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# **Perceived public support and entrepreneurship attitudes: A little reciprocity can go a long way!**

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## **Abstract**

This study investigates the link between perceived public support for entrepreneurship and individuals' entrepreneurial intention. Using samples from the US and Poland, we show that positive perception of public support is indirectly related to entrepreneurial intentions of university students. This takes place through relationships with personal attitude to entrepreneurship, entrepreneurial self-efficacy and risk attitudes. Such links are explained by the reciprocity theory wherein individuals' attitudes and beliefs are associated with a feeling of mutuality towards the supportive actions of society. From a cross-national perspective, we find that while perceived public support exhibits similar relationships across Poland and the US, attitude to risk has a greater positive association with entrepreneurial intentions among US students. These findings hold important implications for theory and practice.

**Keywords:** attitude to risk, entrepreneurial intentions, entrepreneurial self-efficacy, theory of planned behaviour, public support; reciprocity.

## **1. Introduction**

As entrepreneurship is perceived as a major driver of economic growth (Acs & Szerb, 2007; Audretsch & Keilbach, 2004), there has been a substantial debate in academia and among policy makers on how to encourage young people to choose entrepreneurship as their career (European Commission, 2013; Lechner, Sorthaix, Obschonka, & Salmela-Aro, 2018; Lüthje & Franke, 2003; Souitaris, Zerbinati, & Al-Laham, 2007; Wilson, Kickul & Marlino, 2007). In terms of academic discourse, this has focused on drivers of entrepreneurial intention (EI) as the key predictor of actual entrepreneurial activity (Hsu, Shinnar, Powell, & Coffey, 2017). Understanding what drives entrepreneurial behaviour is important for policy makers and educators as it can help improve the effectiveness of public policies and educational programs.

It is widely accepted that entrepreneurs face substantial barriers related to the small size of new ventures and the lack of resources, which could deter potential entrepreneurs to pursue this route. In this regard, it has been observed in the past that favourable institutions and policies encourage entrepreneurial activity (Autio & Fu, 2015), although the influence of such policies is sometimes debated and considered counterproductive (Acs, Åstebro, Audretsch, & Robinson, 2016; Shane, 2009). This being said, despite this debate, encouraging entrepreneurship among university students should not be lightly discarded, since higher levels of education increase the probability of successfully establishing high growth firms (Dickson, Solomon, & Weaver, 2008; Galloway & Brown, 2002).

In the extant literature, the link between entrepreneurial activity and entrepreneurship policies has been studied by linking entrepreneurial activity with objective measures of institutional framework (Autio & Fu, 2015; Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2002; Simón-Moya, Revuelto-Taboada, & Guerrero, 2014) or supportive policies (Román, Congregado, & Millán, 2013). However, entrepreneurs' perception of available support may

have a greater bearing on their intention and decisions than the real scale of support programmes (Isenberg, 2011; Saeed, Yousafzai, Yani-De-Soriano, & Muffato, 2015; Van der Zwan, Thurik, Verheul, & Hessels, 2016). Therefore, the key question that we address in this paper is whether and how perceptions of support available to entrepreneurs are related to entrepreneurial intentions.

Due to scarcity of previous studies addressing this question, we draw upon a dual organizational support theory and theory of planned behaviour to uncover the mechanism whereby perceived entrepreneurship support is associated with entrepreneurial intentions. We expect that as perceived organizational support is related to attitudinal variables, such as job satisfaction, performance and intention to leave organization (Kurtessis, Eisenberger, Ford, Buffardi, Stewart, & Adis, 2017; Riggle, Edmondson, & Hansen, 2009), perceived public support for entrepreneurship is also likely to be related to entrepreneurial intentions through attitudinal variables such as attitudes toward entrepreneurship and risk, as well as entrepreneurial self-efficacy (ESE) beliefs. Moreover, since previous research linking entrepreneurship policies with entrepreneurial intentions provided mixed findings (Djankov et al., 2002; Engle, Schlaegel, & Dimitriadi, 2011; Van Stel, Storey, & Thurik, 2007), attitudinal variables and entrepreneurial self-efficacy beliefs could provide the missing link, as their relationship with entrepreneurial intentions is widely supported, and in line with the theory of planned behaviour (Krueger, Reilly, & Carsrud, 2000; Moriano, Gorgievski, Laguna, Stephan, & Zarafshani, 2012; Nowiński, Haddoud, Lančarič, Egerová, & Czeglédi, 2019).

Furthermore, attitudes to [the outcome of] entrepreneurship refer to various intrinsic costs and benefits ensuing from entrepreneurial activity and encompasses, amongst other elements, attitude to risk (Douglas & Shepherd, 2002). Nevertheless, contrary to general attitudes, the relationship between risk attitudes and entrepreneurial activity is not unequivocal (Brockhaus, 1980; Busenitz & Barney, 1997; Caliende, Fossen, & Kritikos, 2009; Douglas and Shepherd,

2002; Tyszka, Cieřlik, Domurat, & Macko, 2011), which calls for additional research to help explain these inconclusive findings.

To sum up, in this paper, we undertake an effort to align these inconsistent results by (1) exploring the effect of perceived public support on entrepreneurial intentions, (2) testing, how attitude to entrepreneurship, attitude to risk and entrepreneurial self-efficacy mediate this link, and (3), examining the influence of context, reflected here through national culture, on these relationships with the use of two samples from different countries (Poland and the US).

## **2. Theoretical framework**

Drivers of entrepreneurial intentions can be identified at personal and contextual levels. Little has been done so far to link these two perspectives. Therefore, Fayolle and Lińńn (2014) recommend investigation of how institutional context and public policies affect entrepreneurial intentions, particularly indirectly, via personal level variables. The following sections explore this mechanism in further details.

### *2.1. Perceptions of public support*

Public policies can play an important role in encouraging entrepreneurship and thus in stimulating economic growth (Audretsch, 2004; Bienkowska, Klofsten, & Rasmussen, 2016; Van Praag & Versloot, 2007). However, evidence on the impact of public policies aimed towards increasing entrepreneurship has been mixed. For example: while Djankov et al. (2002) suggested an explicit link between certain regulatory arrangements, such as ease of setting up a business and the rate of entrepreneurship, Van Stel, Storey and Thurik (2007) found the opposite. Similarly, Turker and Sonmez Selçuk (2009) concluded that perceived structural support (e.g. access to bank loans and institutional arrangements) exerts positive impact on entrepreneurial intention, whereas other research using perceptual measures of public policies indicated a marginal impact on entrepreneurial intent (Engle et al., 2011).

Such mixed findings suggest that the link between public policies and entrepreneurial activity is more complex, potentially involving intervening factors. In this respect, Wagner and Sternberg (2004) argued that regional policy aimed at entrepreneurship is more likely to influence entrepreneurial attitudes. Another reason for the mixed findings might be the way in which these policies are captured. Here, Arenius and Minniti (2005) argued that considering subjective perceptions of public policies would be more accurate when assessing their influence. This was confirmed by Van der Zwan et al. (2016), who showed that perceptions of public support may be more important for opportunity-driven entrepreneurship. That said, a minimal number of studies have applied this approach so far. Thus, drawing on the above arguments, we propose to incorporate perceptions of public entrepreneurship policies into existing models explaining entrepreneurial intentions.

Public support is an umbrella term that encompasses many aspects. It is multifaceted and could be reflected through financial means such as loans and credits and non-financial means including information provision and consultancy (Cumming & Fischer, 2012; Eurobarometer, 2009; Mole, 2002). Tang (2008) posits that financial and non-financial support from local institutions increase individuals' engagement with business opportunities and could potentially increase entrepreneurial behaviour. In the following sections, we explain how positive perceptions of public entrepreneurship policies could indirectly contribute to entrepreneurial intentions via their impact on attitudes and self-efficacy.

### *2.1.1. Perceived public support and attitude toward entrepreneurship*

The impact of support on individuals' behaviour in general has its roots in the organisational support theory (Rhoades & Eisenberger, 2002) which is now seen as a useful theoretical framework for understanding individual entrepreneurial behaviour (Zampetakis, Kafetsios, Bouranta, Dewet, & Moustakis, 2009). Here, the rationale is that the more people perceive they are receiving support from a given organisation, the more they feel a sense of

obligation to reciprocate in both attitudinal and behavioural ways (Zampetakis et al., 2009). In this regard, Liñán, Urbano and Guerrero (2011) posit that favourable governmental policies encourage people to venture into new business creation through the creation of positive attitudes toward entrepreneurship. Positive attitudes can also be shaped as a result of a feeling of protection arising from such support (Troilo, 2011). Precisely, attitude toward entrepreneurship can be fostered by perceived government support, including tax incentives (Gentry & Hubbard, 2000). Because perceived financial barriers are often cited when studying entrepreneurship (Hoogendoorn et al., 2019), Schwarz, Wdowiak, Almer-Jarz, & Breitenecker. (2009) argue that, theoretically, when students perceive credit access mechanisms to be too restrictive, they would be reluctant to engage in entrepreneurial activity. In South Africa, perceived difficulties in accessing bank finance were found to be the main obstacles (Fatoki, 2010). Likewise, in the UK, access to financing was also perceived as an important barrier among social entrepreneurs (Leahy & Villeneuve-Smith, 2009). Against this backdrop, one can argue that when individuals perceive that capital will be available to them, they anticipate the success of their entrepreneurship activity and hence are more likely to see it as useful in meeting their goals. Tang (2008) explains that entrepreneurs' alertness to profit opportunities through entrepreneurship activities can be "switched on" by financial support.

In a similar vein, Hoogendoorn et al. (2019) posit that when individuals perceive insufficient information support at start-up phase, they will feel unsupported during the process of starting a business. Sharing knowledge and expertise reduces the ambiguity linked to entrepreneurship activity (McAdam & Marlow, 2006). For example, knowledge and consultancy delivered through business incubators can help individuals build financial skills and transform their ideas into commercial enterprises (Van Rijnsoever, 2020). Such assistance is likely to improve an individual's attitude toward entrepreneurship. Therefore, based on the extant literature, it could be advanced that when nascent entrepreneurs feel they receive

sufficient support from local institutions, they would be inclined to think favourably of entrepreneurial activity, not only because they feel supported but also because they develop a feeling of reciprocity toward such institutions. Accordingly, we propose the following hypothesis:

*H1a. Positive perceptions of public support are associated with individuals' positive attitudes toward entrepreneurship.*

### *2.1.2. Perceived public support and attitude towards perceived risk*

Favourable public policies can affect individual attitude to business risk. According to risk compensation theory (Hedlund, 2000), measures which alleviate the possible negative outcome of a risky behaviour can lead to increased risk taking. Evidence suggests that people take more risks in the presence of measures that increase their safety. Bike riders, for example, tend to increase their speed when using helmets (Phillips, Fyhri, & Sagberg, 2011) and backcountry skiers using avalanche airbags are more likely to ski steeper slopes where the avalanche risk is higher (Haegeli, Rupf, & Karlen, 2018).

Similar findings have been found in a business context where perceptions of a higher supply chain resilience increases the chance of trying new, more risky suppliers (Mena, Melnyk, Baghersad, & Zobel, 2019), and decreases the share of geographically close and reliable suppliers and the safety stocks (Duhadway, Carnovale, & Kannan, 2018). Following this logic of risk compensation theory, we argue that under public policies which eliminates some of the adverse effects of entrepreneurial failure, individuals are more likely to embrace risks. This notion receives some support from earlier entrepreneurship studies. Nascent entrepreneurs perceiving lower market risks are more likely to continue with their start-up efforts (van Gelderen, Thurik, & Bosma, 2005). According to Zahra and Wright (2011), public policies, and in particular legal regulations, can reduce risk perceptions associated with new firm protection, and in this way influence the supply of entrepreneurship. In a similar

vein, Troilo (2011) suggests that more high growth-aspiring entrepreneurs start their businesses when the state tackles risks related to property rights or contract enforcement.

Considering the multifaceted nature of public aid, perceived financial support through the availability of credits and loans is believed to foster risk-taking attitudes. It is argued that, in theory, access to financial resources can stimulate risk taking (Wiklund & Shepherd, 2005). On an organizational level, availability of financial resources has been found to contribute to performance and entrepreneurial orientation (Filser, Eggers, Kraus, & Málovics, 2014; Zampetakis, Vekini, & Moustakis, 2011) of which risk-taking is one dimension. A recent study in China demonstrates that mobile payment enhances the opportunity to obtain formal lending (such as micro-loans), which in turn changes individuals' attitudes toward risk (Yi et al, 2019). Likewise, it was also found that experience helps entrepreneurs develop relevant and accurate information that will increase their risk-taking intensity (Wang & Poutziouris, 2010). Thus, obtaining access to external knowledge and information pools can also create more positive perceptions of business risks.

Summing up our argument, we expect that individuals who view financial and non-financial public policies as supportive for entrepreneurs will exhibit more favourable attitudes towards new venture or business-related risks.

*H1b. Positive perceptions of public support are associated with individuals' attitudes towards perceived (business) risk.*

### *2.1.3. Perceived public support and entrepreneurial self-efficacy*

According to Bandura (2006) people are neither fully autonomous agents nor fully determined by their environment. Instead, their actions are a result of interplay of intrapersonal, behavioural and environmental factors. Thus, while society can affect entrepreneurial behaviours by creating a supportive environment, it is ultimately up to how each individual react to this support through self-reflection and self-efficacy beliefs. As a

result, entrepreneurship can become a viable career option for people who perceive favourable conditions for this kind of career, not only in terms of market opportunities but also supportive policies. Based on this reasoning we argue that individuals who perceive public policies as supportive for entrepreneurship may develop entrepreneurial self-efficacy beliefs.

The relationship between support received from the society and entrepreneurial self-efficacy has been verified empirically. Access to business knowledge (Puni, Mohammed, & Asamoah, 2018; Memon, Soomro, & Shah, 2019) and business process knowledge (Chowdhury et al., 2019) was found to be positively related with entrepreneurial self-efficacy. Also, access to (or lack of) financial funds (Hoque, Awang, Muda, & Salleh, 2018) including microfinance (Newman, Schwarz & Borgia, 2014), bank loans and venture capital (Tang, 2008) was found to affect the level of entrepreneurial self-efficacy. Likewise, awareness of entrepreneurial support systems (Liñán et al., 2013), positive perceptions of regulatory environment (Urban, 2013) and the presence of informal institutional support (Kazumi & Kawai, 2017) were also linked with entrepreneurial self-efficacy and perceived behavioural control. Lastly, educational support was associated with student entrepreneurial self-efficacy (Saeed et al. 2015). To conclude, we expect that students who perceive greater access to informational support along with access to services and financing opportunities will have higher entrepreneurial self-efficacy. We thus hypothesise that:

*H1c. Positive perceptions of public support are associated with entrepreneurial self-efficacy*

## *2.2. Attitudes towards entrepreneurship and entrepreneurial intentions.*

In line with Ajzen's (1991) theory of planned behaviour, individuals' perceptions of entrepreneurship activities and their expected outcomes should predict their intention to venture into new business creation. Attitudes towards entrepreneurship reflect the degree to which a person has a favourable or unfavourable evaluation of target behaviour (Ajzen, 1991).

Hence, they are reflective of peoples' feelings about the potential entrepreneurial experience (Zhang & Cain, 2017). Kruger et al. (2000) explain that when an individual's perception of the attractiveness of starting a business increases, their entrepreneurial intention also increases.

In the extant empirical literature, such a link has been widely confirmed, and in various contexts (Esfendiar et al., 2019; Karimi, Biemans, Lans, Chizari, & Mulder, 2018; Moriano et al., 2012; Munir, Jianfeng, & Ramzan, 2019; Nowiński et al., 2019; Zhang, Wang, & Owen, 2015). For instance, Moriano et al.'s (2012) study recognised attitudes towards entrepreneurship as the strongest driver of entrepreneurial intention in all of the six countries under study, namely: Germany, India, Iran, Poland, Spain, and the Netherlands. In Iran, Karimi et al. (2016) and Esfendiar et al. (2019) reported a positive link between attitudes toward entrepreneurship and students' entrepreneurial intention. Similarly, Nowiński et al. (2019) found that attitude to entrepreneurship is a key predictor of entrepreneurial intentions in the Czech Republic, Hungary, Poland and Slovakia. Lastly, when comparing Chinese and Pakistani students, Munir et al. (2019) noted a positive influence of attitudes on entrepreneurial intentions. Therefore, this study hypothesises that:

*H2. Favourable attitudes toward entrepreneurship are associated with university students' entrepreneurial intention.*

### *2.3. Entrepreneurial self-efficacy and entrepreneurial intentions*

Individuals' self-efficacy is recognised as an important antecedent of intentions (Schmutzler, Andonova & Diaz-Serrano, 2018). By definition, entrepreneurial self-efficacy is a motivational construct, which refers to people's belief in being able to successfully launch a business venture (Bellò, Mattana, & Loi, 2018; McGee, Peterson, Mueller, & Sequeira, 2009). Thus, self-efficacy refers to individuals' judgments of their skills as opposed to actual skills (Kickul, Gundry, Barbosa, & Whitcanack, 2009). In line with the social cognitive theory,

there is a link between self-perceptions of personal skills in performing a given task and entrepreneurship activity (Bandura, 1977). Here, it is argued that the more individuals believe in their ability to be a successful entrepreneur, the more likely they are to embark on the entrepreneurial journey (Fuller, Liu, Bajaba, Marler, & Pratt, 2018). Entrepreneurial self-efficacy provides potential entrepreneurs the confidence needed to accomplish different and sometimes unexpected tasks characterised by high uncertainty (Baum & Locke, 2004). Such confidence would also increase the persistence and effort one can exert. By contrast, a low level of self-efficacy would lead individuals to avoid facing fears or building competencies (McGee & Peterson, 2019).

Empirically, the positive influence of entrepreneurial self-efficacy has been well established in a range of contexts (e.g. Bellò et al., 2018; Esfandiar, Sharifi-Tehrani, Pratt, & Altinay, 2019; Munir et al., 2019; Nowiński et al., 2019; Pérez-López, González-López, & Rodríguez-Ariza, 2019) and is now considered as an established link (Schmutzler et al., 2018). For instance, Esfandiar et al. (2019) confirmed the positive influence of self-efficacy on entrepreneurial goal intention in the case of Iranian students. Likewise, Munir et al. (2019) found that both Chinese and Pakistani students' entrepreneurial intentions are affected by perceived behavioural control (akin to self-efficacy). Therefore, the second hypothesis of this study advances that:

*H3. Entrepreneurial self-efficacy is associated with university students' entrepreneurial intention.*

#### *2.4. Attitude to risk and entrepreneurial intentions*

It is argued that entrepreneurship is risky (Hall and Woodward, 2010). Consequently, it is also widely assumed that entrepreneurs must be less risk averse than non-entrepreneurs. When career choice is framed as utility maximizing action, individuals who are less risk averse, can be expected to maximize their utility function by moving from employment to

entrepreneurship (Douglas & Shepherd, 2000). In this regard, scholars indicated that business founders have higher risk tolerance than small business managers (Begley and Boyd, 1987) and that low risk aversion is positively related to the choice of entrepreneurship as a career (Caliendo, Fossen, & Kritikos, 2009; Cramer, Hartog, Jonker, & Van Praag, 2002; Dawson & Henley, 2015; Douglas & Shepherd, 2002). The theory of planned behaviour (Ajzen, 1991) argues that entrepreneurial intentions must precede entry into entrepreneurship. Such intentions should also be associated with positive attitude to risk. Here, positive risk attitude reflects abilities to cope and successfully adapt to uncertain circumstances (Ciappei, & Zampi, 2019). Indeed, the “risk attitude – entrepreneurial intention” nexus has received support, especially among university students (Bell, 2019; Gurel, Altinay, & Daniele, 2010; Laudano, Zollo, Ciappei, & Zampi, 2019; Mahajan & Gupta, 2017; Zhang et al., 2015). For example, in the UK, Bell (2019) posit that risk attitude affects students’ entrepreneurial intention significantly across various faculties, while in India, Mahajan and Gupta (2017) reported that students with high entrepreneurial intentions exhibited high levels of risk-taking ability. Likewise, Laudano et al. (2019) compared Albanian and Italian female students and concluded that risk-taking propensity is an important antecedent of entrepreneurial behaviour in both countries. That said, other studies find that entrepreneurs and non-entrepreneurs do not differ in respect to their risk propensity or risk attitude (Brockhaus, 1980; Busenitz & Barney, 1997; Palich & Bagby, 1995; Tyszka et al., 2011). Nevertheless, as Busenitz and Barney (1997) indicate, while entrepreneurs may not be risk takers, they may perceive lower risks and more opportunities than non-entrepreneurs in similar settings. Moreover, a number of researchers (Block, Sandner, & Spiegel 2015; Krueger & Dickson, 1993) suggest that risk taking may be context specific, which means that entrepreneurs may take business risks while not being risk takers in general. All this leads us to expect that students with a positive attitude to business risk will be characterized by higher entrepreneurial intentions. Thus:

*H4. Positive attitude to (business) risk is associated with entrepreneurial intentions of university students*

### *2.5. Perceived public support and entrepreneurial intention: the role of mediators.*

The relationship between public policies and entrepreneurial intentions can be mediated by personal level variables (Fayolle and Liñán, 2014). In this respect, it is argued that the effectiveness of entrepreneurial support can be assessed through the theory of planned behaviour (Ajzen, 2005; Malebana, 2017). According to this approach, entrepreneurship is a planned behaviour that is dependent on individuals' intention, which is in turn, associated with people's attitude toward entrepreneurship and their perceived behavioural control (akin to self-efficacy<sup>1</sup>). Hence, this suggests that these two aspects mediate the contextual influence on entrepreneurial behaviour.

This approach has been confirmed by Zapkau et al. (2015) wherein the attitudinal variables of the TPB were found to mediate the relationships between prior entrepreneurial exposure and entrepreneurial intention. According to the authors, uncovering the indirect links will explain inconclusive findings emanating from direct-effects models. They argued “...we encourage future research to employ indirect (intention-based) models in order to reduce the inconclusive findings from direct effects models” (p649). In the same vein, Ajzen (2011) refers to “background factors”, such as exposure to information sources that are more likely to be indirectly associated with intentions, through the TPB determinants.

Linking this approach to the present paper, Malebana (2017: 76) states “*Entrepreneurial support can play a vital role in entrepreneurship development by positively*

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<sup>1</sup> Entrepreneurial self-efficacy reflects an individual's belief in his/her ability to undertake entrepreneurial tasks and roles, whereas a perceived behavioral control construct is comprised of entrepreneurial self-efficacy and controllability (Ajzen, 2002). Commonality between these two constructs is accepted (Krueger, Reilly & Carsrud, 2000) and researchers often draw upon theory of planned behavior to explain the relationship of entrepreneurial self-efficacy with entrepreneurial intentions (Newman, Obschonka, Schwarz, Cohen, & Nielsen, 2019)

*influencing...attitudes towards an entrepreneurial career, and increasing individuals' confidence in their own ability to start a business*". Similarly, Liñán, Nabi, and Krueger (2013: 76) argue for *"the relevance of a greater knowledge of the entrepreneurial environment (e.g., knowing about sources of entrepreneurial knowledge and support assistance)"* in shaping entrepreneurial intention through the theory of planned behaviour elements. Therefore, based on this premise, we conclude that attitudinal variables and entrepreneurial self-efficacy beliefs will act as mediators in the relationship between perceived public support and entrepreneurial intention.

More importantly, to increase model accuracy, we test mediating effect of attitudes toward risk. Douglas and Shepherd (2000) consider risk as one of the important attitudes in evaluating alternative career paths. Fairlie et al. (2012) argue that risk tolerance is the most studied personality characteristic in the context of entrepreneurship, while recent evidence has confirmed the central role of risk attitudes in new venture creation (Yin, Gong, Guo, & Wu, 2019). Hoogendoorn, van der Zwan and Thurik (2019) defined entrepreneurship as involving risk seeking. On the other hand, based on the risk compensation theory (Hedlund, 2000), actions such as public support that could offset the negative outcomes of entrepreneurship activities are likely to make individuals less risk averse. In this regard, Zahra and Wright (2011) posit that institutional support and public policies reduce perceived risks related to new venture creation. Hence, one can argue that risk attitudes in particular are likely to mediate the influence of public support on entrepreneurial behaviour. To conclude, we expect that:

*H5. The association between perceived public support for entrepreneurship and entrepreneurial intention is mediated by (a) attitude to entrepreneurship, (b) attitude to risk, and (c) entrepreneurial self-efficacy.*

## *2.6. Drivers of entrepreneurial intentions across cultures*

Prior studies suggest that low uncertainty avoidance, high individualism and high masculinity are typical for entrepreneurs (McGrath, MacMillan, & Scheinberg, 1992) and can contribute to entrepreneurial activity (Busenitz & Lau, 1996). In a similar vein, Lee and Peterson (2001) argued that nations with specific cultural characteristics will display higher entrepreneurial orientation, including higher risk-taking propensity, leading to higher entrepreneurship activity. Culture was also found to affect the intention-action link, where masculinity acts as a positive moderator and power distance and uncertainty avoidance as a negative one (Bogatyreva et al., 2019). Saeed, Yousafzai and Engelen (2014) confirm the relationship between culture and entrepreneurial orientation, part of which is risk-taking. Thus, the mentioned studies suggest that individuals from a country characterized by higher uncertainty avoidance should display less favourable attitudes to risk and lower entrepreneurial intentions. Additionally, the level of individualism and masculinity should contribute to entrepreneurial intentions. It is less clear if cultural traits should affect relationships in the studied model. The results of Liñán and Chen (2009), who tested the theory of planned behaviour model on Spanish and Taiwanese students, suggest that personal attitudes towards entrepreneurship would exert a higher influence on entrepreneurial intentions in a more individualistic society. In turn, the same research suggests that the relationship between entrepreneurial self-efficacy and entrepreneurial intentions should be stronger in the collectivistic than in the individualistic society. Similar implications stem from research by Wennberg, Pathak and Autio (2013), who found that self-efficacy contributes to greater entry into entrepreneurial activity under higher institutional collectivism settings. The same study suggests that the effects of fear of failure are less negative under higher institutional collectivism settings.

In the present study, we argue that cultural characteristics of Polish and US nationals differ in some respects when measured according to the most common approach with

Hofstede indices ([www.geert-hofstede.com](http://www.geert-hofstede.com)). Polish nationals are characterized overall as having medium individualism as compared to the high level displayed by US nationals (60 for Poland and 91 for the US). While masculinity is at a very similar level, Poland scores much higher on uncertainty avoidance than the US (93 versus 46). Considering prior arguments and these differences in cultural characteristics, one could expect implications for the proposed research model. For example, the impact of entrepreneurial self-efficacy on entrepreneurial intentions would be stronger for Poland, which is a relatively more collectivistic society than the US, while the risk attitude and personal attitude to entrepreneurship would contribute to entrepreneurial intentions more in the case of the US respondents. These arguments lead to the following hypothesis:

*H6. (a) Personal attitude to entrepreneurship and (b) attitude to risk are more strongly associated with entrepreneurial intentions in the case of the US, as compared to Polish students, while (c) entrepreneurial self-efficacy is more strongly associated with the entrepreneurial intentions of Polish as compared to US students.*

The above arguments can be summarized in the following figure (Figure 1). Apart from the hypotheses derived above, Figure 1 includes several control variables such as: gender, country, age of the student, employment experience and presence of the entrepreneur in the family.

Figure 1 around here

### **3. Method**

#### *3.1. Data collection and sample*

The study is based on a survey conducted among university students in Poland and the US. University students are considered as an appropriate target for the study due to the increasing interest in understanding the peculiarities of students' entrepreneurship activity (Neneh, 2019). The survey was conducted from 2014 to 2016 at several universities spread across three locations: two in Poland and one in the US. It was administered in a paper form in the case of Polish students and in an electronic form in the case of American students. Earlier studies (Dodou & De Winter, 2014; Gnambs & Kaspar, 2015) including studies on entrepreneurial intentions (Nowiński et al., 2019) showed that both modes of data collection can yield data of comparable quality (this is confirmed in Section 4.3).

A convenience sampling was used. While this approach has its limitations concerning generalisability of the results, it is nonetheless very common in entrepreneurship (Ahl, 2006; Coviello & Jones, 2004) as well as career studies (Douglas & Shepherd, 2002; Santos, Ferreira & Gonçalves, 2014; Urbanaviciute, Pociute, Kairys & Liniauskaite, 2016) including studies on career choices using student samples (Jin, Watkins, & Yuen, 2009; Pérez-López et al., 2019; Wilson et al., 2007). That said, we have undertaken efforts to increase the sample size to increase the generalisability of the results.

The sample consists of 1414 responses, of which 360 were obtained in the US and the remaining ones in Poland. Only students personally invited by their instructors could participate in the survey. The majority of respondents (over 55%) majored in business and economics, with the remaining representing humanities (7.6%), social sciences (9.1%), science (3.7%), engineering (9.8%) and medical studies (10.7%). The majority of respondents (almost 69%) were aged between 20 and 23, with relatively few (7.7%) aged below 20, and the remaining were aged 24-25 (10.1%) or above (12.3%). 65% of the respondents were female, which is above the national average for the US (57%) (US Department of Education) or Poland (59%) (Eurostat). This discrepancy can be attributed to a relatively low share of

students majoring in engineering and a higher share of the fields of study where women tend to dominate. In terms of education level, 75% of the respondents were undergraduate students, 21.7% were graduate and 3.3% were postgraduate students.

### *3.2. Measures*

Both entrepreneurial intentions and attitude to entrepreneurship were measured using items from Liñán and Chen (2009), with some minor differences in wording due to the use of back-translation from the Polish version of the items (see the Appendix for full items). Entrepreneurial self-efficacy was measured using 7 items derived by Urban (2006) from 22 originally suggested by Chen, Greene and Crick (1998). Two items constitute the construct of Attitude to (business) risk. One of these (C1) was derived from Hisrich, Peters and Shepherd (2002). The other (C2) is, in a way, the reverse of the measure applied in the Eurobarometer (2009) survey whereby "one should not start a business if there is a risk it might fail". While this original statement was measured on a 4-point Likert scale, our item was measured on a 7-point scale. This measure is different from the majority of research on risk attitudes which have applied measures of general risk attitude. The decision to focus on risk attitudes related to investment and entrepreneurship activity was driven, among other things, by the arguments of Block et al. (2015: 185) who stated that "one should assess the entrepreneurs' risk attitude in the specific business and entrepreneurship context they face". It was also found that context-specific questions can yield stronger measures (Dohmen et al., 2011).

Perceived support was measured with 3 items. These items reflect the multifaceted nature of perceived public support outlined in Section 2.4. One item capturing financial support was self-developed, based on the main financial services typically provided for entrepreneurs (i.e. loans, credit and public subsidies are offered to potential entrepreneurs at a sufficient level). The other two were used to reflect non-financial support, from which one (H1) was adapted from Lüthje and Franke (2003) and the second was self-developed to reflect the informational

type of support. All items which were measured on a 7-point Likert scale can be found in the Appendix.

### *3.3. Control and bias*

Four control variables were included: gender, exposure to family business, employment and age. Prior research has found a significant relationship between gender and entrepreneurial intentions (Wilson et al., 2007). Additionally, research on role models has tended to find a positive relationship between exposure to entrepreneurship (Laspita, Breugst, Hebllich, & Patzelt, 2012) and entrepreneurial intentions. Earlier studies have also indicated that current employment situation (Gutiérrez, 2019) and age of the respondents (Hatak, Harms, & Fink, 2015) could affect their entrepreneurial intentions. Three of the control variables: gender of the respondent (Gend), involvement of the respondent's family in running a business (FamilyB) and current employment of the respondent (Employ) were dummy variables, while age was measured by means of age groups and thus was an ordinal variable.

A post-hoc test for common method bias was applied following Liang, Saraf, Hu, & Xue (2007) instructions (an approach based on Podsakoff, MacKenzie, Lee and Podsakoff's (2003) technique). Here, a PLS model was created in which a method factor including all items is included. This was done using the WarpPLS 6.0 software (Kock, 2017). According to Liang et al. (2007), when method-based factor loadings are non-significant and the indicators' substantive variances are considerably greater than their method variance, one can argue no major issue of common method bias. In this study, while many of the method-based factor loadings were significant, the difference between the two aforementioned variances was substantially larger (0.73 as opposed to 0.01). Hence, we conclude that common method bias is unlikely to have a serious impact on the results.

## **4. Results**

To test the hypotheses, a regression-based Partial Least Squares Structural Equation Modelling (PLS-SEM) was applied using SmartPLS 3.28 (Ringle, Wende, & Becker, 2015). The choice of a variance-based approach was deemed suitable for two main reasons. First, compared to Covariance-based SEM (CB-SEM), PLS-SEM is able to explain more variance in the dependent variable (Hair et al., 2017). In fact, variance-based PLS-SEM focuses on assessing the total variance in the observed indicators (Sarstedt et al., 2014) by producing latent variable scores that jointly minimise the residuals of the regressions, and hence maximising explanations (Richter et al., 2015). In this regard, Hair et al (2017: 119)<sup>2</sup> posit that " ... *in a direct comparison with CB-SEM the variance explained in the dependent variables is substantially higher [in PLS-SEM]*". Such attribute is relevant to the present study since the focus is on factors driving entrepreneurial intentions. Second, PLS-SEM is particularly suitable when the research involves theory development (Esfendiar et al., 2019; Sarstedt, Ringle, Henseler, & Hair, 2014). The present paper makes an attempt to develop a theoretical approach to assess the effectiveness of perceived public support using a theory of planned behaviour approach.

#### *4.1. Measurement model*

Reliability of the latent constructs was measured using Cronbach's Alpha and Composite Reliability. We measure convergent validity with Average Variance extracted and constructs loadings (available upon request). The measures achieved satisfactory levels, as shown in the next table (See Table 1). The Appendix depicts the descriptive statistics for each variable.

Table 1 around here

For discriminant validity, we followed the Fornell-Larcker criterion (1981). We compared square roots of AVE with correlations against the remaining constructs. The criterion has

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<sup>2</sup> For a full discussion on this, please refer to the article by Hair et al. (2017).

been met with square roots of AVE greater than the remaining correlations (see Table 2 showing square roots of AVE and constructs' correlations).

Table 2 around here

Lastly, for collinearity issues, we assessed all inner Variance Inflation Factor VIF values. These were below the cut-off point of 5, indicating no multicollinearity problems.

#### *4.2. Results: structural model*

Having validated the measurement model, we assessed the structural model (see Figure 2). Prior to this, the model's indices were inspected. The Standardised Root Mean Square Residual (SRMR), which captures the root mean square discrepancy between the observed correlations and the model-implied correlations (Hair et al., 2017), amounted to 0.05, which is less than the recommended threshold of 0.08 suggested by Hu and Bentler (1998). As for the Normed Fit Index (NFI), the closer to 1, the better the fit, with values above 0.9 representing a good fit. In this study, the value of NFI was 0.85, which is close to 0.9. Despite this, it is worth noting that PLS-SEM mainly focuses on prediction as opposed to fit. Hence, Hair et al. (2017) recommends focusing more on predictive relevance, including  $R^2$  values and significance of path coefficients.

Figure 2 around Here

Our analysis yields support to the majority of our hypotheses. We find a significant association of perceived public support with attitude to entrepreneurship, attitude to risk and entrepreneurial self-efficacy. We thus confirm hypotheses 1a, 1b and 1c. Furthermore, we find that not only personal attitude to entrepreneurship and entrepreneurial self-efficacy but also attitude to risk are significantly associated with entrepreneurial intentions, confirming hypotheses 2, 3 and 4. Ultimately, we find that positive perceptions of public support are related to higher entrepreneurial intentions, and this relationship is fully mediated by personal

attitude to entrepreneurship, attitude to risk and entrepreneurial self-efficacy ( $\beta_{\text{indirect}}=0.31^{***}$ ;  $\beta_{\text{direct}}=0.01$ ). More precisely, the results revealed that the full mediation takes place mostly via attitude toward entrepreneurship ( $\beta=0.21^{***}$ ), followed by attitudes to risk ( $\beta=0.06^{***}$ ) and lastly via self-efficacy ( $\beta=0.03^{***}$ ). Thus we confirm hypotheses 5a, 5b and 5c. Full results are presented in Table 3. In terms of explained variances, perceived public support explained 10% of general attitudes, 12% of attitudes to risk and 15.3% of entrepreneurial self-efficacy. Overall, the full model explained 70% of entrepreneurial intention.

Out of four control variables, three affect entrepreneurial intentions in a statistically significant way. Male students tend to develop greater intentions than female students, younger students demonstrate greater intentions compared to older ones, and current employment negatively affects entrepreneurial intentions.

Table 3 around Here

#### 4.3. Country comparison

To assess for differences across the two countries under investigation, namely Poland and the US, a multi-group analysis (MGA) needs to be conducted. The purpose of an MGA is to assess whether the differences (if any) across the two countries are significant. A PLS-MGA approach proposed by Henseler, Ringle, and Sinkovics (2009) was used. However, prior to the comparison, measurement variance between the two samples needs to be established. In so doing, a MICOM approach was adopted here, allowing both configural invariance and compositional invariance to be checked (Henseler, Ringle, & Sarstedt, 2016). The former is confirmed when structural models and algorithm settings are equal for the two samples, which is the case in this study. As for the compositional invariance, a permutation procedure with a

minimum of 1000 permutations and a 5% significance level would help address the invariance. Following this, a comparison was made of the original score correlations  $c$  against the empirical distribution of the score correlations obtained through the permutation process ( $c_u$ ) to see whether  $c$  exceeds the 5% quantile of  $c_u$ . If this is the case, then a compositional invariance can be confirmed (Schlängel & Sarstedt, 2016). Table 4 confirms partial measurement invariance for all but one variable (attitude to entrepreneurship). This should not have a major impact on the validity of the multi-group analysis.

Table 4 around here

Table 5 shows the differences in paths between Poland and the US. Here, p-values below 0.05 or above 0.95 suggest significant differences<sup>3</sup>. As can be seen, two relationships differ significantly between Poland and the US. First, age has a significant negative impact on entrepreneurial intention in Poland, while no influence was recorded in the US. Second, attitude to risk has a significantly greater influence on entrepreneurial intentions in the US as opposed to Poland. Hence, H6b is confirmed, while no evidence to confirm H6a and H6c is noted

Table 5 around here

## 5. Discussion

In this study, we provide support for the suggestion of Arenius and Minniti (2005) that subjective perceptions of the quality of entrepreneurship-oriented public policies can be useful when assessing the role of public support. We show that the positive link between perceived public support and entrepreneurial intention is mediated by the people's attitudes and entrepreneurial self-efficacy. This would reconcile the conflicting findings obtained so far on

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<sup>3</sup> Please note that “*this method is a non-parametric significance test for the difference of group-specific results that builds on PLS-SEM bootstrapping results. A result is significant at the 5% probability of error level, if the p-value is smaller than 0.05 or larger than 0.95 for a certain difference of group-specific path coefficients. The PLS-MGA method (Henseler et al., 2009)*” (Smartpls.com)

the role of public policy in improving entrepreneurship activity. It will also bear important theoretical and practical implications.

### *5.1. Public support, students' attitudes and entrepreneurial self-efficacy*

First, the positive relationship between perceived public support and personal attitudes towards entrepreneurship suggests that the organisational support theory (Rhoades & Eisenberger, 2002) could be extended into the public domain, reflecting a reciprocity between individuals considering their career options and the society that provides support to undertake entrepreneurial activity. In other words, when people perceive they are receiving support, a sense to reciprocate in attitudinal ways emerges (Zampetakis et al., 2009). This is different from viewing the influence of the society as stemming from the approval by close relations, as in the case of subjective norms.

Second, positive perceptions of public policies hold a positive relationship with entrepreneurial self-efficacy, which is in line with our expectations and earlier studies on related phenomena (Li et al., 2019; Newman et al., 2014). As showed by Turner and Lapan (2002), career self-efficacy depends on the support received by individuals, and while their study concerns family support, we show that support from the society at large, as represented by public policies, can yield analogous results. For example, our findings corroborate with Tang (2008) who show that financial support from local funding institutions such as banks improves individuals' perceived desirability and feasibility in terms of starting their own business.

Lastly, the positive link between public support perceptions and attitudes to business and entrepreneurship risk suggests that such risks are perceived more positively when individuals have access to external public resources, which is consistent with Mishra, Barclay and Sparks (2016). These findings can be interpreted in light of the risk compensation theory (Hedlund,

2000; Phillips, Fyhri, & Sagberg, 2011) which suggests that individuals can increase their risk taking if some external measures (e.g. public support) can decrease risk exposure. Here, past evidence stipulated that access to financial resources and micro-loans fosters risk taking (Wiklund & Shepherd, 2005; Yin et al., 2019). Moreover, the possession of accurate and relevant information is likely to increase risk-taking intensity (Wang & Poutziouris, 2010).

### *5.2. Students' attitudes, entrepreneurial self-efficacy and entrepreneurial intention*

The overwhelming support for H4 linking attitude to business and entrepreneurship risk with entrepreneurial intentions provides support for previous suggestions that attitude to risk should be considered in the specific context of entrepreneurial actions (Block et al., 2015; Krueger & Dickson, 1993). In addition, we demonstrate that context specific risk attitudes should not be regarded as purely congenital, but also dependant on the perceptions of the external environment and the societal support within. The obtained results highlight the relationship between integrated entrepreneurship policies and entrepreneurial intentions. These policies should concurrently support individuals through education-related measures, as these enhance entrepreneurial self-efficacy (Nowiński et al., 2019), and create supportive entrepreneurial policies and ecosystems, since these would affect attitudes towards entrepreneurship and related risks.

In this study, we also outline the link between risk attitudes and entrepreneurial intentions. Previous research displayed substantial ambiguity in respect to the impact of risk attitudes on entrepreneurial intentions. While several studies supported this link (Bacq et al., 2017; Bell, 2019; Caliendo et al., 2009; Dawson & Henley, 2015; Laudano et al., 2019; Mahajan & Gupta, 2017), others proved the opposite (Busenitz & Barney, 1997; Palich & Bagby, 1995; Tyszka et al., 2011). We believe that the answer to these mixed results lies in the way in which risk attitudes are measured, i.e. capturing business risks as opposed to general risks.

This provides support for recent suggestions that "the entrepreneur's risk attitude must be viewed in the specific decision situations with which he or she is faced" (Block et al., 2015: 184).

Lastly, cultural characteristics play a role in determining how entrepreneurial intentions are shaped. This cultural specificity does not, however, refer to basic TPB variables and linkages with entrepreneurial intentions but to risk attitudes. The stronger link between risk attitudes and intentions among US students suggests that individuals demonstrating lower uncertainty avoidance might be more affected by risk attitudes. This is in line with evidence suggesting that individuals from high uncertainty avoidance cultures tend to be less entrepreneurial (Swierczek & Ha, 2003). It also coincides with evidence suggesting that cross-cultural differences have an impact on individuals' risk attitude (Bontempo, Bottom, & Weber, 1997). Future research on samples of individuals from low uncertainty-avoiding societies, such as the Chinese, and high uncertainty-avoiding, such as the Japanese, could verify these suggestions. Additionally, apart from looking at the cultural context through Hofstede dimensions, future studies could apply other measures of cultural context, as well as consider other contextual differences related to macroeconomic developments (Malmendier & Nagel, 2011), legal systems or religion (Dohmen, Falk, Huffman, & Sunde, 2012).

## **6. Study limitations**

In this study, the self-report design of the survey and the cross-sectional nature of the data raise a number of limitations. First, given that the same student self-reports all variables of the study, social desirability, consistency motives and leniency biases amongst others are likely to create issues of common method variance, which would in turn inflate the relationships. To avoid this, it is recommended that more objective measures are employed. On the other hand, we believe that the magnitude of this problem was decreased by the post-hoc tests we conducted to assess common method bias. This being said, in relation to our core

variable “perceived public support”, the focus was intentionally on the perceived support as opposed to the actual support.

Second, the cross-sectional nature of the data implies that the relationships identified in this paper are patterns of association rather than causal links. Following Cadogan, Paul, Salminen, Puumalainen and Sundqvist’s (2001) pragmatic view, the associations uncovered here are interpreted as causal relationships primarily on the basis of the theoretical logic underpinning these links. However, such causal interpretations must be taken with caution and should only be considered tentative. Furthermore, we do not disregard alternative causal directions, which could also explain entrepreneurial behaviour. For this reason, we join Newman et al.’s. (2014) call for longitudinal studies to confirm the causal nature of the relationships outlined in this study. We do, however, anticipate that given the financial and logistical requirements of longitudinal studies, these will remain rare (Obschonka, Silbereisen, & Schmitt-Rodermund, 2010).

## **7. Conclusions**

The purpose of this research was to examine the mechanism underlying the relationship between perceived public support and students’ entrepreneurial intentions in two distinct contexts, namely Poland and the U.S. We concluded that positive perceptions of entrepreneurship public support boost entrepreneurial intentions of university students through enhancing their personal attitude toward entrepreneurship, entrepreneurial self-efficacy and risk attitudes. We explained those links through the reciprocity lenses whereby individuals exhibit favourable cognition towards entrepreneurship to reciprocate the supportive actions of the society. It was also found that attitude to risk has a greater impact on entrepreneurial intentions in the US compared to Poland. We believe that this research will

reconcile the inconclusive extant literature looking at the perceived public support-entrepreneurial intentions nexus.

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**Table 1**  
**Measurement Model Indicators for Reflective Constructs**

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
EIs	0.951	0.961	0.806
Att	0.910	0.933	0.738
AtRisk	0.670	0.855	0.748
ESE	0.924	0.939	0.690
PercSupp	0.738	0.848	0.651

*EI= Entrepreneurial Intentions; AtR=Attitudes to Risk; ESE=Entrepreneurial Self-Efficacy; PercSupport=Perceived Support*

**Table 2**  
**Discriminant validity**

	Age	AtR	Attitude	EIs	ESE	Employ	Family Business	Gender	PercSupport
Age	1.000								
AtR	0.006	0.865							
Attitude	0.015	0.578	0.859						
EIs	-0.042	0.624	0.809	0.898					
ESE	0.016	0.493	0.464	0.491	0.831				
Employ	-0.323	-0.038	-0.062	-0.076	-0.105	1.000			
Family Business	-0.008	-0.142	-0.124	-0.150	-0.100	0.064	1.000		
Gender	-0.054	-0.227	-0.123	-0.198	-0.118	0.032	0.074	1.000	
PercSupport	0.036	0.351	0.331	0.336	0.391	-0.084	-0.112	-0.074	0.807

Values on diagonal represent the square root of the AVE

*EI= Entrepreneurial Intentions; AtR=Attitudes to Risk; ESE=Entrepreneurial Self-Efficacy; PercSupport=Perceived Support; Employ= respondent's employment status*

**Table 3**  
**Indirect Effect Results**

	Coefficient	Standard Deviation	T Statistics	P Values
PercSupport -> AtR -> EIs	0.065	0.009	7.297	0.000
PercSupport -> Attitude -> EIs	0.214	0.017	12.769	0.000
PercSupport -> ESE -> EIs	0.031	0.007	4.294	0.000

*EI= Entrepreneurial Intentions; AtR=Attitudes to Risk; ESE=Entrepreneurial Self-Efficacy; PercSupport=Perceived Support*

**Table 4**  
**Compositional Invariance**

	$c$	5.0% quantile of $c_u$	Permutation p-Values
Age	1.000	1.000	0.346
AtR	1.000	0.998	0.451
Attitude	0.999	1.000	/
EIs	1.000	1.000	0.476
ESE	1.000	0.999	0.334
Employ	1.000	1.000	0.350
Family Business	1.000	1.000	0.395
Gender	1.000	1.000	0.297
PercSupport	1.000	0.995	0.949

*EI= Entrepreneurial Intentions; AtR=Attitudes to Risk; ESE=Entrepreneurial Self-Efficacy; PercSupport=Perceived Support; Employ= respondent's employment status*

**Table 5**  
**Differences in Path Coefficients**

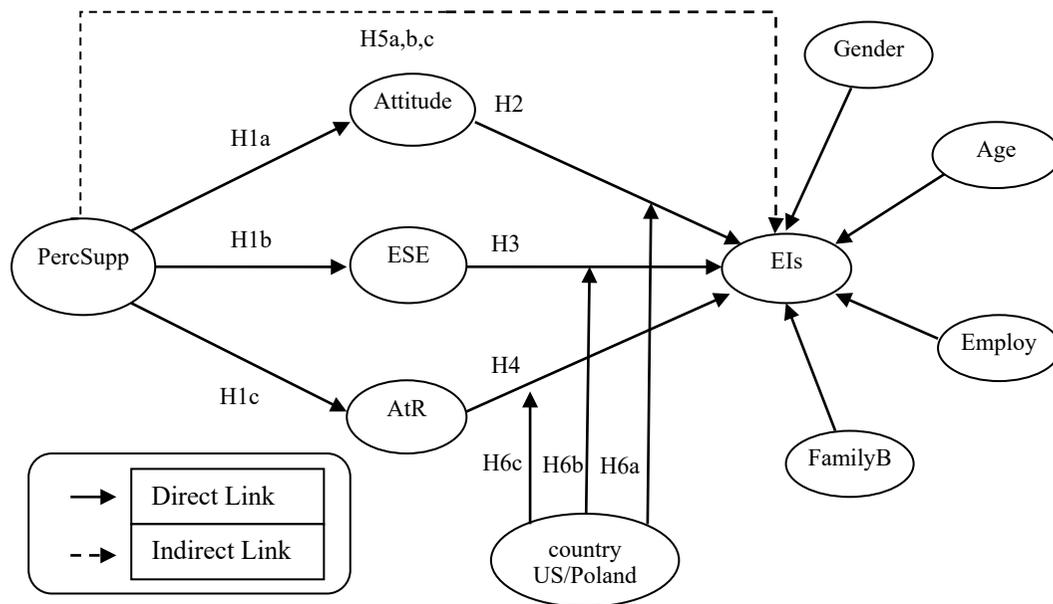
	Path Coefficients of Polish Respondents	Path Coefficients of US Respondents	Path Coefficients-diff (   Poland – US  )	p-Value(Poland vs US)
Age -> EIs	-0.083***	-0.015	0.068	0.980
AtR -> EIs	0.135***	0.274***	0.139	0.998
Attitude -> EIs	0.670***	0.607***	0.062	0.078
ESE -> EIs	0.079***	0.104**	0.024	0.736
Employ -> EIs	-0.041*	-0.028	0.013	0.654
Family Business -> EIs	-0.040*	0.000	0.040	0.888
Gender -> EIs	-0.074***	-0.044	0.030	0.809
PercSupport -> AtR	0.324***	0.332***	0.008	0.557
PercSupport -> Attitude	0.328***	0.330***	0.002	0.519
PercSupport -> EIs	0.017	-0.027	0.044	0.102
PercSupport -> ESE	0.399***	0.385***	0.014	0.400
<i>Indirect effect</i>				
PercSupport -> EIs	0.295***	0.331***	0.036	0.781

*EIs= Entrepreneurial Intentions; AtR=Attitudes to Risk; ESE=Entrepreneurial Self-Efficacy; PercSupport=Perceived Support; Employ=respondent's employment status*  
*\*Significant at 5% ;\*\* Significant at 1%; \*\*\*Significant at 0.1%*

**Appendix: Loadings, Means and Standard Deviations****Items and Variables**

		<b>Mean</b>	<b>Standard Deviation</b>	<b>Loadings</b>
<b>Entrepreneurial Intentions</b>				
A1	I am ready to do anything to be an entrepreneur.	4.035	1.642	0.827
A2	My professional goal is to be an entrepreneur.	3.771	1.75	0.874
A3	I will make every effort to start and run my own business.	4.118	1.779	0.931
A4	I am determined to create a business venture in the future.	4.168	1.782	0.923
A5	I have very serious thoughts in starting a business.	4.118	1.823	0.930
A6	I've got the intention to start a business one day.	4.373	1.787	0.897
<b>Personal Attitude to Entrepreneurship</b>				
B1	Being an entrepreneur implies more advantages than disadvantages to me.	4.643	1.493	0.745
B2	A career as an entrepreneur is totally attractive to me.	4.461	1.562	0.900
B3	If I had the opportunity and resources, I would like to start a business.	5.276	1.618	0.843
B4	Amongst various options, I would rather be an entrepreneur.	4.147	1.693	0.900
B5	Being an entrepreneur would give me great satisfaction.	4.687	1.666	0.897
<b>Attitude to Risk</b>				
C1	I can take risks with my money, such as investing in stocks	3.728	1.72	0.819
C2	It is very risky to create a firm, but I don't mind the risk.	3.988	1.546	0.908
<b>Entrepreneurial Self-Efficacy</b>				
F1	... set and meet market share goals (marketing ESE)	4.286	1.417	0.868
F2	... establish positioning in market (marketing ESE)	4.271	1.414	0.884
F3	... expand business (marketing ESE)	4.656	1.44	0.894
F4	... engage in new venturing and new ideas (innovation ESE)	4.85	1.427	0.867
F5	... engage in new markets/products/technologies (innovation ESE)	4.554	1.491	0.845
F6	... perform financial analysis (financial ESE)	4.382	1.63	0.771
F7	... develop financial systems and internal controls (financial ESE)	4.205	1.726	0.661
<b>Perceived Public Support</b>				
H1	Qualified consultants and service support for new businesses is made available for me to access.	3.817	1.442	0.848
H2	Loans, credits and public subsidies are offered to potential entrepreneurs at the sufficient level.	3.832	1.47	0.740
H3	I have access to supporting information to start to be an entrepreneur.	4.366	1.618	0.827

**Figure 1**  
**Theoretical model**



*EIs= Entrepreneurial Intentions; AtR=Attitudes to Risk; ESE=Entrepreneurial Self-Efficacy; PercSupport=Perceived Support; FamilyB=involvement of respondent's family in running a business; Employ=respondent's employment status*

**Figure 2**  
**Structural model**

