
A comparative study of cultural influences on intentions to found a new venture in Germany and Poland

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Abstract: This study investigates cultural antecedents of

- motivators
- intentions of new venture-generation.

By using a sophisticated data analysis method – multi-group structural equation modelling – we compare German and Polish MBA students in order to study cultural influences on entrepreneurship. In general, we find some similar, but also contrasting, results through the analyses of three cultural dimensions:

- power distance
- collectivism
- individualism.

Also, results show that in both countries the motivation to start a new venture leads to the intent to start a new venture. This study not only considers different cultural antecedents, but also indirectly analyses the dissimilarities between a developed and a transitional economy.

Keywords: culture; entrepreneurship; structural equation modelling; multi-group comparison; transition countries.

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1 Introduction

Entrepreneurship is regarded as a major driving force for innovation and the wealth of regions and nations. At the very roots it is the people who have to be risk-taking and entrepreneurial. Holt (1997) defines entrepreneurs "as those who start businesses thereby assuming the psychological and financial risks of creating new ventures". Despite the large research on individual traits and values, national culture plays an important role in entrepreneurship (Holt, 1997) as culture affects entrepreneurial outcomes (Hofstede and Bond, 1988; McGrath et al., 1992; Peterson, 1988). Prior studies have shown that uncertainty avoidance, the fear of different barriers, e.g., technological bureaucracy, decreases the individual's intention to start new ventures (Dwyer et al., 2005; Russell, 1997). Still, research has barely investigated the effect of culture on entrepreneurship, in particular, on motivators and their intentions to found a new venture. This is an important omission when envisaging the competition of nations and regions and the impact of entrepreneurship on innovation. To close this gap, this study aims to

explore the effects of national culture on new venture generation. Therefore, a cross-cultural study was undertaken that analyses the impact of distinct cultural values on motivators and intentions to found a new venture.

Drawing on cross-cultural research in the tradition of Hofstede (1980) and Schwartz (1992), who investigated cultural differences, we assume commonalities of cultural dimensions, which have different scores across cultures. This study empirically explores distinct dimensions of culture (power distance, individualism, and collectivism) that can have different scores, and which we assume will affect the intentions of the motivators of new venture generation.

Our cross-cultural comparison is based on a sample of 450 MBA students in Germany and Poland. The results of this cross-national survey are derived from highly developed data analysis: using the multi-group method of structural equation modelling, we are able to measure the multifaceted character of culture and of entrepreneurship. This simultaneous estimating procedure is understood to deliver highly valid results (Arbuckle and Wothke, 2003; Byrne, 2001; Lee and Bruvold, 2003).

From a theoretical point of view, the results of our study contribute to an improved understanding of the cross-cultural differences of entrepreneurship. Furthermore, the results improve the comprehension of challenges in cross-national entrepreneurship collaboration and cross-national entrepreneurship teams. From a practical point of view, these insights can assist the formulation of national and cross-national entrepreneurship programmes.

2 Theory

2.1 Motivators and intentions of entrepreneurship

Sahlman and Stevenson define entrepreneurship as

“a way of managing that involves pursuing opportunity without regard to the resources currently controlled. Entrepreneurs identify opportunities, assemble required resources, implement a practical action plan, and harvest the reward in a timely, flexible way.” (Sahlman and Stevenson, 1992)

Entrepreneurship covers the founding of a new venture by individuals or institutions (Hisrich, 1990). To uncover the effects of the risk-laden endeavour this paper only analyses independent entrepreneurship, where entrepreneurs differ substantively from managers (Hebert and Link, 1989).

We assume that the intentions to found a new venture are many; also, they are associated with time lags, e.g., the strong desire to found a firm, the plan to start a firm shortly or after some more years of professional experience (Shapero and Sokol, 1982; Krueger and Brazeal, 1994).

2.2 Cross-culture and new venture generation

2.2.1 Cultural comparison

The literature indicates that there is some meaningful degree of intra-country commonalities and inter-country differences in culture. Empirical works by Hofstede (1980, 1991), Schwartz (1994), as well as Smith et al. (1996) show that the countries are

clearly separated from each other on national-cultural dimensions. Cultural values do have a significant effect on differences in entrepreneurial behaviour, with some cultures producing more innovation and entrepreneurship than others (Baumol, 1990; Shane, 1995; Shaper and Sokol, 1982).

National culture's multifaceted character was explored in many studies, which tried to develop dimensions for distinguishing different national cultures. Hall and Reed Hall (1990) differentiate between context, space, and time orientation. Trompenaars and Hampden-Turner (2000) developed six culture dimensions:

- universalism vs. particularism
- individualism vs. communitarianism
- specificity vs. diffusion
- achieved status vs. ascribed status
- inner direction vs. outer direction
- sequential time vs. synchronous time.

However, one of the most rigorous and comprehensive frameworks that has been developed in the last two decades is the study by Hofstede (Steenkamp, 2001). In his study, Hofstede (1980) identified four cultural dimensions: power distance, uncertainty avoidance, individualism/collectivism, and masculinity/femininity through research of 116,000 employees of US computer corporate IBM in 50 countries (Deresky, 2000).

The first dimension, power distance, was defined as the degree to which a culture's people are separated by power, authority and prestige. A high power distance points to high acceptance of unequal power distribution. The countries which we are investigating, are Germany (low power distance) and Poland (high power distance). The second dimension is uncertainty avoidance, which refers to people's attitudes towards change, risk, and uncertainty and how the members of society deal with changes and risk, whether they are open to change or feel threatened. Germany and Poland which we explore, score high on uncertainty avoidance. The third cultural dimension, individualism, refers to the tendency of people to concentrate on themselves and neglect the needs of society. Individualistic countries emphasise values such as self-respect, autonomy, and independence. People in collectivistic countries are integrated in strong, small, and closed in-groups, being emotionally dependent on the group. Germany is, according to Hofstede, among the individualistic societies, whereas Poland is collectivistic. The fourth cultural dimension covers the spectrum of masculinity and femininity. High masculinity directs the preference for material life, work, career, associated with values of ambition and toughness. In contrast, femininity displays the feminine value of taking care of other's feelings. Germany and Poland belong to masculine cultures.

Beyond the discussion of Hofstede's cultural dimensions, we have to state that both countries, Poland and Germany, are affected by Christian culture and today have a democratic form of government. Still, cultural values of power distance and individualism show differences. So, a study of these cultures with a common border and strong economic relationships while having different cultural values is of interest when studying entrepreneurship. We assume that differences in cultures lead to different strengths of entrepreneurial intentions.

2.2.2 *Cultural aspects of entrepreneurial intention*

Erez and Early (1993) found dissimilarities of managerial behaviour and entrepreneurship across cultures. Other studies have analysed the effect of culture on the success of new ventures, embedded in different nations (Hofstede et al., 1988; McGrath et al., 1992). While the entrepreneurial environment covers socio-cultural values (Shapiro and Sokol, 1982), researchers analyse the role of values and culture on new venture generation (Weber, 1930). Beyond this research, motives have been researched across cultures (Baker et al., 2005).

Further studies explored the influence of different cultural dimensions (e.g., power distance, individualism and collectivism) on the role of values in entrepreneurship (Busenitz and Lau, 1996; McGrath et al., 1992; Mitchell et al., 2000; Morris et al., 1994; Takyi-Asiedu, 1993). From these studies we learn that power distance, individualism, and collectivism influence new venture generation. Still, the direction of influence of the cultural dimension on motivators and their intentions of new venture generation is unclear. To shed more light on this, we will first discuss the effect of power distance, then that of individualism and collectivism.

McGrath et al. (1992) found entrepreneurship to be associated with high scores of power distance. They also identified that individualism, masculinity, and low scores of uncertainty avoidance increase entrepreneurship. However, numerous other studies indicate that high scores of power distance reduce entrepreneurship (Aiken and Hage, 1971; Burns and Stalker, 1961; Thompson, 1967; Zaltman et al., 1973). We find some similarities to power distance in the study of organisations' character by Burns and Stalker (1961) who suggest that mechanistic organisations are less innovative than organic ones. The equality of prestige, rewards, and social power increases innovation (Burns and Stalker, 1961). Also, Thompson (1967) suggests that discrete power structures create coalitions that support innovation. Another negative effect of power distance on entrepreneurship is the lack of communication between different hierarchical levels (Hofstede, 1980). Free communication in all directions is important for innovative organisations, researched in the USA and Japan (Shane, 1993; Thompson, 1967). Furthermore, power distance is related to the centralisation of power (Hofstede, 1980). Instead, decentralisation promotes innovation (Aldrich, 1979), because it provides opportunities for possible feedback from lower level staff (Hage and Aiken, 1970). Thus, we find different indicators of a negative effect on entrepreneurship through power distance, and in consequence we hypothesise:

H1: High power distance has a negative impact on entrepreneurial motivation.

Peterson (1980) suggests that the greater individualism is the greater an entrepreneur's chances of achieving success are. According to the motivational aspects, entrepreneurs are driven by motives like developing themselves (Huisman, 1985). A study on new venture generation can also be informed by Hofstede's individualism index, which encompasses three attitudes to encourage innovation (Hofstede, 1980).

Importance of freedom, which directs freedom of managers to take actions which they perceive as most worthwhile. This was found to be important for innovations in the USA and Japan (Shane, 1993).

The outward cosmopolitan orientation of society (Hofstede, 1980) is important because contacts with outsiders encourage creativity (Mueller, 1962; Pavitt, 1984; Utterback, 1974).

Autonomy and independence: these foster entrepreneurship and are more common in individualistic societies (Shane, 1992) as individuals with such traits are less in need of the support of others or conformity to the norms of others (Sexton and Bowman, 1985). Hornaday and Aboud (1971) found that in comparison to non-entrepreneurs, entrepreneurs had higher needs for achievement and higher scores for independence, in general. Therefore, we find evidence of the relationship between individualism and entrepreneurship. We hypothesise:

H2: There will be a positive relationship between individualism and the intention to found a new venture.

Still, Tiessen (1997) suggests that both individualism and collectivism are necessary for successful entrepreneurship. Similarly, Morris et al. (1994) discover that midlevel individualism-collectivism leads to greater levels of entrepreneurship. Shane (1992, 1993) analysed data from 33 countries and found that the rate of innovation varies across cultures. Under certain circumstances, such as new ventures pursuing radical innovations or in societies with a high index of collectivism, team founding is more successful and also increases the motivation to found a new venture. Thus, we hypothesise that collectivism and individualism can have positive effects on motivators of new venture generation, depending on contingency effects across national cultures.

H3: Collectivism and individualism will have a positive impact on motivators on entrepreneurship depending on national cultures.

Entrepreneurial personality research considers the effect of motivations related to the decision to start a new business (Korunka et al., 2003; Rauch and Frese, 2000). Individuals who lack entrepreneurial motivation will be less likely to start a new venture. The general proposition that entrepreneurial motivation increases the likelihood of founding a new venture will be tested here. That implies Hypothesis 4.

H4: There will be a positive relationship between motivators and the intention to found a new venture.

3 Method and data

3.1 Sample

This study analyses attitudes toward motivators and intentions to promote a new venture. The hypotheses were empirically tested using data collected from a survey of MBA students. The proposed model was tested on data collected from 450 students in Germany (275) and Poland (175). The entire questionnaire was subjected to double blind translation by bilingual speakers to improve the validity of the measuring instruments (Brislin, 1980).

3.2 Measures

Latent constructs estimated as linear functions of direct measurable variables (Diamantopoulos and Winklhofer, 2001) refer to power distance, individualism, collectivism, entrepreneurial motivators, and intentions to promote a company.

3.2.2 Collectivism

Collectivists relate an individual to an in-group such as family (Fiske, 1992; Hofstede, 1980; Markus and Kitayama, 1991). Collectivists internalise the group's goals and values (Hofstede, 1980; Markus and Kitayama, 1991). The construct of collectivism can be defined by several attributes. To measure collectivistic attributes we used the items, shown in Table 1 and Figure 1.

3.2.3 Individualism

Individualistic people are autonomous and independent from groups. Their personal goals are more important than the goals of their group. To measure individualism, we follow the scale of Triandis et al. (1988, 1990) and Shulfruf et al. (2003) (see Table 1 and Figure 1).

3.2.4 Motivators

Motivators of entrepreneurship deal with the question of what would motivate a person to become an entrepreneur. Many concepts to measure entrepreneurial motivators are possible. We restrict ourselves to the items shown in Table 1 and Figure 1.

3.2.5 Intentions

Entrepreneurial intentions reflect the willingness to start a new venture. We measured this willingness with different questions (see Table 1 and Figure 1).

3.3 Structural equation modelling analysis for cross-cultural comparison

To gain an overview about the data of each country we first deliver a correlation matrix (see Figure 2).

To test our hypotheses and to estimate the proposed model we carried out Structural Equation Modeling (SEM). This method allows us to:

- research the relations among the latent constructs while accounting for the measurement model of the observed indicators
- test the specific hypotheses
- estimate the overall fit of the hypothesised model to the data.

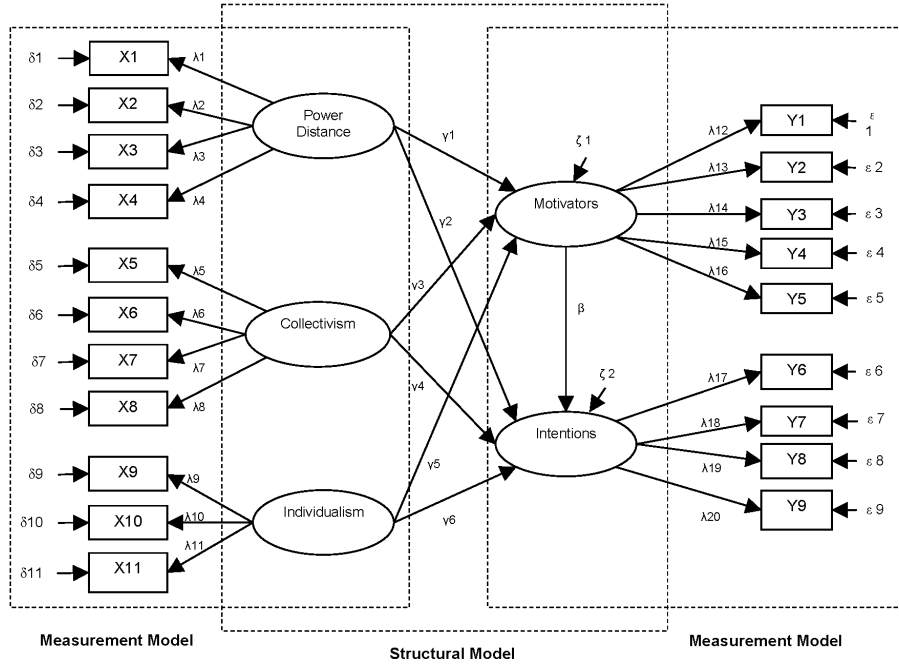
Within SEM, multiple measures of goodness of fit are provided.

3.3.1 Procedure of multi-group comparison with SEM across cultures

This research addresses not only simultaneous estimations of latent constructs by taking the measurement error into consideration, it also includes a comparison of different groups with respect to the national culture. One of most important and yet only partially answered issues in cross-cultural research is establishing construct comparability in different samples (Robert et al., 2000). Thus, the measurement of the different independent constructs (individualism, power-distance, and uncertainty avoidance) and dependent constructs (motivators and intentions of entrepreneurship) has to be

statistically invariant. For multi-group comparisons, the instrument of measurement has to work in the same way (Byrne, 2004).

Figure 2 Structural equation model



Before testing for invariance of the measurement model, it is customary to consider a baseline model that is estimated for each group separately. The baseline model represents a model that best fits the data, according to parsimony and substantial meaningfulness (Byrne, 2004). As the analysis of baseline models involves no constraints between groups, the data can be estimated separately for each group. When testing for invariance across groups, equality constraints are imposed on particular parameters, and therefore the data for all groups must be estimated simultaneously in order to achieve efficient results (Bentler and Chou, 1987). Fixed parameters are constrained equal across groups. Instead, free parameters can take dissimilar values across groups. Nevertheless, the pattern of the fixed or free parameters across groups remains consistent with the baseline model specification.

3.3.2 Baseline models and remarks on the goodness of fit

Baseline models have to be tested for the single-model goodness of fit, for the multi-group goodness of fit, and for invariance. In this section, we discuss measures of the goodness of SEM and give results according to our baseline model. For the structure of the baseline model see Figure 1.

We estimated the models using the Maximum Likelihood (ML) estimation procedure (Byrne, 2001) of AMOS 6. In the following different global goodness of fit measures are discussed and reported (see also Table 2 for values).

The loadings and the associated significance are shown in Table 3.

Table 2 Multiple goodness's of fit measures of the baseline model

<i>Model</i>	X^2	<i>DF</i>	X^2/DF	<i>CFI</i>	<i>RMSEA</i>	<i>NFI</i>
Germany	246.942	161	1.534	0.929	0.042	0.826
Poland	243.488	161	1.512	0.869	0.041	0.710

Table 3 Local goodness's of fit

		<i>Germany</i>					<i>Poland</i>				
		<i>Loadings</i>	<i>P</i>	<i>T-value</i>	α	<i>AVE</i>	<i>Loadings</i>	<i>P</i>	<i>T-value</i>	α	<i>AVE</i>
Power distance	X1	0.715	–	–			0.631	–	–		
	X2	0.523	<0.01	5.619	0.623	0.33	0.594	<0.01	5.111	0.623	0.35
	X3	0.505	<0.01	5.545			0.600	<0.01	5.134		
	X4	0.460	<0.01	5.255			0.516	<0.01	4.730		
Collectivism	X5	0.876	<0.01	3.133			0.313	0.021	2.303		
	X6	0.412	<0.01	3.665	0.491	0.26	0.520	<0.01	2.788	0.491	0.20
	X7	0.325	<0.01	3.298			0.540	<0.01	2.795		
	X8	0.291	–	–			0.359	–	–		
Individualism	X9	0.538	–	–			0.521	–	–		
	X10	0.640	<0.01	5.941	0.686	0.44	0.612	<0.01	3.650	0.686	0.30
	X11	0.588	<0.01	6.672			0.500	<0.01	3.627		
Motivators	Y1	0.368	–	–			0.528	–	–		
	Y2	0.420	<0.01	4.683			0.448	<0.01	4.723		
	Y3	0.871	<0.01	5.992	0.762	0.35	0.859	<0.01	6.912	0.762	0.32
	Y4	0.916	<0.01	6.015			0.847	<0.01	6.886		
	Y5	0.596	<0.01	5.427			0.634	<0.01	5.980		
	Y6	0.965	–	–			0.664	–	–		
Intentions	Y7	0.602	<0.01	9.748	0.707	0.39	0.711	<0.01	5.606	0.707	0.31
	Y8	0.233	<0.01	2.964			0.408	<0.01	4.129		
	Y9	0.691	<0.01	11.122			0.536	<0.01	5.100		

Due to the selection of most comparable indicators, in some cases we achieve less moderate Cronbach's α and composite reliability.

3.3.3 Testing for multi-group invariance

As a first step in testing for invariance of the cultural groups we assess the validity of the structure of the model across the two groups (Byrne, 2004). This test differs from the test of the baseline model. Here, the validity of the structure is tested simultaneously across the two national groups: all parameters are estimated for all groups at the same time. The fit of the simultaneous testing can provide a comparison to the baseline model against which all other models will also be tested. In this simultaneous model all parameters have no equality constraints: they are free items. In contrast to single group analyses this offers a fit-statistic for the overall model fit.

With respect to chi-square statistics and their degrees of freedom that are summarised, the over all chi-square value obtained is to be tested for each group of culture. This multi-group model reflects the fit of the data when no cross-group constrains are imposed.

The chi-square of the two-group unconstrained model is reported in Table 4. The chi-square value of 490.430 with 322 DF provides the baseline value against which the following test for invariance has to be compared. The Comparative Fit Index (CFI) and Root Mean Squared Error Of Approximation (RMSEA) values are 0.909 and 0.029, respectively. This indicates that the hypothesised model of five constructs still represents a good fit across the two cultures.

Table 4 Comparison of unconstrained, fully constrained model fits and best fit model

<i>Model</i>	<i>X²</i>	<i>DF</i>	<i>X²/DF</i>	<i>CFI</i>	<i>RMSEA</i>	<i>NFI</i>
Unconstrained	490.430	322	1.523	0.909	0.029	0.783
Fully constrained	531.748	337	1.578	0.894	0.031	0.765
Best fit model	509.622	334	1.526	0.909	0.029	0.775

The next step is to compare for the equality of the set of parameters of the measurement model. In different cultures it is most likely that a fully constrained model is non-invariant across groups. In AMOS 6.0, different parameters could be defined and measured fixed and free. Constraints are specified by a labelling technique where each parameter is held equal across groups. Unlabelled parameters will be freely estimated, thereby having different values across groups. As we deal with cross-cultural research, where characteristics and values are understood to be somehow different, some parameters will have to be estimated freely. The process of labelling parameters is purely arbitrary (Byrne, 2004).

Before starting the procedure of labelling specific parameters, we first estimated a model completely constrained equally across groups. Therefore, we have to investigate if there is a significant change in the chi-square statistics and their Degrees of Freedom (DF), the CFI, and the RMSEA. Following the suggestion by Robert et al. (2000) we primarily checked the chi-square statistics. Still, all other indices were taken into account. If there the model is significantly worse than the unconstrained model (*t*-values are significant in the comparison of the unconstrained and constrained model), then we have to deal with some non-invariance. Consequently, we have to explore if there is complete non invariance or if there are only some unequal parameters. After the complete procedure of testing and removing each factor and each item related to the factor we finally reached a multi-group model with some parameters fixed and some freely estimated. In this model we strive to fix as many parameters as possible while still achieve multi-group invariance. Table 4 reports the comparison of the chi-square statistics and their DF, the CFI, and the RMSEA between the unconstrained and the last model. X^2 changes from 490.430 to 509.622 ($\Delta X^2 = 18.192$, $\Delta DF = 12$). So we have found invariant models.

Goodness of fit statistics related to this two-group partially constrained model revealed excellent fit to the data. We regard both models as invariant. From the non-significant change and the fulfilment of the conditions, we achieved measurement invariance that allows us to undertake further estimations can be compared across groups.

Nevertheless, as cultures have different values of the constructs (Luthans and Ibrayeva, 2006), non-invariance of the structural weights has to be assumed. The fit of the best fitting model that is invariant to the unconstraint model is good (refer to Table 4).

4 Results

For testing the hypotheses we investigate the path coefficients of the model. Table 5 summarises measures according to the significance of the paths for and across the countries. The first column gives information about the specific paths being measured. The next columns inform about each of the countries' critical ratios and the significance of each path. The critical ratio (known as *t*-value) is the test for the grade of the effect. In general, values ≥ 1.9 are regarded significant at the 5% level. The last two columns give information about the differences of the paths coefficients across the two countries. Levels of $P \leq 0.05$ indicate a significant difference of the path across the countries (significant values are given in cursive writing).

Table 5 Values of the path coefficients of Germany and Poland

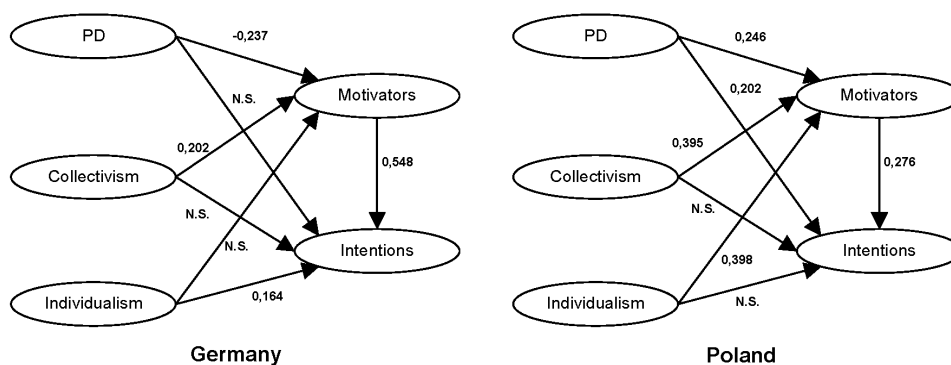
<i>Path</i>	<i>Germany</i>		<i>Poland</i>		<i>Measures of Differences of Path Coefficients across Germany and Poland</i>	
	<i>C.R.</i>	<i>P</i>	<i>C.R.</i>	<i>P</i>	<i>X²</i>	<i>P</i>
Power distance → motivators	-3.076	0.002	2.537	0.011	17.224	0.000
Collectivism → motivators	2.406	0.016	2.670	0.008	0.325	0.569
Individualism → motivators	0.054	0.957	3.193	0.001	10.576	0.001
Power distance → intention	1.436	0.151	1.607	0.108	0.008	0.927
Collectivism → intention	-0.015	0.988	-0.259	0.795	0.029	0.865
Individualism → intention	2.515	0.012	-0.058	0.954	1.695	0.193
Motivators → intention	6.464	<0.001	-1.951	0.051	8.920	0.003

For the discussion of the culture on entrepreneurship data are given in Figure 3. The two figures of each country are estimated on the best fitting model and give information about the direction and the strength of the path coefficients.

- *Power distance on entrepreneurial motivation.* (regarding Hypothesis 1); the 0.246 ($P < 0.05$) value of the path coefficient shows a positive influence of power distance on entrepreneurial motivation in the Polish group. In contrast, the -0.237 ($P < 0.01$) value of the German group indicates a negative relationship between power distance and entrepreneurial motivation. Thus, Hypothesis 1 is confirmed in the German group. Instead, for the Polish group Hypothesis 1 has to be rejected as the direction of the path is opposite to that hypothesised.

- Individualism on intentions to found a new venture.* (regarding Hypothesis 2); the value of the path coefficient of the Polish group was non significant. Hence, Hypothesis 2 cannot be confirmed with the Polish group. In contrast, the 0.164 ($P < 0.05$) value of the German group path coefficient indicates a positive influence of individualism on entrepreneurship. So, Hypothesis 2 can be confirmed, but only for the German group.
- Collectivism and individualism on motivators on new venture generation.* Regarding Hypothesis 3 we again find multifaceted differences across the nations. In the German group the relationship between individualism and entrepreneurial motivators was non-significant. However, the relationship between collectivism and entrepreneurial motivators is positive with a 0.202 ($P < 0.05$) value for Germans. Results for Polish nationals are different. The Polish group 0.395 ($P < 0.05$) illustrates a positive relationship between collectivism and entrepreneurial motivators. The 0.398 ($P < 0.05$) value indicates a positive relationship between individualism and motivators for entrepreneurship. As such, depending on the national culture's background, we find different effects through collectivism and individualism on entrepreneurship. For this reason, Hypothesis 3 assuming collectivism and individualism will have a positive impact on motivators on entrepreneurship depending on national cultures, can be confirmed. On top of the different directions, we gain interesting results in Poland where there is a balanced influence of individualism and collectivism on the motivators of new venture generation. This finding indicates that in some countries individualism and collectivism are different dimensions and not only opposite poles of one single dimension.
- Motivators and intentions of new venture generation.* (regarding Hypothesis 4); both path coefficients, of the Polish group 0.276 ($P < 0.01$) and the German group 0.548 ($P < 0.01$) are positive and significant. From the positive and significant path we find Hypothesis 4, which suggested a positive relationship between motivators and intentions of new venture generation, confirmed. Furthermore, we find that the likelihood of individuals, who are entrepreneurially motivated, to found a business in Germany is higher than in Poland.

Figure 3 Paths coefficients of Germany and Poland



5 Conclusion and implications

The purpose of this paper was to investigate the effects of national culture on new venture generation. We draw on the literature on culture and entrepreneurship which informed us about the different challenges and risks associated with founding a new venture as well as about different decision stages in entrepreneurship. The literature further enhanced the understanding of values on entrepreneurship. In order to explore cultural differences, this study builds upon the culture-classification of Hofstede. Following Triandis (2002) we use only two of Hofstede's four cultural dimensions, namely, power distance and individualism/collectivism. However, we measured individualism and collectivism on two dimensions and further items.

The aim of our study was to investigate the cultural antecedents of new venture generation. Our highly developed multi-group SEM analysis with AMOS allowed us to simultaneously measure not directly observable aspects like cultural dimensions and also motivators and intentions to found a new venture. Largely, the results of this study provide support of our hypotheses. The findings were robust.

Our first hypothesis predicting that influences on entrepreneurship are different across cultures is supported by Germany and Poland. To our surprise, we found a negative impact of power distance on entrepreneurial motivators with German students, in contrast to a positive one with Polish students. This finding is very interesting as it shows opposite effects in entrepreneurship across cultural backgrounds. We deduce that in Germany, where power distance is lower, individuals feel comfortable being subordinates and to be part of an organisation that has less power distance across organisational levels. Contrastingly, in Poland where power distance is higher, people might have a stronger wish to escape from hierarchical restraints and follow a strong drive of improving their social status and strength by the help of entrepreneurship. Therefore, we deduce that power distance has mixed effects across cultures. Our results in Germany are consistent with prior research of power distance on entrepreneurship. However, our results with Poles are opposite to prior research (see Holt, 1997; Hofstede and Bond, 1988; McGrath et al., 1992; Peterson, 1988). We deduce that the strong wish to escape hierarchies and control by supervisors in the ex-communist countries is a driver of entrepreneurship. Hence, the transition process in ex-communist countries delivers new and different results of cultural values and new venture generation.

In the analysis of collectivism and individualism on the motivation to found a new venture, we find further dissimilarities across Germans and Poles. In Germany, individualism has only a positive, yet small, effect on the intention to found a new venture. With Poland, collectivism and individualism have a positive effect on entrepreneurial motivators. These results are interesting in different aspects. Collectivism and individualism exert different effects that can be redirected to national or cultural backgrounds. So, general assumptions on individualism or collectivism on entrepreneurship do not hold, according to our results. Therefore, we specify and also contradict prior research (e.g., Busenitz and Lau, 1996; Minoti, 2001; Mitchell et al., 2000; Morris et al., 1994), and suggest that only individualism has a positive impact on entrepreneurship. These assumptions only apply to Germany and merely for the intention to found a new venture, not on motivators of new venture generation. In Poland, the positive impact of both collectivism and individualism on motivators of entrepreneurship is interesting. We assume that entrepreneurship also requires leveraging resources internally or by establishing external ties; so collectivism is the second attribute

influential for entrepreneurship. Still, this finding was only possible as we measured individualism and collectivism according to different dimensions. From the results we also deduce that individualism and collectivism are not poles of one dimension. As such, research has to move from the single dimensional measures of individualism to two dimensional measures of individualism and collectivism.

Finally, we found that the motivation to found a new venture essentially leads to intention to entrepreneurship in both countries. However, the likelihood to found a new venture is in Germany higher than in Poland. We reason that different economic and social environments in both countries influence the intention to found new ventures. The bureaucracy, high financial risk and heavy borrowing, the challenging economic-political situation as well as varying entrepreneurial climate in Poland, can inhibit the motivation to found a new venture. Also the lack of social networks would reduce the willingness to found a new venture. Thus, the high risks associated with new venture generation limit the more actual intention of new business generation.

As the literature is still incomplete on this topic, further theoretical and empirical studies are necessary. Further investigations could concentrate on the question of how other cultural dimensions affect different aspects of entrepreneurship; in particular, comparing transformational and non-transformational countries. Further studies might investigate uncertainty avoidance, as entrepreneurship is a risky process (McMullen and Shepherd, 2006; Olson, 1986). The novelty of entrepreneurial actions, such as new products, new services, or new technologies (Gartner, 1990; Schumpeter, 1934) increase uncertainty (Amabile, 1997; Smith and DiGregorio, 2002). Further, other cultural studies, such as Hall and Reed Hall (1990), Hampden-Turner and Trompenaars (2000), and Schwartz (1992) could be a good base for further research into entrepreneurship.

Further studies could also explore how culture impacts the motivation and success of team venturing, especially when team members belong to different cultures. Team-based entrepreneurship reduces the scarcity of resources by bringing founders with diverse profiles together, who also contribute a broader portfolio of technical and managerial knowledge and resources. Team-based entrepreneurship was found to be more successful when compared to single entrepreneurs (Keeley and Knapp, 1994; Mellewigt and Späth, 2002). Team venturing has the advantage of diverse resources and competencies of individuals (Garcia-Prieto et al., 2000; Harrison et al., 2002; Kilduff, 2000). The diversity in venturing teams increases when the team members come from different countries and belong to different cultures. Drivers for the internationalisation of entrepreneurship are cost advantages, new markets and new knowledge. In order to operate successfully abroad, a venturing team has to comprise individuals from the respective countries. These people have specific knowledge about the economic, cultural, social and political environment of the country. However, such ventures include a high likelihood of conflicts. Thus, it appears fruitful to investigate the cultural factors on cross-cultural team venturing.

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