



ABAC
GRADUATE SCHOOL
of BUSINESS

Au Virtual International Conference 2020
Entrepreneurship and Sustainability in the Digital Era
Assumption University of Thailand
October 30, 2020
Co-hosted by



The Influence of Social and Economic Context Factors on Student's Entrepreneurial Intent – A comparative analysis

Matthias Liedtke*, Prof. Dr. Reza Asghari

Technische Universität Braunschweig, Entrepreneurship Hub, Braunschweig, 38106, Germany

**Corresponding author. E-mail: m.liedtke@tu-braunschweig.de*

Abstract

What motivates students to develop startup intentions during their studies? From a political point of view, students' startup intentions are a very relevant topic. This article aims to investigate the influence of social, cultural and economic conditions on the founding intentions of students. As a theoretical foundation, the theory of planned behaviour is used. Based on data from the Global Entrepreneurship Monitor (GEM) for the years 2014 - 2016 and the cultural dimensions according to Hofstede, influencing factors are analysed and compared in a country comparison with the four countries, Germany, Mexico, South Africa, and Thailand. In order to answer the research question, descriptive analyses using SPSS were carried out. The results of the analyses show that the attitude towards a foundation, subjective norms, and perceived behaviour control as well as cultural dimensions vary across countries in the context of students' startup intentions.

Keywords: entrepreneurial intention; entrepreneurship; theory of planned behavior

Introduction

Startups and the associated startup intentions of students are a much-discussed topic in science and politics. In the course of the Bologna Process and connection with the latest economic and financial crisis, the European Commission for example has set itself the goal of intensifying the interest of students in setting up their own businesses through various measures in the coming years (cf. European Commission, 2008; Yerevan Communiqué, 2015). Accordingly, the investigation of the factors influencing the intentions of startups is an important topic for entrepreneurial research (cf. do Paço *et al.*, 2011; Schwarz *et al.*, 2009).

The study of students against the background of founding intentions and their influencing factors represents a special focus for entrepreneurship research since students have to decide on a career path after completing their studies. For many students, the step into self-employment is an option

or often no other possibility is offered. The situation on the labour market plays an important role in this context (Krueger *et al.*, 2000; Pruett *et al.*, 2009). Recent research shows that there is a strong correlation between social, cultural and economic context factors and founding intentions. Therefore, the intention of an individual to choose the path to self-employment depends on many influencing factors, such as the cultural environment (cf. Lee, L. *et al.*, 2011; Liñán *et al.*, 2011). Culture has an impact on the environment in which the foundation takes place. However, these influencing factors differ between countries (cf. Bosma & Schutjens, 2011; Freytag & Thurik, 2007). Following Kluckhohn (1951), Hofstede defines culture as "the collective programming of the mind that distinguishes the members of a group or category of persons from others" (Hofstede, 2001). In the context of social acceptance, cultural values are understood as the degree to which society considers entrepreneurial behaviour, such as risk-taking and independent

thinking, to be desirable (cf. Hayton *et al.*, 2002). Also, entrepreneurial activities differ across countries depending on their level of economic development (cf. Sternberg & Wennekers, 2005). The Global Entrepreneurship Monitor (GEM) shows that an average of 68 percent of adults in the countries surveyed attributes a high status in society to company founders. Furthermore, the study concludes that on average 42 percent of adults see good opportunities to start a business in their environment (cf. Kelley *et al.*, 2016). This study aims to investigate the influence of social, cultural, and economic conditions on the startup intentions of students in Germany, Mexico, South Africa, and Thailand.

The theoretical framework of the founding

Theory of planned behavior in the context of the startup intentions of students

An important theory for the analysis of intentions of any kind is the theory of planned behavior (TPB) developed by Ajzen (1991). The theory of planned behavior states that intentions can predict a certain behavior (cf. Ajzen, 1991). Here it is true that the stronger the intention to exercise a behaviour, the higher is the probability of the actual exercise of this behaviour. These intentions are in turn influenced by the attitude towards the planned behaviour, subjective norms regarding the behaviour, and the perceived behavioural control over this behaviour. However, as a prerequisite, the behaviour to be exercised can be controlled (cf. *ibid.*).

The theory of planned behaviour is very suitable as a basis for the analysis of this paper since a wide range of planned behaviour can be predicted on the basis of this theory (cf. Engle *et al.*, 2010; Krueger *et al.*, 2000).

In the context of the startup intentions of students, this theory is used to test the extent to which attitudes towards startup, subjective norms, and perceived behaviour control have a direct influence on the founding intentions of students (cf. fig. 1). Current research, which examines the influence of various factors on students' intentions to start a business, shows that the theory of planned behaviour is an essential part of numerous scientific papers on this topic (e.g. Autio *et al.*, 2001; Engle *et al.*, 2010; do Paço *et al.*, 2011; Kolvereid & Isaksen, 2006; Iakovleva, *et al.*, 2011; Moriano *et al.*, 2011; Shook & Bratianu, 2010). In this context, the founding attitude describes the extent to which students regard

starting their own business as positive or negative. In the context of this work, the subjective norms describe the pressure exerted by family, friends, or society on students to point out their intentions to start a business (cf. Byabashaija & Katono, 2011). The perceived control of behaviour is the perceived ease or difficulty of students in starting a business (cf. Liñán *et al.*, 2011). Following the model of Ajzen (1991), the more positive students' attitudes and subjective norms towards self-employment are, and the greater the perceived control of behaviour is, the greater is the intentions of the students to found a company (cf. Ajzen, 1991).

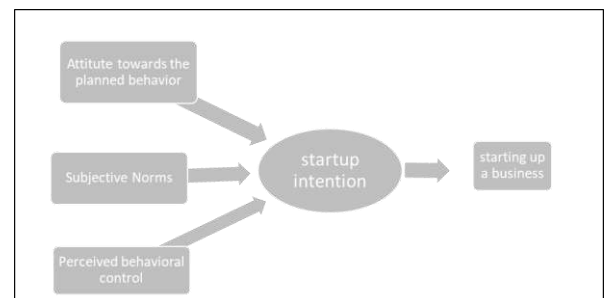


Figure 5: Framework of startup intention
 Source: Modified from Ajzen (1991)

An international comparison of students' startup intention

In the following, the startup intentions of students are presented in an international comparison. This is important because entrepreneurial activities differ across countries (cf. Sternberg & Wennekers, 2005).

The results of the GUESSS study 2018 show that 9 percent of the globally surveyed students want to work in their own company after completing their studies and thus have startup intentions. This proportion rises to almost 35 percent when it comes to the question of which career path students want to pursue five years after completing their studies (cf. Sieger *et al.*, 2019). Other studies based on different data also show that a high proportion of students are positive about starting a business and have intentions to do so (cf. Bruns & Görisch, 2002; Fafaliou, 2012). With regard to the founding intentions of students, however, differences emerge in an international comparison. Franke and Lüthje (2004), for example conclude that the intentions of German and Austrian students to start up a business are significantly lower than those of students at the Massachusetts Institute of Technology (MIT). They highlight the different circumstances regarding the macro environment (e.g.



ABAC
GRADUATE SCHOOL
of BUSINESS



capital markets, government regulations) and the micro environment (e.g. universities) between the USA and the two European countries as a possible reason for this difference. The personality and attitude factors that were identified as important indicators for business startups, however, are at a comparable level for German, Austrian and American students (cf. *ibid.*). The GUESSS study shows that the degree of interest of students in starting a business varies across countries. While the direct startup intentions in some countries such as Argentina (25.3 percent), South Africa (15.3 percent), Mexico (13.6 percent), China (10.1), France (9.6 percent) Australia (9.1 percent) are above the average of 9 percent, the founding intentions among students in most European countries such as the England (6.2 percent), Poland (5.4 percent), Germany (2.4 percent) are below average. The country with the lowest number of direct startup intention is Japan (1.6 percent) (cf. *Sieger et al.*, 2019).

Attitude towards starting up a business, subjective norms, and perceived behavioral control in the context of startup intention

Studies on the subject of founding intentions show that the founding attitude correlates with the founding intention (cf. *Autio et al.*, 2001; *Schwarz et al.*, 2009). In addition, it is proven that the spatial aspect affects the extent to which the founding attitude of students is pronounced (cf. *Liñan et al.*, 2011). Intentions to found a company can result from the fact that the potential founder sees an opportunity that outweighs the risks. In order to see this opportunity, the attention of the potential founder must first be drawn to this opportunity. It can therefore be stated that the attitude influences the founding intention of students (*Krueger et al.*, 2000). The attitudes towards starting up a business are influenced by both pull factors (e.g. implementation of a profitable option) and push factors (e.g. poor economic situation) (cf. *Shariff & Saud*, 2009).

The GUESSS study also shows that the personal environment in the various countries reacts to the choice of starting a business to varying degrees. Students in Mexico, Russia, the USA, and England for example rate the subjective norms as particularly positive. Subjective norms in Germany, Singapore, and Japan are rated below average. The study thus shows that there is a positive correlation

between the strength of the founding intentions and subjective norms. At the same time, the study shows that subjective norms differ greatly between countries (cf. *Sieger et al.*, 2014).

Furthermore, research indicates that attitudes towards starting up a business, students' subjective norms, perceived behavioural control, as well as their entrepreneurial self-efficacy, have a significant influence on students' startup intentions (cf. *Kolvereid*, 1996; *do Paço et al.*, 2011; *Wang, C. K. & Wong*, 2004). *Do Paço et al.*, on the other hand, describe that subjective norms only have an indirect effect on the founding intentions (cf. *do Paço et al.*, 2011). These different results can possibly be attributed to the fact that subjective norms have so far been little empirically researched (cf. *Khalili et al.*, 2015).

The risk aspect as well as socio-demographic factors such as the entrepreneurial background of the parents are also influential factors with regard to the motivation to found a company. Research shows that students' intentions to start a business are greater if at least some of their parents have already founded a business themselves (cf. *Fafaliou*, 2012; *Pruett et al.*, 2009; *Sieger et al.*, 2014; *Wang, C. K. & Wong*, 2004).

Not only the family environment, but also the social environment has a strong influence on the founding intentions of students. The more founders an individual knows in his or her immediate environment and the more role models he or she has, the more likely they are to develop startup intentions (*Krueger et al.*, 2000; *Nishimura & Tristán*, 2011).

The influence of perceived behavioral control on the startup intentions of students is shown in many scientific papers. In this context, perceived behavioral control is described as the feeling of self-efficacy or the ability to carry out entrepreneurial activities. The more knowledge, skills, and experience the individual has, the lower the perceived level of difficulty in carrying out entrepreneurial activities (cf. *Nishimura & Tristán*, 2011). Knowledge and skills that can be acquired through (work) experience exert an influence on the founding intentions (cf. *Walter et al.*, 2013). Research shows that a lack of economic knowledge and entrepreneurial knowledge constitute a barrier to

entrepreneurship (cf. Fafaliou, 2012; Wang, C. K. & Wong, 2004).

Iakovleva *et al.* (2011) show that students in industrialised countries have a more positive attitude towards startups, higher subjective norms, and higher perceived behavioural control than students in the developing countries surveyed. On the basis of this literature analysis, it can be concluded that in most countries the founding attitude, subjective norms, and perceived behaviour control have an influence on the founding behaviour of students.

Cultural and economic context

In addition to the theory of planned behaviour, economic and cultural (e.g. Hofstede's cultural dimensions) factors that influence students' career and startup decisions and intentions are also increasingly coming into the focus of entrepreneurship research (cf. Freytag & Thurik, 2007; Liñán *et al.*, 2011; Moriano, *et al.*, 2011).

Research shows that the influence of cultural factors on the startup intentions of students varies. It has been shown, for example, that compared to Anglo-Saxon countries, the aspect of possible failure and the associated loss of social status in Asian countries represents a stronger obstacle to the step into self-employment. In addition, it can be shown that the cultural factor "social status" makes it easier to predict the founding interest of students in East Asia than, for example, in Anglo-Saxon states (cf. Begley & Tan, 2001).

In their study, Liñán *et al.* also show that startup research focuses on the role of cultural differences by depicting the different behaviors between the states and regions studied (cf. Liñán *et al.*, 2011). Research also shows that the step of students into self-employment in Romania and other transition economies has a relatively low social acceptance (cf. Shook & Bratianu, 2010).

Empirical studies show that company founders have a lower degree of risk aversion than non-company founders and that there is a negative correlation between the strength of the founding intentions and the perceived risk of founding intentions (cf. Begley & Tan, 2001; Freytag & Thurik, 2007; Pruett *et al.*, 2009; Sieger *et al.*, 2014; Thomas & Mueller, 2000).

Entrepreneurship research shows that, in terms of cultural dimensions, the founding interest of students should be greatest in states with a population with a high degree of individualism, a low degree of uncertainty avoidance, a low degree of power distance, and a high degree of masculinity (cf. Hayton *et al.*, 2002). The study by Moriano *et al.* shows that subjective norms have no stronger influence on the startup intentions of students in collectivist states than on students in individualist states (cf. Moriano *et al.*, 2011).

Due to the complexity of the cultural expressions of the populations in a cross-country comparison, it is not surprising that startup researchers who analyse the relationship between national culture and business startups sometimes might yield different results. However, research shows that students from different cultural backgrounds have basically similar startup motivations and are confronted with the same obstacles to start up a business, such as economic events. Pruett *et al.* prove that the cultural and social dimension can explain only a small part of the founding intentions (cf. Pruett *et al.*, 2009).

Various studies show that the economic context influences founding intentions. Regional differences can be observed with regard to the founding intentions of students. These differences can be attributed, among other things, to the economic development of the individual regions (cf. Liñán *et al.*, 2011). Due to the most recent global economic and financial crisis, students are not sure that they will find a permanent position in the labour market after completing their studies (cf. Fafaliou, 2012). This view is supported by the EUROSTUDENT V study as results of this study show that in some European states, especially in some Eastern European states, students regard the chances on the domestic labour market after completing their higher education studies as rather low (cf. Hauschildt *et al.*, 2015). The GUESSS study (2014) also shows that the level of development of a state has a strong influence on the founding behaviour of students. This study shows that, in principle, there is an above-average number of startups in developing countries, whereas in "developed countries" the degree of startups is below average (cf. Sieger *et al.*, 2014). With regard to the spatial context and subjective norms, it has also been proven that social assessments are higher in



ABAC
GRADUATE SCHOOL
of BUSINESS



more developed regions (e.g. Catalonia) than in less developed regions (e.g. Andalusia), and that the level of economic development thus has a positive influence on the perceived subjective norms and behaviour control (cf. Liñan *et al.*, 2011).

Though there is a high political and academic interest in the study of startup intentions of students, many research gaps still exist. Only a small number of researchers have so far dealt with and analysed the startup intentions of students and their influencing factors in the form of national or international comparative studies (e.g. Autio *et al.*, 2001; Fafaliou, 2012; Iakovleva *et al.*, 2011; Kolvereid, 1996; Liñan *et al.*, 2011; Moriano *et al.*, 2011; Pruett *et al.*, 2009; Schwarz *et al.*, 2009). Bergmann *et al.* make clear that in studies on student business startups, the organisational and spatial context, for example in which region and in which university students study, has been widely ignored, although the organisational and regional context and the intentions of prospective company founders play an important role (cf. Bergman *et al.*, 2016). This research gap can be attributed, among other things, to the fact that the spatial aspect is generally ignored by the majority of scientists in the field of entrepreneurship research (cf. Bosma & Sternberg, 2014; Thomas & Mueller, 2000). With regard to the cultural influence on the founding intentions relatively little research was done in this field until the beginning of the new millennium (cf. Begley & Tan, 2001). Several researchers recommend investigating in depth the cultural influence on founding attitudes, subjective norms and perceived behavioral control (cf. Iakovleva, 2011, Liñan & Chen, 2009).

Since there are not many comparative studies that sheds light on the influence of social, cultural, and economic environmental conditions on the founding intentions of students, this article intends to partially close this research gap. In addition, it is intended to generate ideas for further research by examining students' intentions to found a business with a view to their influencing factors (cf. Hayton *et al.*, 2002; Shook & Bratianu, 2010; Thomas & Mueller, 2000).

The following research question arises from the present presentation:

What influence do social, cultural, and economic conditions have on the founding intentions of students?

Based on existing literature in the context of students' startup intentions, the following analysis foci have been set:

Analysis focus I: Students' startup attitudes, subjective norms, and perceived behaviour control in the context of startup intentions.

Analysis focus II: The cultural dimensions power distance, individualism, masculinity, uncertainty avoidance, and long term orientation

Analysis focus III: Students' startup intentions across four selected countries (Germany, Mexico, South Africa, Thailand).

Theoretical framework of the founding

Data

Data from the Global Entrepreneurship Monitor (GEM) have been used as data source (Global Entrepreneurship Monitor, 2016). The data concerning the cultural dimensions are derived from Hofstede (2001).

The GEM research programme was launched in 1999. The data collected annually can be used to make cross-national comparisons of national startup activities. A fundamental goal of GEM is to show differences in startup activities between countries. It also aims to find answers to the question of why some countries have a higher number of startups than others. The most recent results were published in 2020 and comprises 50 states (cf. Bosma *et al.*, 2020; Reynolds *et al.*, 2005; Sternberg & Wennekers, 2005).

In the GEM project, startup intentions are defined on the basis of the percentage of individuals who expect to start a business in the next three years (cf. Bosma *et al.*, 2012).

The empirical analysis is based on the students who participated in the GEM survey. In the GEM survey, a representative sample of at least 2,000 interviewees aged 18 or older per country is examined (cf. Amoros & Bosma, 2014). Due to their thematic focus and questions, the GEM data are used

in many studies on the subject of founding intentions and business startups (cf. Nishimura & Tristan, 2011). In order to be able to conduct cross-country comparisons, standardised questionnaires were used for each wave in the GEM project (cf. Amorós, & Bosma; 2014).

The GEM questionnaire contains some indicators suitable to measure the variables of the theory of planned behaviour. For this reason, the GEM data can be used to study TPB in the context of founding intentions (see Nishimura & Tristán, 2011). The GEM questionnaire contains several items that are relevant for answering the hypotheses of this master thesis. Table 1 gives an overview of the relevant questions.

Table 1: Used GEM-Items

Reference of question in GEM-questionnaire	Item	Variable	Coding ¹
3A	Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years?	Dependent variable: Intention to startup (IS)	0 = „No“ 1 = „yes“ 8 = „Don't know“ 9 = „refused“
12	In the next six months, will there be good opportunities for starting a business in the area where you live?	Explaining variable: Attitude towards founding a business – opportunities (A-O)	0 = „No“ 1 = „yes“ 8 = „Don't know“ 9 = „refused“
14	Would fear of failure prevent you from starting a business?	Explaining variable: Attitude towards founding a business - Fear of failure (A-FF)	0 = „No“ 1 = „yes“ 8 = „Don't know“ 9 = „refused“
15	In your country, most people would prefer that everyone had a similar standard of living	Explaining variable: Subjective norm – equal standard of living (SN – ESL)	0 = „No“ 1 = „yes“ 8 = „Don't know“ 9 = „refused“
16	In your country, most people consider starting a new business a desirable career choice	Explaining variable: Subjective norm – desirable career choice (SN – DCC)	0 = „No“ 1 = „yes“ 8 = „Don't know“ 9 = „refused“
17	In your country, those successful at starting a new business have a high level of status and respect	Explaining variable: Subjective norm – status and respect (SN – SR)	0 = „No“ 1 = „yes“ 8 = „Don't know“ 9 = „refused“
18	In your country, you will often see stories in the public media about successful new businesses	Explaining variable: Subjective norm – Success stories in media (SN – SSM)	0 = „No“ 1 = „yes“ 8 = „Don't know“ 9 = „refused“
13	Do you have the knowledge, skill and experience required to start a new business?	Explaining variable: Perceived behavioral control (PBC)	0 = „No“ 1 = „yes“ 8 = „Don't know“ 9 = „refused“

Source: Own table based on GEM data (2016)

Four states were picked based on their high number of respective respondents after filtering the cases and the availability of data regarding Hofstede's cultural dimensions. The selected states for this study are Germany, Mexico, South Africa, and Thailand.

The total size of the sample used for this study is 719 students. The sample size for the countries varies between 109 (Mexico) and 295 (Germany). A total of 96 (13.4 percent) of the students surveyed intend

to start up a company within the next three years. 623 (86.6 percent) students have currently no intentions in this respect.

Description of variables

Figure 2 shows the conceptual analytical framework. The analytical framework shows that the descriptive analysis is based on the variables startup attitude ("possibilities" and "fear of failure"), subjective norms ("desirable career choice", "equal standard of living", "status and respect" and "success stories in the media"), perceived behavioural control, country, and the five cultural dimensions.

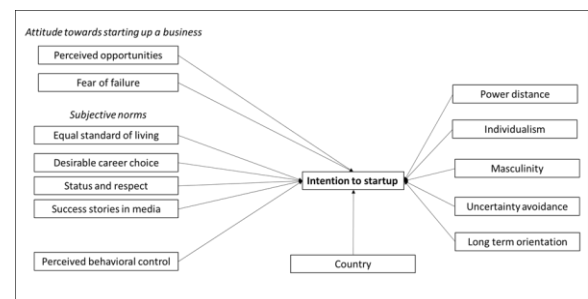


Figure 6: Conceptual framework (Source: own illustration)

Startup intention of students

The founding intention is the intention of an individual to found a new company. The intention to start up is influenced by other factors (cf. Ajzen, 1991; Engle *et al.*, 2010). According to Shook & Bratianu, founding intentions are conscious states of mind that precede action but draw attention to the goal of the foundation (Shook & Bratianu, 2010). The question used in the GEM questionnaire, which asks about the founding intention, is: "Are you, alone or with others, expecting to start a new business, including any type of self-employment, within the next three years? (cf. Reynolds *et al.*, 2005). This self-assessment question is a question with four possible answers (see Table 1). Since it is necessary to classify students into two groups in order to answer the research question, based on their answer to the question whether they expect to start their own business in the next three years (first group: students with intentions to set up their own business within the next three years; second group: students without

intentions to set up their own business within the next three years), the corresponding cases with the answers "don't know" and "refused" were excluded from the analysis.

Attitudes towards startup intention

The GEM questionnaire contains two questions (see table 1) that relate to attitudes towards starting a business. The first question is whether there are good opportunities for starting a business in the area where the respondent lives in the next six months. This item is also used in other studies as an important indicator of startup attitudes (e.g. Stuetzer *et al.*, 2014). The second question in this context is whether fear of failure would prevent respondents from becoming self-employed. An agreement with the first question points to a positive attitude, whereas an agreement with the second question shows a negative attitude with regard to the foundation (cf. Nishimura & Tristán, 2011). According to Shaw & Shiu, the attitude that one should behave is based on one's own belief in behaviour (cf. Shaw & Shiu, 2003).

Subjective norms in the context of startup intention

Four GEM questions (see table 1) are used to describe subjective norms.

In the first question on testing the influence of subjective norms on startup attitudes, students are asked for their personal opinion as to whether everyone should have the same standard of living or not. The second question deals with the subjective assessment of students as to whether the majority of people in the interviewee's country regard starting a business as a desirable career choice. In response to the third question, students express their personal opinion as to whether those who start a business in the country in which they live have a high social status and receive respect. The fourth question deals with media influence. The students are asked whether, in their opinion, the public media in the state in which they live show many successful cases of business startups.

Perceived behavioral control in the context of startup intention

To measure the perceived behavioral control of students, students were asked whether they had the

knowledge, skills, and experience needed to start a business.

Hofstede's cultural dimensions

For the items "power distance", "Individualism", "Masculinity", "Uncertainty avoidance" and "long-term orientation" the corresponding values of this cultural dimension according to Hofstede (2001) are used. These are values on a scale of 0 - 100, where 100 describes the highest possible degree of a population in a country.

Results and Discussion

In order to answer the research question descriptive analyses were carried out.

Figure 3 shows that the cultures of the populations differ across the countries surveyed. Mexico appears to have the highest degree of power distance (81) followed by Thailand (64), South Africa (49), and Germany (35). The degree of uncertainty avoidance of the population in Mexico (82) is much higher than in Germany (65), Thailand (64), and South Africa (49). However, fear of failure does not significantly correlate with the item A-FF, which might lead to the assumption, that the student groups in the respective countries are less likely to fear failure compared to the overall population. Considering the cultural dimension "individualism", Germany (67) scores highest followed by South Africa (65), Mexico (30) and Thailand (20).

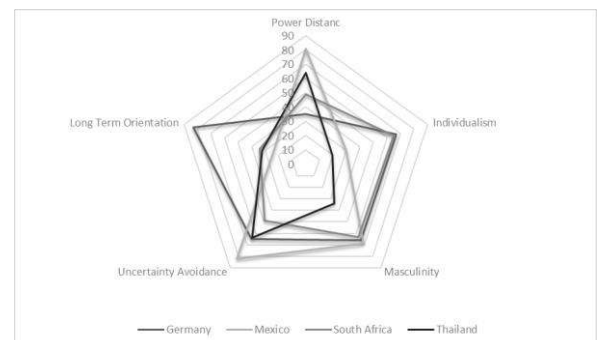


Figure 7: Comparison of cultural dimensions
 Source: Own illustration based on Hofstede (2001)

Figure 4 shows that the countries differ in terms of startup attitudes, subjective norms, and perceived behavioural control. For example, students in Germany and Mexico see better start-up opportunities (A - O) in the geographical region in

which they live than their fellow students in South Africa and Thailand. Fear of failure can be considered a barrier to starting up a business. The descriptive analysis indicates that the fear of failure in the context of founding a business is comparatively high in Germany (0.44) and Thailand (0.5). Figure 4 also shows that in Mexico, South Africa and Thailand more than half of the students surveyed consider starting a business as a desirable career choice (SN - DCC). While in Germany, South Africa, and Thailand less than 30 % of students believe that they have the necessary knowledge, skills, and experience (PBC) to start a business, Mexico ranks highest with 35 %. Based on this we may conclude that the student population in Mexico has a higher degree of perceived behavioural control with regard to the founding intentions compared to the other countries.

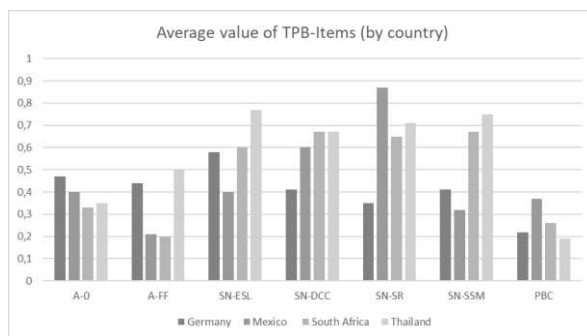


Figure 8: Average value of Theory of Planned Behavior items (by country)

Source: Own illustration based on GEM data (2014 – 2016).

Figure 5 shows the percentage of students with startup intentions (by sex). Besides South Africa, startup intention differs by gender. In Germany and Mexico, the percentage of male students intending to start up a business is higher than their female counterparts, whereas in Thailand more female students are intending to start up a business.

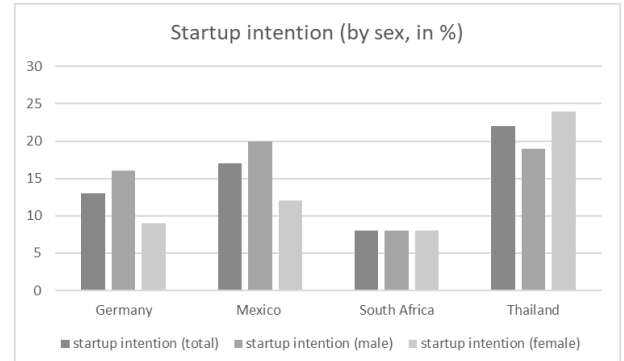


Figure 9: Proportion of students with startup intention (by sex)

Source: Own illustration based on Hofstede (2001)

Conclusions

Based on the theory of planned behaviour, this paper examines the social, cultural and economic environment and its influence on the founding intentions of students in four selected countries. The research question of this was derived from the existing literature. The results of the descriptive analysis were subsequently discussed and elaborated in more detail with the help of the analytical framework.

Data from the Global Entrepreneurship Monitor for the years 2014 - 2016 have been used for the analysis. In addition to the GEM data, four cultural dimensions according to Hofstede were used for the analysis in order to show cultural influences with regard to the founding intentions.

The results indicate that the theory of planned behaviour (Ajzen, 1991) serves as a useful tool to pursue this research topic. It becomes clear that in the four countries studied, the minority of students indicates to have intentions to start up a business in the near future. However, the intention to start up a business and its influencing factors vary across countries.

The special focus of this article is on the hitherto unperformed comparative analysis of the influence of social, cultural, and economic conditions on the founding intentions of students in Germany, Mexico, South Africa, and Thailand based on the theory of planned behaviour. Due to the focus of this article on social, cultural, and economic factors, the aspect of university influence on startup intentions will not be discussed further. This aspect has already been dealt with by many researchers in scientific papers (e.g. Lee, S. M. *et al.*, 2006; Sternberg & Lückgen, 2005), but still requires further research.

Since, in contrast to the GUESSS project, the GEM project considers the adult population in general, the student population could only be filtered out based on individual questions. This has led to a strong minimization of the number of cases and thus to the elimination of the states to be investigated.

The study by Fabian *et al.* (2013) shows that many students only take the step into self-employment a few years after completing their studies. The authors cite the necessary startup capital as the reason for this, which students initially lack after leaving university. These findings are supported by the study by Sieger *et al.* (2014). However, since the question from the GEM questionnaire is only aimed at whether it is intended to found a company within the next three years, those students who plan to establish a company in the long term (e.g. in 5 or 10 years) are not included in the analysis.

Furthermore, this paper did not deal further with the founding motives of students (e.g. necessity vs. opportunity) (cf. Kelley *et al.*, 2012).

In this paper, the attitude towards starting up a business is measured, among other things, by whether the students see good startup opportunities in the region in which they live. Here, however, the mobility aspect is ignored. Hauschildt & Liedtke (2016) show that a relatively high proportion of students at the European Higher Education Area spend time abroad during their studies (cf. Hauschildt & Liedtke, 2016). This result is exemplary for the fact that students are mobile and quite willing to leave their current place of residence. Therefore, an alternative question that raises the regional aspect to the national level, for example, would be more appropriate. It would be conceivable for students to see startup opportunities, but not in the region in which they live. In order to achieve a stronger statement of the founding intentions of students, further research should include a higher number of countries in the analysis. In view of the cultural dimensions in particular, greater heterogeneity (e.g. degree of individualism) would be achieved. As presented by Begley & Tan (2001), the aspect of possible failure and the associated loss of social status in Asian countries represents a stronger obstacle to the step into self-employment than for students in Western countries. The cultural factor "social status" makes it easier to predict the founding interest of students in East Asia than in Western countries. In this context, it would be beneficial for science and politics to investigate which cultural dimension supports business startups and to what extent (cf. Begley & Tan, 2001).

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Amorós, J. E. & Bosma, N. (2014). *Global Entrepreneurship Monitor 2013 Global Report*. Babson Park, MA: Babson College, Santiago de Chile: Universidad del Desarrollo, Kuala Lumpur: Universidad Tun Abdul Razak, London: London Business School.
- Autio, E.; Keeley, R. H.; Klofsten, M.; Parker, G. G. C.; & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise and Innovation Management Studies*, 2(2), 145-160.
- Begley, T. M. & Tan, W. L. (2001). The socio-cultural environment for entrepreneurship: A comparison between East Asian and Anglo-Saxon countries. *Journal of International Business Studies*, 32(3), 537-553.
- Bergmann, H.; Hundt, C. & Sternberg, R. (2016). What makes student entrepreneurs? On the relevance (and irrelevance) of the university and the regional context for student start-ups. *Small Business Economics*, 47(1), 53-76.
- Bosma, N. & Schutjens, V. (2011). Understanding regional variation in entrepreneurial activity and entrepreneurial attitude in Europe. *The Annals of Regional Science*, 47(3), 711-742.
- Bosma, N. & Sternberg, R. (2014). Entrepreneurship as an urban event? Empirical evidence from European cities. *Regional studies*, 48(6), 1016-1033.
- Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J., & Tarnawa, A. (2020). *Global Entrepreneurship Monitor 2019/2020 Global Report*. Global Entrepreneurship Research Association, London Business School.
- Bruns, R. W. & Görisch, J. (2002). *Unternehmensgründungen aus Hochschulen im regionalen Kontext-Gründungsneigung und Mobilitätsbereitschaft von Studierenden*. Karlsruhe: Fraunhofer ISI.



ABAC
GRADUATE SCHOOL
of BUSINESS



- Byabashaija, W. & Katono, I. (2011). The impact of college entrepreneurial education on entrepreneurial attitudes and intention to start a business in Uganda. *Journal of Developmental Entrepreneurship*, 16(1), 127-144.
- do Paço, A. M. F.; Ferreira, J. M.; Raposo, M.; Rodrigues, R. G. & Dinis, A. (2011). Behaviours and entrepreneurial intention: Empirical findings about secondary students. *Journal of International Entrepreneurship*, 9(1), 20-38.
- Engle, R. L.; Dimitriadi, N.; Gavidia, J. V.; Schlaegel, C.; Delanoe, S.; Alvarado, I. & Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behavior. *International Journal of Entrepreneurial Behavior & Research*, 16(1), 35-57.
- European Commission (2008). Final Report of the Expert Group (2008). Best Procedure Project: Entrepreneurship in Higher Education, especially in non-Business studies. Brussels.
- Fabian, G.; Rehn, T.; Brandt, G. & Briedis, K. (2013). Karriere mit Hochschulabschluss. In *HIS: Forum Hochschule* (Vol. 10, 2013). Hannover: HIS.
- Fafaliou, I. (2012). Students' propensity to entrepreneurship: an exploratory study from Greece. *International Journal of Innovation and Regional Development*, 4(3-4), 293-313.
- Franke, N. & Lüthje, C. (2004). Entrepreneurial intentions of business students - A benchmarking study. *International Journal of Innovation and Technology Management*, 1(3), 269-288.
- Freytag, A. & Thurik, R. (2007). Entrepreneurship and its determinants in a cross-country setting. *Journal of Evolutionary Economics*, 17(2), 117-131.
- Hauschildt, K.; Gwosć, C.; Netz, N. & Mishra, S. (2015). Social and Economic Conditions of Student Life in Europe. Synopsis of Indicators. EUROSTUDENT V 2012–2015. Bielefeld: W. Bertelsmann Verlag.
- Hauschildt, K. & Liedtke, M. (2016). Auslandsmobilität und Internationalisierung der Studierenden im Europäischen Hochschulraum. EUROSTUDENT Kurzdossier. Hannover: Deutsches Zentrum für Hochschul- und Wissenschaftsforschung (DZHW).
- Hayton, J. C.; George, G. & Zahra, S. A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory and Practice*, 26(4), 33-53.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Iakovleva, T.; Kolvereid, L. & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education+ Training*, 53(5), 353-370.
- Kelley, D.; Singer, S.; Herrington, M. (2012). *Global Entrepreneurship Monitor. 2011 Global Report*. Babson Park, MA: Babson College, Santiago de Chile, Chile: Universidad del Desarrollo, Kuala Lumpur: Universiti Tun Abdul Razak, London: London Business School.
- Kelley, D. J.; Singer, S. & Herrington, M. D. (2016). *Global Entrepreneurship Monitor 2015/2016 Global Report*. Babson Park, MA: Babson College, Santiago de Chile, Chile: Universidad del Desarrollo, Kuala Lumpur, Malaysia: Universiti Tun Abdul Razak, Mexico: Tecnológico de Monterrey, London, United Kingdom: London Business School.
- Khalili, H.; Zali, M. R. & Kaboli, E. (2015). A structural model of the effects of social norms on entrepreneurial intention: evidence from gem data. *International Journal of Advanced Research in Management and Social Sciences*, 4(8), 37-57.
- Kluckhohn, C. (1951). The study of culture. In Lerner, D. & Lasswell, H. D. (Hrsg), *The*



ABAC
GRADUATE SCHOOL
of BUSINESS



- Policy Sciences. Stanford: Stanford University Press.
- Kolvereid, L. (1996). Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice*, 21(1), 47-58.
- Kolvereid, L. & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), 866-885.
- Krueger, N. F.; Reilly, M. D. & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5-6), 411-432.
- Lee, S. M.; Lim, S. B.; Pathak; R. D., Chang, D. & Li, W. (2006). Influences on students attitudes toward entrepreneurship: a multi-country study. *The International Entrepreneurship and Management Journal*, 2(3), 351-366.
- Liñán, F. & Chen, Y. W. (2009). Development and Cross-Cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617.
- Liñán, F.; Urbano, D. & Guerrero, M. (2011). Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain. *Entrepreneurship and Regional Development*, 23(3-4), 187-215.
- Moriano, J. A.; Gorgievski, M.; Laguna, M.; Stephan, U. & Zarafshani, K. (2011). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development*, 39(2), 162 – 185.
- Nishimura, J. S. & Tristán, O. M. (2011). Using the theory of planned behavior to predict nascent entrepreneurship. *Academia, Revista Latinoamericana de Administración*, 46, 55-71.
- Pruett, M.; Shinnar, R.; Toney, B.; Llopis, F. & Fox, J. (2009). Explaining entrepreneurial intentions of university students: a cross-cultural study. *International Journal of Entrepreneurial Behavior & Research*, 15(6), 571-594.
- Reynolds, P.D.; Bosma, N.; Autio, E. Hunt, S.; De Bonon, N.; Servais, I.; Lopez-Garcia, P. & Chin, N. (2005). *Global Entrepreneurship Monitor: data collection and implementation 1998–2003*, *Small Business Economics*, 24, 205–231.
- Schwarz, E. J.; Wdowiak, M. A.; Almer-Jarz, D. A. & Breiteneker, R. J. (2009). The effects of attitudes and perceived environment conditions on students' entrepreneurial intent: An Austrian perspective. *Education + Training*, 51(4), 272-291.
- Shariff, M. N. M. & Saud, M. B. (2009). An attitude approach to the prediction of entrepreneurship on students at institution of higher learning in Malaysia. *International Journal of Business and Management*, 4(4), 129 - 135.
- Shaw, D. & Shiu, E. (2003). Ethics in consumer choice: a multivariate modelling approach. *European Journal of Marketing*, 37(10), 1485-1498.
- Shook, C. L. & Bratianu, C. (2010). Entrepreneurial intent in a transitional economy: an application of the theory of planned behavior to Romanian students. *International Entrepreneurship and Management Journal*, 6(3), 231-247.
- Sieger, P.; Fueglistaller, U. & Zellweger, T. (2014). *Student entrepreneurship across the globe: A look at intentions and activities*. St. Gallen: Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen (KMU-HSG).
- Sieger, P., Fueglistaller, U., Zellweger, T. & Braun, I. (2019). *Global Student Entrepreneurship 2018: Insights from 54 Countries*. 2018 GUESSS Global Report.
- St.Gallen/Bern: KMU-HSG/IMU-U.
- Sternberg, R. & Wennekers, S. (2005). Determinants and effects of new business creation using



ABAC
GRADUATE SCHOOL
of BUSINESS



global entrepreneurship monitor data. *Small Business Economics*, 24(3), 193-203.

Sternberg, R.; Brixy, U. & Vorderwülbecke, A. (2015). *Global Entrepreneurship Monitor (GEM) Länderbericht Deutschland*. Hannover: Institut für Wirtschafts- und Kulturgeographie, Universität Hannover, Nürnberg: Institut für Arbeitsmarkt- und Berufsforschung der Bundesagentur für Arbeit (IAB).

Stuetzer, M.; Obschonka, M.; Brixy, U.; Sternberg, R. & Cantner, U. (2014). Regional characteristics, opportunity perception and entrepreneurial activities. *Small Business Economics*, 42(2), 221-244.

Thomas, A. S. & Mueller, S. L. (2000). A case for comparative entrepreneurship: Assessing the relevance of culture. *Journal of International Business Studies*, 31(2), 287-301.

Walter, S. G.; Parboteeah, K. P. & Walter, A. (2013). University Departments and Self-Employment Intentions of Business Students: A Cross-Level Analysis. *Entrepreneurship Theory and Practice*, 37(2), 175-200.

Wang, C. K. & Wong, P. K. (2004). Entrepreneurial interest of university students in Singapore. *Technovation*, 24(2), 163-172.

Internet sources

Global Entrepreneurship Monitor
Entrepreneurial Attitudes, Perceptions, Intentions:
<http://www.gemconsortium.org/wiki/1182>

Global Entrepreneurship Monitor (2016). Adult Population Survey:
<http://www.gemconsortium.org/data/sets>
Global Entrepreneurship Monitor. Adult Population Survey

Hofstede (n.d.): Country Comparison: <https://geert-hofstede.com>

Yerevan Communiqué 2015 (2015). Yerevan Communiqué:
<http://www.ehea.info/page-ministerial-conference-yerevan-2015>