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How Role Models Shape Entrepreneurial Intentions in Different Cultural Settings

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Abstract

This study investigates the effect that role models have on entrepreneurial intentions. Specifically, this study looks at how this effect is influenced by the cultural context of a country. Cultural context is measured in this study by individualism and uncertainty avoidance, where both dimensions originate from Hofstede's cultural model (1980). On individual level, data from the Global Entrepreneurship Monitor database of a 2019 APS survey and a 2019 NES survey has been taken from 40 countries and this has been integrated with data from the cultural dimensions model. Through a logistic regression analysis, results show that individualism acts as a moderator with positive influence and uncertainty avoidance acts as a moderator with a negative influence. These findings suggest that policymakers and entrepreneurship educators should consider cultural contexts in their work. They should use the positive influence of role models in individualistic cultures and address the negative impact of role models in cultures that strongly are strong in uncertainty avoidance

Keywords: entrepreneurial intentions, entrepreneurial role model, individualism and uncertainty avoidance

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1. Introduction

Entrepreneurial intentions (hereafter referred to as EI or entrepreneurial intent) play a big role in shaping an individual's decision to pursue entrepreneurial activities and establish new ventures (Krueger et al., 2000). Extensive research has been conducted to understand the factors influencing EI, as they serve as a precursor to entrepreneurial behavior (Rauch & Hulsink, 2015). Scholars have explored various determinants, including personality traits, environmental factors, and contextual influences, recognizing the multidimensional nature of EI (Davidsson, 1995).

One significant factor that has attracted substantial attention is the presence of entrepreneurial role models (hereafter referred to as ERM or role models). Role models are individuals who inspire and motivate others by setting examples to be emulated. Researchers have highlighted the impact role models can have on fostering EI and behavior. By observing successful entrepreneurs, individuals gain insights into the entrepreneurial process, acquire relevant knowledge and skills, and develop a sense of self-efficacy regarding entrepreneurship (Abbasianchavari, 2021).

Another important factor that plays a crucial role in shaping EI is the cultural context. The cultural context of a region can be defined using Hofstede's cultural dimensions model (1980). One cultural dimension that can have a big impact on EI is individualism. This cultural dimension refers to the degree to which individuals prioritize their personal goals and interests over those of the collective. Individualism can potentially promote values and form characteristics that seem to be in line with personality traits needed in entrepreneurship.

Another cultural dimension from Hofstede's model (1980) that warrants consideration is uncertainty avoidance, which reflects a society's tolerance for ambiguity and uncertainty. Cultures with high uncertainty avoidance tend to be more risk-averse, potentially hindering EI.

While there is extensive research about the effects of role models on EI, this existing research doesn't take into how the relationship could differ among different cultural contexts (Abbasianchavari, 2021). So there is need for further research that integrates these factors and comprehensively understands the interplay among these factors. By examining how cultural dimensions moderate the influence of role models on EI, there will be a better understanding of the effects of role models on EI.

Therefore the following main research question has been stated:

What is the influence of different cultural contexts on the effect of having an entrepreneurial role model on entrepreneurial intentions?

I specifically look at two cultural dimensions: individualism and uncertainty avoidance. This is because research has shown that these 2 dimensions can have the most impact on the effect of ERM and EI (Hofstede, 2004). The main research question has been divided into two sub research questions:

- (1) *What is the influence of individualism on the effect of having an entrepreneurial role model on entrepreneurial intentions?*
- (2) *What is the influence of uncertainty avoidance on the effect of having an entrepreneurial role model on entrepreneurial intentions?*

To investigate the interplay between cultural dimensions, role models, and EI, I will utilize data from the Global Entrepreneurship Monitor (GEM) for a sample of countries in 2019. Regression analysis will be employed to estimate the relationships between the variables of interest. The use of data from multiple countries allows me to have a greater understanding of cultural dimensions and their impact on the role model effect.

This research contributes to the academic literature by bridging the gap between cultural dimensions, role models, and EI. By empirically examining the moderating effects of cultural dimensions on the role model influence, it provides a better understanding of the complex interplay between these factors. The findings will enrich existing theories and conceptual frameworks, offering valuable insights for academic researchers studying role model effects on EI.

This research is also socially relevant, because it gives implications for policymakers and educators aiming to foster entrepreneurship and economic development. By understanding how cultural dimensions shape the effectiveness of role models in promoting EI, initiatives can be designed to leverage the power of role models more effectively. This knowledge can help design entrepreneurship education programs and public campaigns that fit different cultural contexts, creating a more inclusive entrepreneurial environment.

The study is divided into several sections. The initial section of the literature review discusses the factors of ERM, individualism, and uncertainty avoidance individually, and their relationship to EI as well as other determinants of EI. The subsequent subsections of the literature review examines how cultural dimensions might impact the effect of ERM on EI. Sections 3 and 4 cover the methodology and present the data analysis. Finally, section 5 provides the conclusion, including implications and recommendations for further research.

2. Literature review

2.1 Understanding entrepreneurial intentions

Before delving into the role of role models in entrepreneurship, it is essential to establish a solid understanding of EI and the factors that influence them. The following subsections define EI and explain a number of determinants of EI that relate closely to ERM, laying the foundation for exploring the specific impact of role models on EI.

2.1.1 Defining entrepreneurial intentions

EI are part of the decision making process that guides the behaviors of individuals towards starting a new business or becoming self-employed (Krueger et al., 2000). It is formed by the conviction a person has to engage in entrepreneurial activities. EI showcase the underlying motivations that influence an individual decision to become an entrepreneur.

EI are used in this study because they act as the last crucial step in starting entrepreneurial behavior. As stated by Ajzen's Theory of Planned Behavior (1991), having intentions is the biggest determinant of behavior. Without having intentions you will never start a particular behavior that relates to these specific intentions. EI acts as a link between factors that influence entrepreneurial behavior and the entrepreneurial action being taken. Because of this link, it gives a better understanding of how certain factors affect entrepreneurial behavior. Furthermore another reason of the utilization of EI is because intentions are easier to measure compared to looking at actual behavior, since entrepreneurial behavior is harder to define (Abbasianchavari & Moritz, 2021).

2.1.2 Determinants of entrepreneurial intentions

EI are influenced by a number of factors, really showcasing the complexity of why certain individuals become entrepreneur. There are a number of determinants of entrepreneurship, such as personality traits, socio-economic factors and educational background (Liñán et al., 2010). I will be looking at those factors and examining if any of them could be linked with the effect of having a role model on EI.

Literature about the role of personality traits shows that certain characteristics have been linked with stronger EI. Some key traits are risk-taking propensity, need for achievement, internal locus of control and self-efficacy (Karabulut, 2016). Individuals who are more risk taking, are more likely to become entrepreneurs since entrepreneurship involves taking actions that are in general have a higher risk propensity (Shazad et al., 2021). The need for achievement, which indicates a drive for excellence and goal attainment, has also been positively associated with entrepreneurial intent (Hansemark, 1998). Furthermore, individuals with an internal locus of control, which means they

believe they have control over outcomes that directly influence their life, exhibit higher EI as they perceive becoming an entrepreneur as a way to exercise control over their career. Lastly, self-efficacy, or the believe in one's skill and ability, has shown to be a strong predictor for EI (Zhao et al., 2005).

Using basic intuition, role models could play a role in amplifying these traits. For example, exposure to a role model can fuel individuals' need for achievement, inspiring them to strive for excellence and pursue their entrepreneurial aspirations with greater determination. Additionally, role models can reinforce risk-taking behavior by demonstrating that calculated risks can lead to success, thus encouraging individuals to embrace entrepreneurial opportunities with confidence and conviction.

The other spectrum of factors that have shown to be of great influence on EI are socio-economic factors. These types of factors play a significant role in shaping up EI. Individuals from families with entrepreneurial backgrounds or those who grew up with entrepreneurial activity tend to develop stronger EI. This exposure provides them with learning experiences, role models, and access to resources and networks that make the process of becoming an entrepreneur easier (Davidsson, 1995). Additionally, entrepreneurship education has emerged as a powerful tool, not only for increasing the skills and knowledge needed to become an entrepreneur but also for fostering EI among students (Bae et al., 2014). These programs cultivate an entrepreneurial mindset by providing hands-on experiences, case studies, and by inviting successful entrepreneurs to share their experiences where these individuals act as role models. These programs increase self-efficacy and confidence, which are key determinants of EI (Kuehn, 2008). Role models are inherently linked to socio-economic factors and entrepreneurship education, as family members and mentors within educational settings often serve as role models. Beyond the direct effects that these factors have on EI, I suspect that they could also offer an additional impact through their function as role models, further enhancing individuals' aspirations and confidence in pursuing entrepreneurship.

2.2 Role models in entrepreneurship

After establishing a foundation on EI and their determinants, this section shifts the focus entirely to the concept of role models in entrepreneurship. First role models and their characteristics will be defined more clearly. Additionally, this section combines empirical and theoretical insights to clarify the mechanisms through which role models can shape, reinforce, or mitigate EI.

2.2.1 Defining role models in entrepreneurship

An individual's decision to become an entrepreneur is often influenced by the opinions, actions, and identities demonstrated by others, who are referred to as "role models" (Ajzen, 1991; Akerlof & Kranton, 2000; Bosma et al., 2012). According to Gibson and Barron (2003), a role model is defined as

“a person an individual perceives to be similar to some extent, and because of that similarity, the individual desires to emulate (or specifically avoid) aspects of that person's attributes or behaviors”.

Individuals pay attention to role models because role models represent and have the ability to achieve goals that the individual also aspires to. This view of role models is based on psychological theories emphasizing the degree to which individuals look to role models as a way of increasing self-knowledge, motivation, and inspiration (Gibson, 2004), as well as theories emphasizing that individuals look to role models as a way to effectively learn new task skills (Bandura, 1977; 1986).

Role models are differentiated from traditional mentors. While mentors provide career advice and support to a protégé through an interactive relationship (Higgins & Kram, 2001), role models are defined solely by the needs and wants of the individual. Having a role model is based more on a voluntary basis compared to having a mentor.

Role models in entrepreneurship can take various forms based on their relationship or proximity to the individual. The first group of role models are the family role models. They provide direct exposure to entrepreneurship from an early age, shaping attitudes and behaviors towards entrepreneurial endeavors. Furthermore there are role models, within one's social circle, where entrepreneurial friends, classmates, or colleagues can act as peer role models. Finally, there are unrelated models that are successful and renowned entrepreneurs, who serve as inspirational figures and are examples of entrepreneurial success. The effects on EI that these groups have will be further discussed in section 2.2.2.

2.2.2 Influence of role models on entrepreneurial intentions

The factors that explain the effect of having a role model on EI can be explained by the Theory of Planned Behavior of Ajzen (TPB) (1991). This theory distinguishes between 3 antecedents before a behavior is initiated. The first antecedent examines the attitude towards the behavior. Ajzen (1991) defines an attitude towards a behavior as “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question”. In the context of EI, this attitude refers to how individuals evaluate entrepreneurial activities and their potential outcomes. Specifically, for this study, it indicates the extent to which individuals view entrepreneurial activities as valuable and rewarding experiences. When individuals anticipate positive outcomes from entrepreneurial ventures, they are more inclined to engage in business creation. According to the theory of planned behavior, a positive attitude towards entrepreneurial activities should contribute to the development of EI (Ajzen, 1991; Krueger & Carsrud, 1993). This relationship has been validated in various settings. For instance, the attitude of small business founders towards entrepreneurial

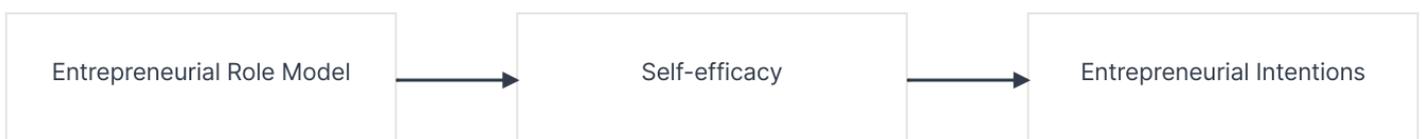
behavior has been identified as a key determinant of corporate entrepreneurial behavior (Fini et al., 2012).

Perceived behavioral control (PBC) refers to an individual's perception of difficulty in performing a particular behavior. It is closely related to the concept of self-efficacy, which reflects the confidence a person has in their ability to execute the behavior. This antecedent is related to Bandura's social learning theory. According to the social learning theory or social cognitive theory (Bandura, 1986), role models provide learning experiences that can enhance self-efficacy, thereby reinforcing specific interests and actions in various educational and career fields. Observing someone else's success can boost one's own self-efficacy judgments (Scherer et al., 1989). Role models offer valuable insights into handling challenges and managing risks, which strengthens an individual's belief in their self-efficacy (Zhao et al., 2005). Wood and Bandura (1989) noted that role models foster self-beliefs of capability by demonstrating effective strategies for managing various situations. Additionally, Carsrud et al. (2007) suggest that entrepreneurial role models enhance PBC by supporting an individual's perception of their ability to overcome challenges associated with an entrepreneurial career.

Based on Bandura (1986), individuals can learn and increase their self-efficacy through the observation of role models. Beyond observation, role models can also enhance an individual's self-efficacy through persuasion, encouragement, and feedback related to specific types of entrepreneurial behavior (Bandura, 1986; Cox et al., 2002).

As discussed in section 2.1.2 of the literature review, self-efficacy has a positive effect on EI. Given that ERMs foster self-efficacy among their followers, self-efficacy could mediate the effect of having ERMs on EI. Therefore, the following hypothesis is proposed:

Hypothesis 1: Self-efficacy mediates the effect of having entrepreneurial role models on entrepreneurial intentions.



The concept of this possible mediator effect is also shown in Figure 1.

Figure 1: *Hypothesized Mediation of Self-Efficacy*

The last antecedent is called the “subjective norms” antecedent (SN). Subjective norms refer to the perceived social pressure to perform or not perform a particular behavior. This concept involves the individual's perception of whether important people in their life (such as family, friends, colleagues, and other significant others) think they should engage in the behavior. When looking at the effects of role models on SN, the entrepreneurial spirit projected by an ERM can set the terms of support or pressure for the start of a new business and thus create a greater SN. In a study of a large group of Norwegian students and employees, for example, Reitan (1997) found having an ERM to positively influence SNs with regard to being an entrepreneur.

According to social cognitive theory (Bandura, 1986) and empirical studies based on the Theory of Planned Behavior (TPB) (Kolvereid, 1996; Krueger, 1993; Krueger & Carsrud, 1993), role models can indirectly influence career intentions through the antecedents of behavioral intention.

The geographical area also plays a significant role. Research indicates that if entrepreneurs and observers reside in the same region, the role model effect on entrepreneurial intentions is more pronounced (Wyrwich et al., 2018). The presence of entrepreneurs in a region has been shown to accelerate venture creation in that area (Andersson & Larsson, 2014; Mueller, 2006). The success stories of local entrepreneurs can have an inspiring effect, encouraging others to pursue their own business ventures.

Also the type of role model can play a mediator role in the role model effect on EI. The type of role models can be divided in five subcategories: ‘Family’, ‘similarity between models’, ‘peers’, ‘successful versus unsuccessful models’ and ‘unrelated models’, where some of these types were already mentioned as different groups of role models in section 2.1.1.

Parents, as early role models, shape children's values, habits, and attitudes (Scherer et al., 1991). Entrepreneurial parents can provide valuable human capital, knowledge, and support, positively affecting their children's EI (Hickie, 2011). Studies show that having entrepreneurial parents increases the likelihood of developing EI.

The similarity, between a role model and an observer, influences EI as well. Opportunity recognition improves when individuals perceive their role models to share similar characteristics, skills, age, gender, or expertise. Studies show people are more likely to follow career advice from those who share their gender or ethnicity (Urbano et al., 2011). As a result, fathers often serve as key role models for sons, while mothers are most influential for daughters (Hoffmann et al., 2015; Lindquist et al., 2015)

Peer group role models, such as school peers and coworkers, also influence entrepreneurial intentions. Employees are more likely to pursue self-employment if they have colleagues with self-employment experience (Nanda & Sørensen, 2010). Similarly, having entrepreneurial peers in school at an early age positively impacts an individual's entrepreneurial intentions (Falck et al., 2012).

Another relevant distinguishing that has to be made, that also acts as a mediator in the effect of having a role model on EI, is the distinguishing between successful and unsuccessful entrepreneurs. Successful role models increase perceived feasibility and self-efficacy (Krueger & Brazeal, 1994), while failed models can raise fear of failure (Boissin et al., 2011). However, exposure to unsuccessful entrepreneurs still boosts EI (Chen et al., 2016). People with successful role models have higher self-efficacy and lower fear of failure (Wyrwich et al., 2018). Comparing oneself to either successful or failed entrepreneurs positively influences EI by offering practical insights and lessons (Brunel et al., 2017; Scherer et al., 1989).

Lastly we look at the group of role models called "unrelated role models" and its effects on EI. "Unrelated role models," such as those encountered through narratives and storytelling about entrepreneurship, significantly influence EI. Laviolette et al. (2012) demonstrate that fictional role models in entrepreneurial narratives positively impact entrepreneurial self-efficacy and intentions by offering relatable stories. They argue that realistic narratives foster a positive attitude towards entrepreneurship and increase entrepreneurial activities. Similarly, Radu and Loué (2008) suggest that exposing young people to realistic role models through social media can amplify these effects, encouraging greater engagement and positive outcomes.

Looking at all the effects described in this section, it becomes evident that they all relate to the Theory of Planned Behavior (TPB) in various ways. Role models can impact the antecedents of TPB, thereby influencing EI. For instance, role models can positively affect attitudes toward entrepreneurship (ATE) by demonstrating the rewards and satisfaction derived from entrepreneurial success. This is for example supported by findings showing that exposure to successful entrepreneurs creates a more positive attitude towards entrepreneurship (Fini et al., 2012). They can also enhance perceived behavioral control by boosting an individual's confidence in their ability to succeed through vicarious learning and direct encouragement. Studies have demonstrated that observing role models increases individuals' self-efficacy and reduces fear of failure, thereby strengthening their sense of control over entrepreneurial outcomes (Wyrwich et al., 2018). Furthermore, role models shape subjective norms by creating social environments that either support or discourage entrepreneurial endeavors. The presence of ERM has been found to positively influence subjective norms related to entrepreneurship, encouraging more individuals to pursue entrepreneurial ventures

(Reitan, 1997). In summary, the influence of role models extends across ATE, PBC, and SN, collectively fostering stronger EI by shaping individuals' attitudes, confidence, and perceptions of social norms towards entrepreneurship.

From the insights provided by the literature above, I propose the following hypothesis.

Hypothesis 2: The presence of an entrepreneurial role model positively influences entrepreneurial intentions.

2.3 Cultural dimensions and entrepreneurial intentions

Cultural values and norms play a significant role in shaping individuals' attitudes, beliefs, and behaviors, including their EI. The cultural dimensions framework, pioneered by Geert Hofstede (1980), provides a systematic approach to understanding the differences in cultural orientations across societies. This section explores the existing literature that discuss relationships between cultural dimensions and EI, and then looks at how the influence of role models on EI may vary across different cultural dimensions.

2.3.1 Linking cultural dimensions to entrepreneurial intentions

In choosing to analyze the effects of individualism and uncertainty avoidance on EI, these cultural dimensions were selected due to their significant impact on shaping individual behavior and attitudes towards entrepreneurship. Individualism, according to Hofstede (1980), measures the extent to which individuals prioritize personal goals over collective interests, affecting their inclination to pursue entrepreneurship independently. Similarly, uncertainty avoidance, also described by Hofstede (1980), determines a society's tolerance for ambiguity and risk, influencing individuals' attitudes toward entrepreneurship, particularly in uncertain environments.

2.3.1.1 Uncertainty avoidance and entrepreneurial intentions

Uncertainty avoidance refers to "the extent to which the members of a culture feel threatened by uncertain or unknown situations" (Hofstede, 1980). This cultural dimension plays a critical role in shaping entrepreneurial behavior and intentions. Cultures with low levels of uncertainty avoidance are more conducive to entrepreneurial entry as they nurture values such as openness to new ideas, extraversion, and achievement orientation (Brändstatter, 2011; Hayton, George & Zahra, 2002; Thomas & Mueller, 2000). Moreover, these individuals are more likely to engage in action planning, a crucial mechanism for translating EI into startup behavior (Gielnik et al., 2014).

In contrast, societies characterized by strong uncertainty avoidance exhibit significant discomfort with uncertainty. These societies often rely on strict laws, regulations, and formal structures to manage uncertainty (Hofstede, 1980). The engagement in entrepreneurial processes in such societies

tends to evoke emotions of action doubt, which have been shown to impede the translation of EI into actual behavior (Van Gelderen et al., 2015). This discomfort and reluctance to deal with uncertainty can lead to a higher fear of failure, lower levels of ambition, and a reduced willingness to take risks (Hofstede, 1980).

Furthermore, high uncertainty avoidance marks a society's reliance on established social norms, rituals, and bureaucratic practices to avoid uncertainty (House et al., 2004). Individuals in such environments are less likely to engage in entrepreneurial activities due to their aversion to risk and ambiguity. When exposed to entrepreneurship education, these individuals become more aware of the uncertainties that come with entrepreneurship, which can further diminish their interest in pursuing entrepreneurial ventures (House et al., 2004). Consequently, the relationship between entrepreneurship education and EI is weaker in high uncertainty avoidance cultures compared to those with low uncertainty avoidance.

Given these dynamics, a relationship can be seen where high uncertainty avoidance negatively impacts EI. This leads to the following hypothesis:

Hypothesis 3: Higher uncertainty avoidance has a negative effect on entrepreneurial intentions.

2.3.1.2 Individualism and entrepreneurial intentions

Individualism, a cultural dimension identified by Hofstede (1980), describes how individuals integrate into groups. In individualistic societies, people are expected to primarily care for themselves and their immediate families. Conversely, in collectivistic societies, individuals rely on their relatives or in-group members for support in exchange for loyalty (Hofstede, 2001).

Hofstede et al. (2004) proposed that differences between cultural dimensions and national institutions can lead to significant dissatisfaction. For instance, in countries with low individualism, organizations may show little tolerance for individuals who prefer to approach tasks differently. In such environments, individuals with high individualism may feel dissatisfied because they cannot freely express themselves within the organizational structure. This clash between individualistic values and organizational expectations can lead to job termination, prompting individuals to pursue self-employment. Therefore, Hofstede et al. (2004) suggested that countries with lower individualism may experience higher levels of entrepreneurial activity, as individuals with entrepreneurial traits may find it challenging to conform to established organizational norms and instead choose for self-employment. Their study confirmed a consistent link between dissatisfaction and entrepreneurial pursuits across the 23 countries examined.

These findings contrast with expectations from a psychological perspective, where countries high in individualism might be expected to have more individuals with entrepreneurial values. However, as argued by Baum et al. (1993), individuals with entrepreneurial intent in countries with low individualism face greater challenges in asserting their independence within organizational structures that exhibit low individualism. Dissatisfied with their circumstances, these individuals may choose self-employment. Empirical studies by Acs, Audretsch, and Evans (1994) substantiate this hypothesis, demonstrating a reverse relationship known as the "dissatisfaction hypothesis," where dissatisfaction with traditional employment pushes individuals toward entrepreneurship.

Additionally, individuals from individualistic cultures typically rely on personal judgments and decisions, whereas those from collectivistic cultures are more inclined to adhere to group expectations (House, 2004). In collectivist cultures, the subjective norm (SN), or the influence of close others' expectations, exhibits a stronger impact on entrepreneurial intentions compared to individualistic cultures. This has been supported by empirical evidence. For example, Abrams, Ando, and Hinkle (1998) found a stronger association between subjective norm and intentions to leave an organization in collectivist cultures like Japan, contrasting with findings in individualistic cultures like the UK, where social norms have less influence on entrepreneurial intentions (Autio et al., 2001; Krueger et al., 2000). Similarly, Tkachev and Kolvereid (1999) identified subjective norm as a significant predictor of entrepreneurial intentions in collectivist countries such as Russia.

To test whether individualism affects EI negatively, the following hypothesis is proposed:

Hypothesis 4: Higher levels of individualism has a negative impact on entrepreneurial intentions.

2.3.2. Role models' impact on entrepreneurial intentions across cultural contexts

This section delves into the influence of role models on entrepreneurial intentions, considering how cultural dimensions act as moderators. Specifically, it examines the impact of role models in relation to two cultural dimensions: uncertainty avoidance and individualism.

2.3.2.1 Role Models effect and Uncertainty Avoidance

Given these dynamics, individuals in high uncertainty avoidance cultures may face significant barriers to entrepreneurial action due to their heightened fear of failure and lower risk tolerance (Hofstede, 1980). However, the presence of role models in such environments could play a crucial role in mitigating these barriers. Role models provide tangible examples of successful entrepreneurial behavior, offering reassurance and a potential roadmap for navigating uncertainties. This influence could be particularly impactful in high uncertainty avoidance societies, where the pressures against

taking risks are stronger. Role models might help reduce the perceived risk associated with entrepreneurship, encouraging individuals to increase their intentions.

In contrast, in low uncertainty avoidance cultures, individuals are more willing to take risks and engage in entrepreneurial activities, often without the need for external validation or examples. They are naturally more inclined towards pioneering achievements and are less deterred by the ambiguities of starting a new venture. Therefore, the presence of role models, while beneficial, may not significantly alter their EI as these individuals are predisposed to undertake entrepreneurial activities regardless.

Using this intuition, I suspect that that the role model effect on EI is stronger in high uncertainty avoidance environments. This leads to the following hypothesis:

Hypothesis 5: Having a role model in a high uncertainty environment has a bigger effect on entrepreneurial intentions compared to not being in a high uncertainty environment and having a role model.

2.3.2.2 Role model effects and individualism

Another key aspect affecting entrepreneurial intention is the degree of individualism or collectivism, which is based on social ties formed in a society (as discussed in section 2.3.1). Collectivistic cultures, where social ties and community support are highly valued, provide a ground for nurturing entrepreneurial ambitions through mechanisms such as role models and social networks (Siu & Lo, 2011). In contrast, individualistic cultures tend to emphasize self-reliance and contractual relationships over relational ties (Tiessen, 1997).

In collectivistic cultures, the social embeddedness plays a crucial role in entrepreneurial endeavors. Role models, for instance, are seen as important sources of inspiration and guidance within an individual's social network, facilitating resource acquisition and providing necessary support for venturing into business (Aldrich & Cliff, 2003). The influence of such role models is amplified in environments where collective values dominate.

Conversely, in individualistic cultures, individuals are expected to rely more on their own abilities and judgments rather than seeking input from others (Singelis, 1994). Thus, the impact of ERM might be less pronounced in such environments where independence and self-reliance are highly esteemed.

Given the literature from above, the following hypothesis is formed:

Hypothesis 6: The effect of having a role model on entrepreneurial intentions is lower in an environment that is more individualistic compared to an environment that is less individualistic.

In Figure 2 the conceptual framework is illustrated, including the hypotheses that relate to the key concepts used within this study.

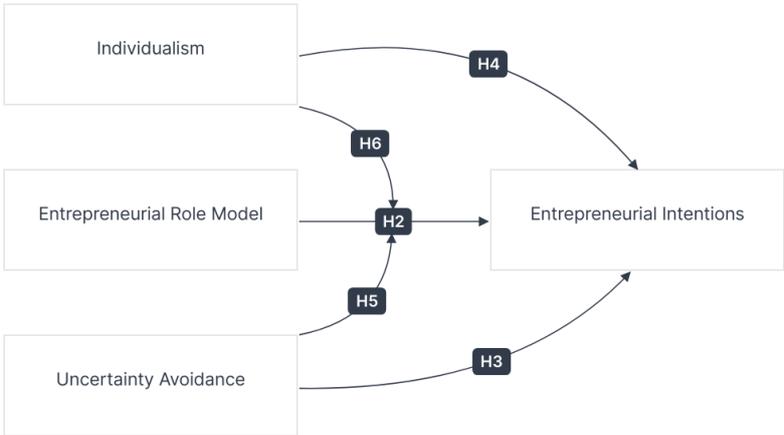


Figure 2: Conceptual Framework - Moderating Effects of Cultural Values on the Relationship between Role Models and Entrepreneurial Intentions

3. Methodology

This study employs a quantitative research design to investigate the relationship between entrepreneurial activity, entrepreneurial role models and cultural dimensions, across different countries. The study integrates individual-level data from the Global Entrepreneurship Monitor (GEM) with country-level cultural indices from Hofstede's framework and economic indicators from the World Bank. The six theoretical hypotheses are tested with five logistic regressions

3.1 Data collection, sample and variables

A database was constructed to test the hypothesized relationships stated in the previous section. Individual level data about entrepreneurial activity was taken from the Global Entrepreneurship Monitor's (GEM) Adult Population Survey (APS) and National Expert Survey (NES). The use of APS data and NES data provides insights into entrepreneurial dynamics in different ways. APS surveys offer broad demographic and economic data on individual level, giving a understanding of entrepreneurial intentions and behaviors. NES, on the other hand, gathers data on country level, focusing more on the entrepreneurial ecosystem. Integrating both surveys enables an exploration of individual motivations and national contexts influencing entrepreneurial endeavors.

For this study, the most recent public data of year 2019 is used covering 50 countries and 155604 observations in total. Each country has a minimum of 2000 observations.

The other database used in this study contains indexes of cultural dimensions from the framework developed by Hofstede (1980). Hofstede's value survey is the most widely used framework for cross-cultural studies (Chand & Ghorbani, 2011). Subsequent studies have shown strong correlations with Hofstede's original dimensions when these dimensions were replicated (Sondergaard, 1994). Hofstede's database contains indexes from 240 distinct cultural regions, where most of these regions represent nations. Out of those 240 regions, only 40 were found in the GEM data base, resulting in 10 countries being dropped from the GEM database.

Lastly, economic data was included into the database to account for differences in economic variables between countries. These were collected from the World Bank on country level.

After adjusting for missing values, 76986 observations were dropped in total, giving a total sample size of 78618. The resulting number of observations per country can be seen in Table A.1 in the appendix.

3.2 Dependent variable

Entrepreneurial intentions is measured as a dummy variable that takes value of 1 if the respondent answers affirmatively to the following question "Within the next three years, do you expect to start alone or with others a new business, including any type of self-employment?" and 0, otherwise. The approach to measure EI by a single-item proxy has been done in other studies as well (Krueger et al., 2000; Harhoff & Weber, 2010).

3.3 Explanatory variables

Entrepreneurial role model is a dummy variable measured on individual level that takes value of 1 if the respondent answers affirmatively to the question: "Do you personally know someone who started a business in the past two years?" and 0, otherwise. Using this variable as a proxy for role models might be a bit limiting, since it doesn't account for the different types of role models as discussed in section 2.1.1. For example, no distinguishing has been made between how successful the role model is, which could have varying impacts on entrepreneurial aspirations and behaviors.

Self-efficacy is a dummy variable that takes value of 1 if the respondent agree to the statement: "Has the knowledge, skill and experience required to start a new business" and 0, otherwise. This variable is used to measure the individual's perception in their entrepreneurial skill and ability.

Individualism is a variable that represents an index score from one until hundred, measured on country level. A higher score represents a strong emphasis on personal autonomy and independence, while a lower score indicates a greater focus on the group and collective responsibility.

Uncertainty avoidance is a variable that represents an index score from one until hundred, measured on country level. Higher scores indicate a strong aversion to uncertainty, favoring structured environments and clear rules. Lower scores suggest greater tolerance for ambiguity and uncertainty acceptance.

3.4 Control variables

At the individual level, *age* is controlled for as individuals' entry to entrepreneurship may be influenced by this (Hatak, 2015). There has been controlled for *gender* since women exhibit lower rates of entrepreneurship (Wannamakok and Chang, 2020). Furthermore, *education* and *household income* have been found to play roles in shaping start-up decisions (Levesque and Minniti, 2006). To address these influences, they have been included in the model. Education is assessed using a five-step categorical scale, and household income is assessed using a three-step income tier scale.

Some individual perceptions variables were included as control variables. *Fear of Failure* has been shown to influence entrepreneurship levels (Weber and Williman, 1997). Consequently, a dummy variable has been included that takes the value of 1 if the individual indicates that fear of failure would prevent them from starting a new business, and 0 otherwise. Another important individual perception variable is *entrepreneurial assertiveness*. Research (Karabulut, 2016) has demonstrated that this personality trait positively influences EI, making it a good control variable in this study.

At the country level, to exclude the impact of country's level of economic development, there has been controlled for *GDP growth*, *GDP per capita* and *Unemployment* (Carree, 2002; Wong et al., 2005). Also, at country level, some cultural dimensions from Hofstede's work have been included. *Individualism* and *uncertainty avoidance* are included since these variables are incorporated into the interaction terms. Furthermore, *masculinity* and *power distance* have been included since these cultural dimensions have been associated in complementing personality traits that are needed to become an entrepreneur (Hofstede et al., 2004). Some country level control variables stemming from the GEM NES survey were also included. *Entrepreneurial ecosystem perception* is derived as the mean of ten expert responses to the question: "How do you perceive the current overall state of your country's conditions for entrepreneurs and the framework within which they operate?". This variable serves to control for different national environments that may influence EI. Lastly, *government policies* is included. This variable measures how favorable a government acts towards entrepreneurship.

The list of variables, their description and sources are presented in Table 1.

Table 1. *Data Description and Sources*

Variable	Description	Type	Level	Source
<i>Dependent variable</i>				
Entrepreneurial intentions	entrepreneurial intentions (in sample that is not involved in entrepreneurial activity)	binary	individual	GEM APS Survey 2019
<i>Explanatory variables</i>				
Entrepreneurial role model	"How many people do you know personally who have started a business or become self-employed in the past 2 years?"	binary	individual	GEM APS Survey 2019
Self-efficacy	"Has the knowledge, skill and experience required to start a new business"	binary	individual	GEM APS Survey 2019
Individualism	cultural dimension which indicates the level of individualism in a country	index (1 - 100)	country	Hofstede
Uncertainty avoidance	cultural dimension which indicates the level of uncertainty avoidance in a country	index (1 - 100)	country	Hofstede
<i>Control variables</i>				
Age	Age range from respondents	categorical	individual	GEM APS Survey 2019
Gender	"What is your gender?"	binary	individual	GEM APS Survey 2019
Education	harmonized educational attainment	categorical	individual	GEM APS Survey 2019
Household income	income recoded into thirds	categorical	individual	GEM APS Survey 2019
Fear of failure	"You would not start a business for fear it might fail"	binary	individual	GEM APS Survey 2019
Entrepreneurial assertiveness	"Even when you spot a profitable opportunity, you rarely act on it"	binary	individual	GEM APS Survey 2019
GDP growth	GDP growth year over year in percentages	continuous	country	World Bank
GDP per capita	GDP capita, measured in US \$	continuous	country	World Bank
Unemployment	unemployment as a percentage of the total labor force	continuous	country	World Bank
Entrepreneurial ecosystem perception	"How do you perceive the current overall state of your country's conditions for entrepreneurs and the framework within which they operate?"	categorical	country	GEM NES Survey 2019
Government policies	"In my country, Government policies (e.g., public procurement) consistently favor new firms"	categorical	country	GEM NES Survey 2019
Masculinity	cultural dimension which indicates the level of masculinity in a country	index (1 - 100)	country	Hofstede
Power distance	cultural dimension which indicates the level of power distance in a country	index (1 - 100)	country	Hofstede

3.5 Proposed regression model

The logistic regression illustrates how the variables contribute to the differences between the two groups. Therefore, employing a logit model in this empirical study is justified for two key reasons: (1) it enables the examination of how specific levels of independent variables affect the likelihood of the studied event occurring (in this case, being a potential entrepreneur); (2) the dependent variable is dichotomous.

The goodness-of-fit of the models is assessed by the pseudo-R² statistics. The significance of individual independent variables was tested using the Wald statistics. A collinearity analysis was also performed to avoid biased estimations of the coefficients. The standard correlation coefficients between individual variables and the variance inflation factor (VIF) were used for this purpose.

4. Results

4.1 Descriptive data

In Table 2, descriptive data at the individual level is presented. The table displays sample characteristics of respondents filtered by the variable EI. Upon comparing these filtered results, it is evident that within this sample, individuals with EI tend to be younger, have similar levels of educational attainment, and comparable household incomes. Moreover, among these observations, those with EI exhibit a higher prevalence of entrepreneurial role models compared to those without EI, suggesting a positive correlation between ERM and EI. Regarding entrepreneurial perceptions, there are no significant differences observed in entrepreneurial assertiveness between the groups. However, fear of failure shows a somewhat negative correlation with EI, while self-efficacy demonstrates a stronger positive correlation with EI, thus showing preliminary support for the first hypothesis.

Table 2. Descriptive Statistics for Potential (EI = 1) and Non-Potential (EI = 0) Entrepreneurs

Profiles	Frequency		Percentage	
	EI = 0	EI = 1	EI = 0	EI = 1
<i>Age</i>				
18-24	7,442	3,235	11.82	20.67
25-34	12,517	5,007	19.88	31.99
35-44	13,617	3,486	21.63	22.27
45-54	12,797	2,388	20.32	15.26
55-64	12,289	1,320	19.52	8.43
65-120	4,305	215	6.84	1.37
<i>Gender</i>				
Male	30,364	8,579	48.22	54.81
Female	32,603	7,072	51.78	45.19
<i>Education</i>				
Pre-primary education	1,451	393	2.30	2.51
Primary education or first stage of basic education	4,963	854	7.88	5.46
Lower secondary or second stage of basic education	9,373	2,323	14.89	15
(Upper) secondary education	18,300	4,687	29.06	30
Post-secondary non-tertiary education	8,974	2,187	14.25	13.97
Short-cycle tertiary education	1,493	698	2.37	4.46
Bachelor or equivalent	13,862	3,457	22.01	22.09
Master or equivalent	4,308	1,003	6.84	6.41
Doctor or equivalent	243	49	0.39	0.31
<i>Household income</i>				
Bottom 33rd percentile	23,120	5,548	36.72	35.45
Middle 33rd percentile	20,171	4,974	32.03	31.78
Top 33rd percentile	19,676	5,129	31.25	32.77
<i>Entrepreneurial role model</i>				
At least one	26,632	10,012	42.30	63.97
None	36,335	5,639	57.70	36.03
<i>Self-efficacy</i>				
Agree	25,808	10,502	46.27	74.59
Disagree	29,970	3,577	53.73	25.41
<i>Entrepreneurial assertiveness</i>				
Strongly disagree	8,238	2,007	13.08	12.82
Somewhat disagree	10,616	2,768	16.86	17.69
Neither agree nor disagree	8,969	2,148	14.24	13.72
Somewhat agree	19,291	4,997	30.64	31.93
Strongly agree	15,853	3,731	25.18	23.84
<i>Fear of failure</i>				
Agree	31,848	7,099	50.58	45.36
Disagree	31,119	8,552	49.42	54.64
<i>Total observations</i>	62,967	15,651	100	100

Examining country-level variables, Figure 3 illustrates the distribution of individualism and uncertainty avoidance among observations with EI. Higher percentages indicate higher scores in these cultural dimensions. A negative association is observed between individualism and EI. However, no clear relationship is evident yet between uncertainty avoidance and EI.

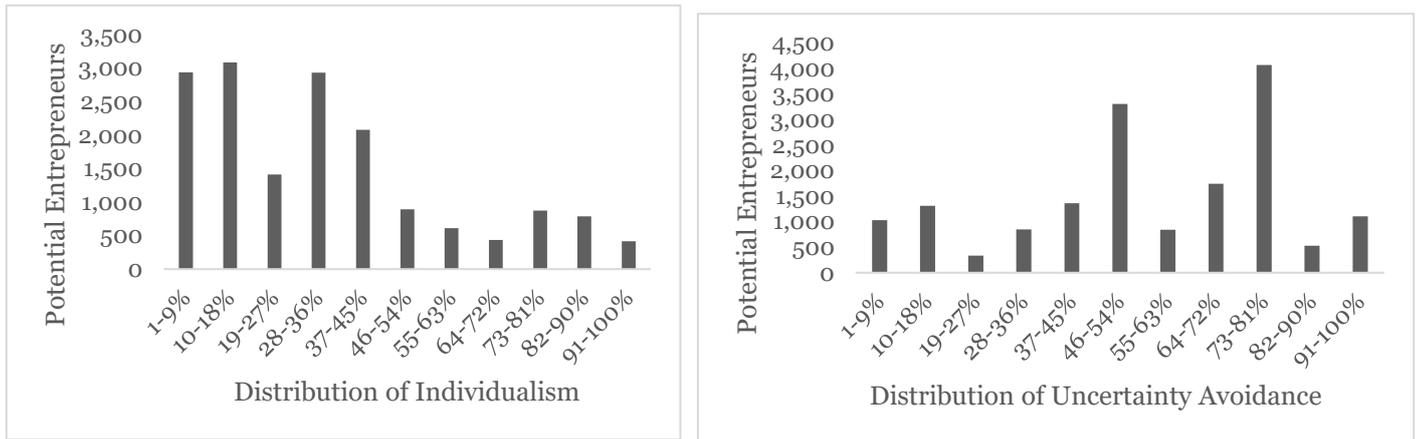


Figure 3. *Distribution of Potential Entrepreneurs Across Individualism and Uncertainty Avoidance*

Examining the correlation matrix in Table 4 (next page), it is observed that there are no correlations between independent variables that exceed the threshold of 0.8, which would indicate multicollinearity. Additionally, the highest VIF is 3.7, well below the threshold of 10, suggesting no signs of problematic multicollinearity among the independent variables. Regarding the hypotheses, the correlation matrix provides initial support for research hypotheses H1, H2, H4, and H5.

4.2 Estimations logistic models

Five binary logistic regressions were conducted. The first model examines the effect of ERM on EI without control variables. The second model includes control variables and the self-efficacy variable alongside the ERM effect. The third model is identical to the second but excludes the self-efficacy variable. The fourth and fifth models introduce interaction terms between ERM and individualism (IND) and between ERM and uncertainty avoidance (UA), respectively. The regression equations are provided below. The results of these logistic regressions can be found in Table 5.

- (1) $EI = \beta_0 + \beta_1 ERM + \varepsilon$
- (2) $EI = \beta_0 + \beta_1 ERM + \beta_2 \text{Self-efficacy} + \Sigma(\beta_i \text{Control Variables}) + \varepsilon, \text{ for } i = 3 \text{ to } 18$
- (3) $EI = \beta_0 + \beta_1 ERM + \Sigma(\beta_i \text{Control Variables}) + \varepsilon, \text{ for } i = 2 \text{ to } 17$
- (4) $EI = \beta_0 + \beta_1 ERM + \beta_2 UA + \beta_3 (ERM \times UA) + \Sigma(\beta_i \text{Control Variables}) + \varepsilon, \text{ for } i = 4 \text{ to } 17$
- (5) $EI = \beta_0 + \beta_1 ERM + \beta_2 IND + \beta_3 (ERM \times IND) + \Sigma(\beta_i \text{Control Variables}) + \varepsilon, \text{ for } i = 4 \text{ to } 17$

Table 4. Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
(1) EI	1.00																			
(2) Gender	-0.06	1.00																		
(3) Age	-0.20	0.02	1.00																	
(4) Household income	0.01	-0.01	-0.03	1.00																
(5) Education	0.02	-0.07	-0.04	0.28	1.00															
(6) ERM	0.17	-0.06	-0.12	0.10	0.10	1.00														
(7) Individualism	-0.25	-0.01	0.20	0.24	0.01	-0.04	1.00													
(8) Uncertainty avoidance	0.03	0.01	-0.08	-0.19	-0.02	0.00	-0.60	1.00												
(9) Power distance	0.22	-0.01	-0.21	-0.21	0.01	0.05	-0.74	0.58	1.00											
(10) Masculinity	-0.05	-0.01	-0.11	0.01	0.03	-0.04	0.11	0.02	0.06	1.00										
(11) ERM*Uncertainty avoidance	0.03	-0.05	-0.05	0.18	0.09	0.84	0.34	-0.22	-0.24	0.02	1.00									
(12) ERM*Individualism	0.17	-0.05	-0.13	0.06	0.08	0.94	-0.18	0.24	0.19	-0.04	0.67	1.00								
(13) Self-efficacy	0.23	-0.10	-0.06	0.04	0.08	0.17	-0.11	0.00	0.13	0.02	0.10	0.16	1.00							
(14) Fear of failure	-0.05	0.04	-0.03	-0.02	-0.02	-0.02	0.02	0.06	0.01	0.00	0.00	0.00	-0.09	1.00						
(15) Entrepreneurial assertiveness	-0.01	0.01	0.01	0.03	0.01	0.00	0.01	0.00	0.00	-0.05	0.00	0.00	0.02	0.17	1.00					
(16) GDP growth	0.01	0.00	-0.03	0.02	-0.01	0.04	-0.04	-0.09	0.00	-0.03	0.03	0.01	0.03	0.01	-0.04	1.00				
(17) GDP per capita	-0.16	-0.03	0.17	0.25	0.06	-0.01	0.58	-0.42	-0.63	0.03	0.22	-0.12	-0.11	-0.05	0.00	0.02	1.00			
(18) Unemployment	-0.16	0.01	0.03	-0.14	-0.06	-0.09	0.11	0.21	-0.12	-0.12	-0.04	-0.04	-0.03	0.08	-0.01	-0.12	-0.19	1.00		
(19) Entrepreneurial ecosystem perception	-0.08	-0.01	0.02	-0.05	0.07	0.01	-0.01	0.10	-0.03	-0.06	0.01	0.04	-0.01	0.01	-0.01	0.11	0.17	-0.03	1.00	
(20) Government policies	-0.16	0.03	0.12	0.02	0.02	-0.04	0.21	-0.16	-0.23	0.03	0.06	-0.08	-0.04	0.01	0.05	-0.20	0.14	0.03	0.22	1.00

Table 5. Logistic Regressions on Entrepreneurial Intention

	(1)		(2)		(3)		(4)		(5)	
	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio	Coefficient	Odds Ratio
ERM	.885*** (0.019)	2.422*** (0.045)	.623*** (0.022)	1.865*** (0.041)	.770*** (0.020)	2.159*** (0.044)	.651*** (0.044)	1.917*** (0.084)	1.125*** (0.080)	3.08*** (0.245)
Gender			-.18*** (0.021)	.836*** (0.018)	-.238*** (0.020)	.788*** (0.016)	-.249*** (0.020)	.78*** (0.015)	-.248*** (0.020)	.78*** (0.015)
Age			-.285*** (0.008)	.752*** (0.006)	-.277*** (0.007)	.758*** (0.005)	-.273*** (0.007)	.761*** (0.006)	-.274*** (0.007)	.761*** (0.006)
Education			.047*** (0.006)	1.048*** (0.007)	.045*** (0.006)	1.046*** (0.006)	.054*** (0.006)	1.055*** (0.006)	.054*** (0.006)	1.056*** (0.006)
Household income			0.000*** (0.000)	1.000*** (0.000)	0.000*** (0.000)	1.000*** (0.000)	0.000*** (0.000)	1.000*** (0.000)	0.000*** (0.000)	1.000*** (0.000)
Fear of failure			-.128*** (0.022)	.88*** (0.019)	-.14*** (0.020)	.869*** (0.017)	-.148*** (0.020)	.862*** (0.017)	-.148*** (0.020)	.863*** (0.017)
Entrepreneurial assertiveness			0.012 (0.008)	0.988 (0.008)	0.004 (0.007)	1.004 (0.007)	0.004 (0.007)	1.004 (0.007)	0.004 (0.007)	1.004 (0.007)
GDP growth			-.084*** (0.008)	.919*** (0.007)	-.068*** (0.007)	.934*** (0.006)	-.075*** (0.007)	.927*** (0.006)	-.075*** (0.007)	.928*** (0.006)
Unemployment			-.047*** (0.002)	.954*** (0.002)	-.033*** (0.002)	.968*** (0.002)	-.041*** (0.002)	.959*** (0.002)	-.042*** (0.002)	.959*** (0.002)
Individualism			-.025*** (0.001)	.975*** (0.001)	-.029*** (0.001)	.971*** (0.001)	-.028*** (0.001)	.972*** (0.001)	-.027*** (0.001)	.974*** (0.001)
Uncertainty avoidance			-.016*** (0.001)	.984*** (0.001)	-.019*** (0.001)	.981*** (0.001)	-.018*** (0.001)	.982*** (0.001)	-.015*** (0.001)	.985*** (0.001)
Power distance			.003*** (0.001)	1.003*** (0.001)	.007*** (0.001)	1.007*** (0.001)	.004*** (0.001)	1.004*** (0.001)	.004*** (0.001)	1.004*** (0.001)
Masculinity			-.009*** (0.001)	.991*** (0.001)	-.008*** (0.001)	.992*** (0.001)	-.008*** (0.001)	.992*** (0.001)	-.008*** (0.001)	.992*** (0.001)
Entrepreneurial environment perception			-.091*** (0.014)	.913*** (0.013)	-.092*** (0.013)	.912*** (0.012)	-.056*** (0.014)	.946*** (0.013)	-.055*** (0.014)	.947*** (0.013)
Government policies			-.27*** (0.014)	.763*** (0.011)	-.257*** (0.013)	.773*** (0.010)	-.278*** (0.013)	.758*** (0.010)	-.278*** (0.013)	.757*** (0.010)
Self-efficacy			1.016*** (0.023)	2.762*** (0.065)						
GDP per capita			0.000*** (0.000)	1.000*** (0.000)	0.000*** (0.000)	1.000*** (0.000)	0.000*** (0.000)	1.000*** (0.000)	0.000*** (0.000)	1.000*** (0.000)
ERM x Individualism							.003*** (0.001)	1.003*** (0.001)		
ERM x Uncertainty avoidance									-.005*** (0.001)	.995*** (0.001)
Constant	-1.863*** (0.014)	.155*** (0.002)	3.385*** (0.125)	29.511*** (3.693)	3.641*** (0.114)	38.137*** (4.353)	3.884*** (0.117)	48.642*** (5.671)	3.628*** (0.122)	37.65*** (4.610)
Observations			78618	78618	78618	78618	78618	78618	78618	78618
Pseudo R2			0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03

Robust standard errors are in parentheses

*** p<.01, ** p<.05, * p<.1

In the first model, a significant positive effect of having an ERM on EI is observed, although no control variables are included.

Model 2 incorporates all control variables, while Model 3 is identical to Model 2 but excludes the variable self-efficacy. Notably, the inclusion of the self-efficacy variable reduces the coefficient of the role model variable (from 0.770 to 0.623), indicating that self-efficacy acts as a mediator between role models and EI. Thus, the first hypothesis is supported.

Given the mediating role of self-efficacy, this variable is omitted in subsequent models to capture the full effect of entrepreneurial role models on entrepreneurial intentions. In Model 3 the odds ratio of ERM is 2.159, suggesting that observations with an ERM are 2.159 times more likely to exhibit EI. This finding supports the second hypothesis and aligns with previous literature (Abbasianchavari & Moritz, 2021).

In the third model, there is a significant negative effect of uncertainty avoidance on EI. Specifically, when residing in a country with a one-point higher uncertainty avoidance score compared to another country, the probability of having EI decreases by 0.019. This finding supports the third hypothesis and is consistent with the hypothesis of other researchers regarding the relationship between uncertainty avoidance and EI (Hayton et al., 2002).

Also in the third model, there is a significant negative effect of individualism on EI. Specifically, when residing in a country with a one-point higher individualism score compared to another country, the probability of having EI decreases by 0.029. This negative effect supports the fourth hypothesis. This finding is also consistent with the 'dissatisfaction hypothesis,' which suggests that potential entrepreneurs are driven towards self-employment due to dissatisfaction with mainstream employment opportunities (Acs, Audretsch, & Evans, 1994). Additionally, the negative result complements research indicating that subjective norms, which typically influence EI but are weaker in individualistic cultures, do not show significant effects in such contexts.

In the fourth model, a significant positive coefficient is found for the interaction term between individualism and role models. This result contradicts the sixth hypothesis. The observed positive effect may be attributed to the cultural context where individuals are more inclined to be influenced by role models who embody values of personal achievement and autonomy, which are esteemed in individualistic societies.

In the fifth model, a significant negative coefficient is observed for the interaction term between uncertainty avoidance and role models. This result contradicts the fifth hypothesis. The negative interaction effect suggests that in cultures characterized by high uncertainty avoidance, having a role

model does not yield the anticipated positive. This could be attributed to individuals in high uncertainty avoidance contexts having difficulty dealing with risk, which may lead them to refrain from following role models. Conversely, cultures low in uncertainty avoidance tend to be more receptive to innovation, change, and unconventional approaches. In these contexts, role models are likely viewed positively as sources of guidance and inspiration, encouraging entrepreneurial behavior without fear of deviating from societal norms (Hofstede et al., 2004).

5. Discussion

Despite the increasing focus on researching the topic of entrepreneurship and role models, there is limited understanding of how the relationship between role models and entrepreneurial intentions varies across different cultural contexts. To address this gap, a logit model was applied to a sample of 78618 individuals from 40 countries. The study aimed to identify the effects of uncertainty avoidance and individualism on the relationship between entrepreneurial role models and entrepreneurial intentions.

This research confirmed the positive relationship between entrepreneurial role models and entrepreneurial intentions, consistent with current literature (Abbasianchavari & Moritz, 2021), supporting Hypothesis 1. Additionally, our findings demonstrated that self-efficacy mediates the relationship between entrepreneurial role models and entrepreneurial intentions, aligning with previous studies (Laviolette et al., 2012; Austin & Nauta, 2016; BarNir et al., 2011; Nowiński & Haddoud, 2019), supporting Hypothesis 2.

Regarding the cultural dimensions studied, both individualism (Hypothesis 4) and uncertainty avoidance (Hypothesis 3) had significant negative effects on entrepreneurial intentions. The effect of individualism can be explained by the “dissatisfaction hypothesis,” where potential entrepreneurs are driven towards self-employment due to their dissatisfaction with mainstream companies. Another explanation could be that the role of subjective norms, which really contribute to forming intentions, is limited in a highly individualistic context. For uncertainty avoidance, the negative impact on entrepreneurial intentions can be attributed to individuals in high uncertainty avoidance environments being less likely to engage in entrepreneurial activities due to their aversion to risk and ambiguity.

Contrary to Hypothesis 5, the presence of a role model did not have a stronger impact on entrepreneurial intentions in high uncertainty avoidance cultures. The rationale behind this hypothesis is that individuals in high uncertainty avoidance environments struggle with handling risky situations. Entrepreneurial role models (ERMs) are known to reinforce risk-taking behavior by

demonstrating that calculated risks can lead to success (Zhao et al., 2005). Therefore, ERMs could be more beneficial for individuals who have difficulty dealing with risk, such as those in high uncertainty avoidance cultures, potentially resulting in higher entrepreneurial intentions (EI). However, instead of the hypothesized positive effect, a negative effect was observed. This negative effect can be explained by a study by House et al. (2004), which examined the impact of entrepreneurial education on EI in high uncertainty avoidance environments. The study found a negative effect, suggesting that entrepreneurial education makes individuals more aware of the uncertainties inherent in entrepreneurship, further diminishing their interest in pursuing entrepreneurial ventures. Similarly, with ERMs, rather than learning to handle risky decisions, individuals may become more aware of the ambiguity and riskiness associated with entrepreneurship, leading to lower EI.

Lastly, the results did not support Hypothesis 6. It was hypothesized that people in high individualism environments would rely more on their own abilities and judgments rather than seeking input from others (Singelis, 1994). Consequently, having a role model was expected to contribute less to entrepreneurial intentions compared to collectivistic environments, where social embeddedness plays a crucial role in entrepreneurial endeavors (Aldrich & Cliff, 2003). Instead, a positive effect was found. This positive effect could be explained by the fact that individuals in highly individualistic cultures share the same ideals of personal accomplishment and self-direction as role models, leading to a stronger connection with entrepreneurial role models. There appear to be two mechanisms at play in individualistic cultures: a general principle of not seeking help from others, and the alignment of values between highly individualistic individuals and ERMs.

Having interpreted the results, answers to the research questions can be formulated. In contexts characterized by high uncertainty avoidance, entrepreneurial role models (ERMs) do not appear to enhance entrepreneurial intentions (EI). Conversely, in highly individualistic contexts, ERMs significantly increase EI.

Finally, the results carry important practical implications as they can be used to improve the design of public policy programs that stimulate entrepreneurial behavior. Many governments recognize the economic and social benefits that entrepreneurship can bring (OECD, 2007), and are actively promoting it through public policy by lowering barriers and improving business environments (OECD/European Union, 2017). This is especially important during the awareness and nascent phases of the entrepreneurial process, where the main objective of policy instruments is to increase interest in entrepreneurship and the intention to start new ventures (Lundström & Stevenson, 2005). Among public policies and initiatives aiming to promote entrepreneurship, role models have played a substantial role (Lundström & Stevenson, 2002). However, policymakers should be aware that such

policies need to be evaluated in the context of national culture. This study's results underscore the significant effects of uncertainty avoidance and individualism as moderators on the impact of entrepreneurial role models on entrepreneurial intentions. By understanding how these cultural factors moderate the influence of entrepreneurial role models on entrepreneurial intentions, policymakers can tailor initiatives to better support and encourage entrepreneurship in culturally diverse environments.

While insightful, this study has several limitations. First, the use of Hofstede's cultural dimensions does not account for intra-country variations, potentially oversimplifying cultural diversity. Second, the control variables employed may not comprehensively capture all factors influencing entrepreneurial intentions. Lastly, the role model variable in this study lacks specificity regarding the nature and proximity of role models, which could substantially affect their influence on entrepreneurial intentions.

Future research should address these limitations in several ways. Firstly, rather than measuring cultural dimensions at the country level, future studies could use other proxy variables to measure uncertainty avoidance and individualism at the individual level. This approach would allow for a better understanding of cultural variations within countries. Additionally, exploring other cultural dimensions relevant to entrepreneurial intentions could provide valuable insights. Understanding these dimensions better, could be of great use for improving policies for countries where these dimensions are particularly strong.

Moreover, future research could benefit from longitudinal data instead of relying solely on cross-sectional data. Longitudinal data would enable the use of different statistical approaches that may offer deeper insights into the relationships studied. Additionally, improving the proxy for the entrepreneurial role model variable is crucial. The current study's variable lacks specificity regarding the types and proximity of role models, as discussed in section 2.2.2. Different types of role models can have varying effects on entrepreneurial intentions, making it essential to develop a more refined proxy for this variable in future research.

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7. Appendix

Table A.1. *List of Countries and Number of Respondents in the Sample*

Country	Freq.	Percent
United States	1,838	2.34
Russia	1,408	1.79
South Africa	2,278	2.9
Greece	1,175	1.49
Netherlands	1,518	1.93
Spain	13,229	16.83
Italy	1,196	1.52
Switzerland	1,284	1.63
United Kingdom	1,152	1.47
Sweden	2,898	3.69
Poland	4,482	5.7
Germany	2,014	2.56
Mexico	3,915	4.98
Brazil	1,059	1.35
Chile	4,337	5.52
Colombia	1,441	1.83
Australia	1,222	1.55
Japan	1,039	1.32
South Korea	1,183	1.5
India	1,414	1.8
Pakistan	1,518	1.93
Iran	1,174	1.49
Canada	5,292	6.73
Morocco	2,555	3.25
Madagascar	914	1.16
Portugal	894	1.14
Luxembourg	1,146	1.46
Ireland	1,281	1.63
Latvia	1,087	1.38
Croatia	1,351	1.72
Slovenia	1,363	1.73
Slovakia	23	0.03
Guatemala	1,428	1.82
Panama	1,435	1.83
Ecuador	1,009	1.28
Taiwan	1,370	1.74
Oman	854	1.09
United Arab Emirates	1,107	1.41
Israel	1,030	1.31
Qatar	1,705	2.17
Total	78,618	100