875***	***-1.697***	***.090***
	Tight culture	***-.684***	***1.270***	***-.539***	***.590***
3	***Intent * Tight/Loose***	***.847***	***.320***	***2.646*****	***.008***

[a] *Analyses based on simple linear regression,* [b] *Entrepreneurial intent is a dependent variable. * P < .05, ** P < .01.*

The results presented in tables 5 reveal that there is no significant relationship between entrepreneurial intent and tight or loose culture both with and without control variables. In model 1 the control variables are taken into accounts, in model 2 the independent variables and in model 3 the moderator variable. There is no significant relationship with loose culture and entrepreneurial intent (B = -1.485, p > .05). In addition, there is no significant relationship with tight culture and entrepreneurial intent (B = -.684, p > .05). This means that the two variables have no significant relationship with each other and do not support Hypothesis 2. It is noteworthy that loose culture has a stronger relationship with entrepreneurial intent (t = -1.485, sig .090) than tight culture (t = -.684, sig .590), but neither have a significant relationship so Hypothesis 2 is not supported.

However, with regard to the moderator effect of tight and loose culture on entrepreneurial intent, there is a significant relationship (B = .847, p < .01). This indicates that that there is a relationship between the two variables and may be influenced by something else. If the relationship between a tight or loose culture and entrepreneurial intent is examined separately, there is no significant relationship, so no support for Hypothesis 2. Therefore, a tight or loose culture has no significant relationship with entrepreneurial intent.

4.4 Preference of cognitive style in a tight or loose culture

Hypothesis 3 considers whether there is a majority of intuitive cognitive style in a loose culture and analytical style in a tight culture. The variables used in Hypothesis 1 were used for analytical style and intuitive style, the variables used in Hypothesis 2 were used for tight or loose culture. A regression analysis was used to examine how the independent variable (cognitive style) shows a different preference in the culture depending on where the entrepreneur is located (tight or loose culture). Hypothesis 3 states that the intuitive cognitive style is predominant in loose cultures and the analytical style is predominant in tight cultures. The control variables education, sex, and age were also taken into account. Tables 6 shows the relationship between intuitive cognitive style in a tight or loose cultures, in model 1 the control variables are takin into accounts, model 2 the independent variables and in model 3 the moderator. The same is applied to table 7. Tables 7 shows the relationship between analytical style in a tight or loose culture.

Table 6 Relationship between tight and loose culture and intuitive cognitive style with control variables [a]

				Coefficients[b]	
		B	Std. Error	T	Sig
Model	Intuitive cognitive style				
1	Applied education	-1.576	.828	-1.903	.058
	Master university	.072	.592	.122	.903
	Male	-3.819	2.515	-1.518	.130
	Female	-2.789	2.528	-1.104	.270
	Age 31-37	-1.102	1.115	-.988	.324
	Age 27-30	-.494	.880	-.561	.575
	Age 22-26	-.018	.767	-.024	.981
	Age 20-21	1.487	1.286	1.157	.248
2	Loose culture	.038	.669	.057	.954
	Tight culture	.377	.969	.389	.697
3	CSI * Tight/Loose	-.783	.247	-3.172**	.002

[a] *Analyses based on simple linear regression,* [b] *Entrepreneurial intent is a dependent variable. * P < .05, ** P < .01.*

According to the results in tables 6, it is clear that there is no significant relationship between intuitive cognitive style and a tight or loose culture. For loose culture, there is no significant relationship with intuitive style (B = .038, p > .05). Based on these results, it can be said that the intuitive cognitive style is not dominant in a loose culture.

Table 7 Relationship between tight and loose culture and analytical cognitive style with control variables [a]

				Coefficients[b]	
Model		B	Std. Error	T	Sig
1	Analytical cognitive style				
	Applied education	-1.032	.863	-1.196	.232
	Master university	.677	.617	1.098	.273
	Male	-.466	2.619	-.178	.859
	Female	.245	2.632	.093	.926
	Age 31-37	-2.077	1.162	-1.788	.074
	Age 27-30	-.243	.917	-.265	.791
	Age 22-26	1.461	.798	1.829	.068

	Age 20-21	***4.353***	***1.339***	***3.251***	***.001***
2	***Loose culture***	***-1.095***	***.696***	***-1.573***	***.116***
	Tight culture	***-.695***	***1.010***	***-.689***	***.491***
3	***CSI * Tight/Loose***	***-.878***	***.257***	***-3.423****	***.001***

*[a] Analyses based on simple linear regression, [b] Entrepreneurial intent is a dependent variable. * P < .05, ** P < .01.*

The results in tables 7 indicate that there is no significant relationship between analytical cognitive style and a tight or loose culture. For a tight culture, there is no significant relationship with analytical style (B = -.695, p > .05). Based on these results and the results regarding intuitive style in a tight or loose culture, it can be said that Hypothesis 3 is not supported.

However, if the moderator effect of cognitive style index on a tight or loose culture is examined, there is a significant relationship (B = -.783, p < .01, 95% confidence interval [CI], -1.267, -.298) for intuitive (B = -.878, p < .01, 95% confidence interval [CI], -1.382, -.374) and analytical. This indicates that that there is a relationship between the two variables that may be influenced by something else.

If the relationship between cognitive style with a tight or loose culture is examined separately, there is no significant relationship, so no support for Hypothesis 3.

5. Conclusion

The goal of this research was to answer the research question: 'How do different cognitive styles influence entrepreneurial intent in tight or loose cultures?'. To answer the questions 3 hypotheses were formulated and tested.

Table 8 below indicates whether the hypotheses of this study were accepted or rejected.

Tabel 8 Main results overview.

Hypothesis	***Accepted/rejected***	***Conclusion***
1a: Students with a tendency toward intuitive cognitive style will have a tendency toward a higher degree of entrepreneurial intention.	*Accepted*	*The data can support hypothesis 1a since the intuitive cognitive style has a significant relation with entrepreneurial intent.*
1b: Students with a tendency toward analytical cognitive style will have a tendency toward a lower degree of entrepreneurial intention.	*Accepted*	*The data can support hypothesis 1b since the analytical cognitive style has a significant relation with entrepreneurial intent.*
2: Entrepreneurial intent will be less apparent in tighter cultures than in looser cultures.	*Rejected*	*The data cannot support hypothesis 2 since there is no relation between entrepreneurial intent in a tight or loose culture.*
3: The intuitive cognitive style is predominant in loose cultures and the analytical style in tight cultures.	*Rejected*	*The data cannot support hypothesis 3 since there is no relation between cognitive style and a tight or loose culture.*

In this research if cognitive styles with entrepreneurial intent is analysed, a significant effect is demonstrated. The same cannot be said about cognitive styles with tight and loose culture or entrepreneurial intent with a tight or loose culture.

The research question, 'How do different cognitive styles influence entrepreneurial intent in tight or loose cultures?', cannot be fully answered, because cognitive styles do influence entrepreneurial intent, but this research study has revealed that tight or loose culture does not have any significant relationship with entrepreneurial intent. It can therefore be assumed that an intuitive cognitive style increases an individual's entrepreneurial intent and an analytical cognitive style decreases it, but tight or loose culture does not have any effect on it.

6. Discussion

This section presents the discussion of this research study, the theoretical and practical implications of the study, the limitations that existed during this research, and possible avenues for future research that could be further explored.

6.1 Theoretical and practical implications

In this study, cognitive styles were demonstrated to have a significant effect on entrepreneurial intent, while both tight and loose cultures did not have a significant effect on either cognitive style or entrepreneurial intent. These results contribute to the ideas of Alabduljader et al. (2020), Mitchell et al. (2002), Kickul et al. (2009), and Kreuger and Brazeal (1994) that cognitive style has an effect on entrepreneurial intent. Several studies have proposed different methods for measuring cognitive styles. For example, Backhaus and Liff (2007) used parcel items to analyse cognitive styles and Alabduljaber et al. (2020) used a questionnaire to distinguish between intuitive and analytical styles. In this research, it was judged more effective to distinguish the two styles instead of using parcel items. With the use of parcel items, there is still no clear distinction between the two styles to make assumptions about the different styles. Moreover, using questions to distinguish the two styles leads to clearer results to research the two styles separately. If a research study wants to look at intuitive and analytical styles, it is recommended to use the questions method instead of the parcel items, because this method provides a clearer distinction.

This research study contributes to and reinforces the theory that entrepreneurial intent is stronger in someone with an intuitive cognitive style than in someone with an analytical cognitive style. When considering entrepreneurs, it is commonly known that they take more risks and do not analyse everything before taking a shot at a new business (Brigham et al., 2007; Fayolle & Linan, 2014). To become an entrepreneur, a person has to take more risks and set up businesses without overthinking and analysing things; that is why entrepreneurial intent is stronger in an individual with an intuitive style than in an individual with an analytical style. This was also revealed by the findings of this research.

This research study furthermore rejects the assumption that entrepreneurial intent is stronger in a loose culture than in a tight culture (Mariano et al., 2012; Ajzen, 1991; Kreuger et al., 2000; Alabduljader et al., 2020; Gelfand et al., 2011). This can be due to the fact that no matter the culture, someone is always willing to take risks and establish a business. When looking at the environment in the Middle East or Asia, mostly known as representing a tight culture, there are enough entrepreneurs in those countries willing to set up businesses (Ahlstrom & Ding, 2014). That is why this research study elicited no evidence for different entrepreneurial intent in a tight or loose culture, because for an individual to

become an entrepreneur, it does not matter which culture he or she grew up in, but what his or her cognitive style is.

The study also rejects the assumption that an intuitive cognitive style or an analytical cognitive style emerges more strongly in either a tight or a loose culture (Allison & Hayes, 1996; Gelfand et al., 2011; Kickul et al., 2009). A cognitive style is something that a person has, no matter the environment or culture; it is a way of thinking. That is why cognitive style is the same in a tight or loose culture. Thus, the research contributes to the theory by providing a different view of tight and loose cultures in relation to entrepreneurial intent and cognitive styles. There are other factors that can influence the two variables, but they have no direct significant relationship with each other such as cognitive styles and entrepreneurial intent. There can be other factors that have an influence on someone's entrepreneurial intent in a tight or loose culture, such as age: the older someone gets, the more he or she gives up on his or her dream to set up a business, or the more educated someone is, the more analytical the person becomes. These can be factors that influence entrepreneurial intent in a tight or loose culture. So researching cognitive styles and entrepreneurial intent in tight and loose cultures provides us with more depth of understanding regarding these concepts and insight into what can influence them.

These results are significant for entrepreneurs who want to understand these types of concepts better and to know how to deal with them in different cultures. Aktas et al. (2016) indicated that in a loose culture, entrepreneurs are more inclined to be innovative to keep challenging themselves, but the results of this research indicate that this can also happen in a tight culture. An entrepreneur is not bound by a tight or loose culture; this is also supported by the study of Harms and Groen (2017). By further analysing these results, they can possibly also be used to give entrepreneurs a better idea of how different cultures are structured around entrepreneurship, for example through subjects taught at school (Mueller, 2011; Ajzen et al., 2015).

6.2 Limitations and future research

This research comprised a quantitative study with pre-existing data from previous studies. A major limitation of this study is that it used pre-existing data from previous studies. This had an impact on the study, because I could not draw up my own list of questions to measure exactly what I needed to measure, partly because the COVID-19 pandemic meant that the research had to be done in a limited environment with existing data. Another limitation of this research was that with these data I did not have insights into East or West Germany, which Gelfand et al. (2011) did take into account. That was not possible during this research, because the existing data did not give insights into these areas. As mentioned in section 5.1.1, this research made use of questions to distinguish between intuitive and analytical styles, but there are also studies that have made use of parcel items. A follow-up study could look at this and examine the differences between these measures and what effect they have on the results.

Another suggestion for follow-up research is to further identify and investigate possible factors that influence the relationship between cognitive styles and tight or loose cultures, or between entrepreneurial intent and tight or loose cultures. In this study it was found that the two variables do not have a direct relationship, but with a moderator between them, the relationship was significant; follow-up research could investigate what may influence this. Moreover, Gelfand et al.'s (2011) research does not explicitly reveal how they defined a tight or loose culture, because the data that emerged in this study do not match what Gelfand et al. (2011) say in the literature. It is different from what the literature says. So is it the scale that is not right, or the data of this study that is not right? Or perhaps the study by Gelfand et al. (2011) has a flaw in it. This could be partly explained by the age or educational background of the study subjects. In Gelfand et al.'s (2011) study, participants averaged 30 years or older, while in this study they averaged 23 years or older, so this could be an reason. Further research will be needed to delve deeper into this. This is a possible avenue for future research, to look at the scale used by Gelfand et al. (2011) and how it is possible that the data of the present study contradict the literature.

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