

# ECONOMIC MATERIALISM AND ENTREPRENEURIAL INTENTION IN ROMANIAN STUDENTS

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## *Abstract:*

*This study intends to analyze the correlation between economic materialism and entrepreneurial intention in a sample of University students from Romania. In addition, the study attempts to identify the particularities of the Romanian culture in regards to materialism and its impact on entrepreneurial intention. Furthermore, the study aims to evaluate the level of economic materialism in Romanian business students. The reliability analysis disclosed a lower inter item correlation in one of the materialism subscales, and the subsequent factor analysis found that two underlying factors account for the majority of the variance. Our result fits with previous research proposing that inconclusive factor analysis results prove that 'materialism is culturally dependent' (Flynn et al, 2013, p.62). Scales developed in a Western culture should go through a process of cultural adaptation, in addition to the process of back translation, to ensure reliable results. These conclusions are valuable due to the scarcity in research on economic materialism and entrepreneurial intention in Romania.*

*Keywords: Economic materialism, entrepreneurial intention, Romania*

## **1. Introduction**

Materialism is an admired value in many countries and cultures. In a materialistic culture the society members spend for non-utilitarian reasons (Belk, 1988), generating a circle of consuming to work and earn money for more consumption (Tatzel, 2003). To examine this phenomenon, researchers have explored economic materialism to a larger extent, finding a complicated concept formed by a complex network of unexpected drives and a great range of effects (Ger & Belk, 1996). The differences and the correlations between drives, environment and the behavior of materialistic and non-materialistic individuals have been scrutinized with partial success, and an agreed mechanism has not been identified (Burroughs & Rindfleisch, 2011). In Romania, only a few studies deal with the issue of materialism (Frunzaru & Popa, 2015), and as of July 2020 we found no study that looks into links between materialism and entrepreneurship in Romania.

The bias towards expanding materialism can be observed worldwide. Materialistic behaviors were initially inferred as particular to the individualist consumers in the United States, where the earliest research on materialism has been completed (Chan & Prendergast, 2007). Materialism has further been associated with Western values (Cleveland & Chang, 2009), and increasing levels of materialism in countries outside the West has been perceived as an emulation of Western-style values (Podoshen & Andrzejewksy, 2012).

Entrepreneurship has become a major focus in research and economics since researchers identified the fact that small and medium ventures add an equal number of new jobs to the economy as large firms (Wennekers & Thurik, 1999). At the same time, a new approach was discussing the differences between materialistic and post-materialist economies, and the ubiquitous transition from a managed economy to an entrepreneurial economy (Audretsch & Thurik, 1997) (Audretsch & Thurik, 2000) (Uhlener & Thurik, 2007).

The entrepreneurship field development in non-Western countries started in the mid-1990s when a large number of economies were transitioning to free markets. For instance, the transition of the former socialist countries in Eastern Europe brought new light to entrepreneurship research, and new factors such as cultural context and path dependence were first considered as important factors on the development of entrepreneurship, together with the influence of the institutional environment (Earle & Sakova, 2000) (Smallbone & Welter, 2001) (Ovaska & Sobel, 2005) (Aidis, Estrin, & Mickiewicz, 2010) (Ateljević & Budak, 2018). As a consequence, the field observed incredible development and the number of topics and concepts used in literature expanded significantly (Carlsson, et al., 2013) (Chepurensko, 2015).

Understanding economic materialism better could make a difference in understanding some of the determinants of individual decision making to become entrepreneurs (Burroughs & Rindfleisch, 2011). It is possible that in the context of a materialistic cycle where individuals are motivated to work and make more money to satisfy their consumption needs, some individuals may consider starting new businesses in order to fund such materialistic inclinations. As materialism plays an important role in human behavior (Richins & Dawson, 1992), a better understanding of economic materialism can be useful to identify the impact of behavior on entrepreneurial intention.

The purpose of this study is to analyze the level of economic materialism in Romanian students, and to identify any relationship that may exist between economic materialism and entrepreneurial intention in Romanian students. Considering the limited amount of research on economic materialism and on the relationship between economic materialism and entrepreneurship in Romania, the present study can provide essential information and fill these gaps. The article will continue with overview of the concept of economic materialism and the main findings in research in materialism and entrepreneurship. Then, we will present the research methods followed by the results obtained, and finish by discussing the results and suggesting directions for future research.

## **2. Literature Review**

### **2.1. Economic Materialism**

Even though the concept of economic materialism has been studied broadly, researchers have not yet agreed on a commonly accepted definition. The most popular definitions of materialism were those who looked at economic materialism as trait (Belk, 1985) or value (Richins & Dawson, 1992). Belk defined materialism as "The importance a consumer attaches to worldly possessions. At the highest levels of materialism, such possessions assume a central place in a person's life and are believed to provide the greatest sources of satisfaction and dissatisfaction" (Belk, 1984). (Belk, 1984, p.291). Richins and Dawson described materialism as a "value that emphasis importance of possessions and material goods in person's life toward achieving life goals or desired states" (Richins & Dawson, 1992) (p.308). Later, Richins (2004) provided an updated definition of materialism as "the importance ascribed to the ownership and acquisition of material goods in achieving major life goals or desired states" (p. 210).

Belk suggested that economic materialism is a combination of traits, initially composed from the sub-traits of envy, possessiveness and non-generosity (Belk, 1984). Envy was defined as the "displeasure and ill will at the superiority of another person in happiness, success, reputation of the possession of anything desirable" (Schoeck, 1966). Possessiveness was defined as the "inclination and tendency to retain control or ownership of one's possessions" (Belk, 1984). Non-generosity was defined as "an unwillingness to give possessions to or share possessions with others" (Belk, 1984). Later, after further cross cultural research, Ger and Belk (1996) added the trait of preservation, defined as the tendency of creating tangible evidence from experiences (Ger & Belk, 1996).

At the same time, Richins and Dawson (1992) proposed a view of economic materialism, a value and not a trait, and identified three sub-parts for the value of economic materialism: centrality, success, and happiness. They developed the Material Value Survey (MVS) to measure "centrality", or how central to an individual's life are having material possessions, "success," defined as "the use of possessions as indicator of success in life", and "happiness," defined as "the perception that possessions are needed for happiness" (Richins & Dawson, 1992).

To support their view of economic materialism as being a value as opposed to being a trait, Richins and Dawson (1992) suggested that if materialistic consumers "make a religion out of things" (Bredemeier & Toby, 1960) while perceiving possession as being "the ultimate source of happiness" (Belk, 1984), and as economic materialism "is organizing lives and creating lifestyles" (Daun, 1983), all these narratives consistently fit Rokeach's definition of value: "enduring beliefs that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence. " (Rokeach, 1973; Richins & Dawson, 1992).

For this study, we used the perspective of economic materialism as being a value. The Richins and Dawson (1992) created a model for economic materialism that is directly related with behavior, as values predispose both attitudes and behavior (Rokeach, 1973) (Richins & Dawson, 1992). Because values guide individuals' attitudes and behavior, they were used before to explain behavior (Bond, 2008). Furthermore, since we are interested in the process of decision making, the

Richins and Dawson perspective fits Rokeach's theory suggesting that "after a value is learned, the individual integrates the value within his/her value system that ranks different values by importance" and then aligns the newly learned behavior with the other previously learned values, a model that provides a glimpse of a portion of decision making process (Rokeach, 1973). This finding may be supported by the many situations in life where individuals activate multiple values, starting an internal conflict among values that has to be resolved in such a way to preserve self-esteem. This theory suggests that instead of using a single value, a system of values could explain better the complex motivational forces driving the individual (Rokeach, 1973).

Attitudes or importance of wealth can influence entrepreneurial intention, as the meaning attached by individual perception to material wealth directly influences behavior (Burns & Gupta, 2014). Xie, Bagozzi, and Yang (2013) designed a qualitative study of the decision-making processes among 322 Chinese materialists and nonmaterialists. The study concluded that decision-making processes were influenced by social influences and motives with regard to the choice of a materialistic value orientation.

Materialism can also be seen as a personal value linked with the perception of wealth that has negative connotations; in other words, detrimental materialism, i.e. consumer bankruptcy, unhappiness, dissatisfaction) (Duh, 2015) (Sidhu & Foo, 2015).

In this context, economic materialism can be proposed to be a value that may affect behavior. It is possible that materialistic individuals are more likely to make decisions and choices to improve their image, including starting a new business venture. Moreover, it is possible that materialistic individuals to be more likely to make such decisions in an effort to increase their income to enable further acquisitions that will bolster their image and perceived status of success. Therefore, it is possible that in initiating new ventures, economic materialism may play an important role when discussing decision making and individual behavior (Burroughs & Rindfleisch, 2002).

## ***2.2. Materialism, post-materialism and entrepreneurship***

A different perspective was provided by Inglehart, who saw values as "the individual's response to the reality" (Inglehart, 1990). In his view, materialism is a focus on the needs that are related to the individual and societal level of development – lower order need such as material comfort or safety or higher order needs for instance self-expression or quality of life. Inglehart pointed towards an evolutionary trend starting from less developed societies having basic materialistic needs and more developed societies who have satisfied their basic needs and switched from basic materialistic values to more elevated values that emphasize autonomy and self-expression (Inglehart, 1995). Therefore, he suggested a model with societies starting from materialism and advancing towards post-materialism, and all societies, depending on their level of development, somewhere on this continuum.

Inglehart continuum materialism - post materialism perspective was seen as a measure of society evolution, with each society going through stages from being extremely materialistic to ideals where money are less important and more elevated needs replace basic materialistic needs. In this article, we argue that entrepreneurship may be as well a measure of evolution, where societies move from extreme needs for organization and bureaucracy, and moving towards stages of less

organized activities, based on more individual freedoms and creativity. Science fiction series have depicted the ideal of equalitarian, money-free societies where humans don't work and they use their time just to create, having no worries regarding their needs being met. With the current trends of universal basic income, cashless societies, crypto currencies advancing towards a unique currency, and with automatization and artificial intelligence replacing mechanical tasks and with the future perspectives of machines becoming creative and truly intelligent, there is a need for research to look at the post-materialistic, technical driven future where it won't be enough for entrepreneurs to be creative and confident.

From the perspective of society evolution, we can identify several keywords such as poverty, inequality, education, healthcare, freedom of choice and others. World organizations publish yearly Human Development Reports in which basic human needs, well-being and opportunity levels are measured. In this context, it is difficult to look at entrepreneurship as a business concept, but more as a evolutionary direction where all society members will have to be entrepreneurs in order to be able to create value and ultimately to survive.

Whereas the industrial revolution led to the focus on economic growth at any cost, the members of the high society have always placed a high importance on quality of life. Now, the majority of the public in highly developed economies are too emphasizing the importance of quality of life and self-expression, a post materialism-stage cultural transformation, a universal phenomenon that takes place as development advances (Inglehart, 1977) (Inglehart & Welzel, 2005).

Inglehart further analyzed and identified significant cross cultural differences within the values of 45 countries, differences between the more and less developed societies involving the perception and views of social norms and beliefs. Similarly, (Audretsch, Bonte, & Tamvada, 2013) found that social differences have an impact on entrepreneurial decision. These social differences were described by Inglehart on a continuum with traditional vs rational values where the traditional societies emphasize survival values, focus more on family relationships and accept hierarchy, whereas the rational societies emphasize self-expression emphasize the individual and are opposed to hierarchies focusing more on well-being, tolerance and self-expression. As Inglehart described, all societies start from a traditional stage, and evolve towards a more rational type of society as it evolves through progress and development (Inglehart, 1977) (Inglehart & Welzel, 2005). This suggests that materialism could be a determining factor for entrepreneurship, whereas the evolution of a society towards post materialism acts as inhibitor for entrepreneurship. However, the search for wellbeing could be a pull factor for entrepreneurship.

Other streams of research identified a relationship between the early stage entrepreneurship and the level of economic development (Prieger, Bampoky, Blanco, & Liu, 2016), saying that entrepreneurship driven by opportunity and especially innovative entrepreneurship can be seen mostly in highly developed, post materialism economies, whereas necessity driven entrepreneurship is mostly found in low and middle income, factor driven, less developed and materialistic economies. This comparison between opportunity and necessity driven entrepreneurship has been analyzed and the findings are interesting. For example, Naude et al (2014) found a relationship between life satisfaction and entrepreneurship where high levels of life satisfaction are positively related with entrepreneurship (Naude, Amoros, & Cristi, 2014). This finding is in line with other studies where authors suggested that

work and ambition result in a better life (Bosma, 2009), and that entrepreneurship driven by opportunity lead to happiness and life satisfaction, in a U curve relationship where reaching a certain moment when excessive entrepreneurial initiatives lead to fierce competition and ultimately to lower satisfaction and reduced levels of happiness (Naude, Amoros, & Cristi, 2014).

In a similar direction, other studies identified links between more developed economies and entrepreneurship; for instance, Turok (2004) found that more developed countries, having better social environments can attract creative individuals and entrepreneurs easier than less developed countries (Turok, 2004). Therefore, there is a mix of elements that results in a higher level of entrepreneurial activity, leading to further progress. This was identified more with opportunity driven entrepreneurship rather than with the necessity driven entrepreneurship (Aparicio, Urbano, & Audretsch, 2016), suggesting this is a positive cycle that developed countries benefit more, leading them towards progress and increasing the gap between these developed economies and the less developed ones.

The determinants of entrepreneurship differ between wealthier and less endowed societies; GEM yearly report separates these motivations behind entrepreneurial activities between opportunity and necessity. Self-expression, creativity and full development of an individual can be achieved in more affluent, free societies. In developed economies, individuals are seeking less short-term solutions through entrepreneurship than in less developed economies (Urbano, Aparicio, & Querol, 2016). In addition, Hechaverria and Reynolds (2009) also found that self-expression is negatively correlated with necessity entrepreneurship, (Hechavarría & Reynolds, 2009)

Research in entrepreneurship is probably one of the most effervescent, dynamic areas of research within management sciences in the last decade and the large number of journals, publications, conferences and other events and participants confirms.

However, entrepreneurship does not seem to be the same in every country, as significant differences in their development, their culture and their environments may result in making some of the concepts, approaches and results ineffective. Since most of our knowledge on entrepreneurship comes from analyzing individuals working within well-functioning economies and markets from the western countries, two important questions emerge: first, are these concepts, approaches and results relevant to non-Western contexts? And what are the implications of the differences between Western and non-Western contexts on the concepts, approaches and research methods?

### ***2.3. Culture and entrepreneurship.***

Hofstede (1980, 1986, 2005) developed a set of dimensions to describe the differences between cultures, dimensions that were used in entrepreneurship research with mixed results (Hofstede, 1980) (Hofstede, 1986) (Hofstede, 2005) (Urbano, Aparicio, & Querol, 2016). As per Hofstede's model, a large number of studies describe the entrepreneur as an individualistic person displaying high power distance, masculine and with low uncertainty avoidance (Busenitz & Lau, 1996) (Hayton, George, & Zahra, 2002). An individualist culture and a low level of uncertainty avoidance have been shown to encourage entrepreneurship (Mueller & Thomas, 2001) (Rooks, Klyver, & Sserwanga, 2016). At the same time, other authors

argue that collectivistic cultural factors such as nationalism are more correlated to entrepreneurial initiatives (Taylor & Wilson, 2012) (Aparicio, Urbano, & Gomez, 2016). At the same time, Pinillos and Reyes (2011) found that a country's economic development level moderates the influence of individualism on entrepreneurship (Pinillos & Reyes, 2011). In addition, several authors found that fear of failure and higher levels of uncertainty avoidance have a negative impact on entrepreneurial intention (Urbano & Alvarez, 2014).

The cultural traits can be interpreted as "a country's mental programs" that are developed early in the family and then through socialization, then reinforced in education institutions and organizations (Hofstede, 2001). A cultural dimension directly linked with attitudes towards risk is 'uncertainty avoidance', which reflects "the extent to which societies tolerate ambiguity" (Hofstede, 2001). These attitudes are different across cultures: a culture is deemed to be high uncertainty avoidance is one in which individuals feel threatened and uncomfortable in uncertain situations, or unknown situations (Hofstede, 2001). Individuals in high uncertainty avoidance cultures will "look for structure in their organizations, institutions and relationships, which makes events clearly interpretable and predictable" (Hofstede 2001: 148). In contrast, in cultures of low uncertainty avoidance, risks are accepted and seen as a part of life, and "not only familiar but also unfamiliar risks are accepted, such as changing jobs and starting activities for which there are no rules" (Hofstede 2001: 148). Cultures with low uncertainty avoidance show more "willingness to enter into unknown ventures" (Hofstede 2001: 164).

During a test to identify the extent of the influence of uncertainty avoidance, Wennekers, Thurik, Van Stel and Noorderhaven (2007) concluded that an uncertainty avoidance climate can push the more entrepreneurial individuals towards self-employment (Wennekers, Thurik, van Stel, & Noorderhaven, 2007). These findings identified a direct impact of uncertainty avoidance, the cultural counterpart of a personal trait that is risk aversion, having an impact on entrepreneurship.

While the dimensions of individualism-collectivism and uncertainty avoidance have been explored widely, the other dimensions of power distance and masculinity - femininity are less analyzed. A high power distance culture is characterized by its hierarchical decision making, while lower power distance levels results in more equal say in the decision making process. Shane (1993) found that a lower power distance is more beneficial for innovation (Shane, 1993), finding confirmed later by Linan and Fernandez-Serrano (Linan & Fernandez-Serrano, 2014). These authors suggested that more equal societies can generate more opportunities to be identified by alert entrepreneurs. In regards to power distance, Thomas and Mueller found no link between power distance and the level of innovation (Thomas & Mueller, 2000), and the scarcity of results in this area makes this an interesting field for future research.

In Romania, according to Hofstede, Romania is a collectivist (individualism score 30) high power distance culture (score 90), a relatively feminine culture (masculinity score 42) with a high preference to avoid uncertainty. Feminine cultures are suggested to be somewhat lower in materialism due to the definitions of masculine – materialistic and feminine – quality of life continuum, and because of the contradiction between the definitions of success for each. In Hofstede's words, "Masculinity stands for a society in which social gender roles are clearly distinct: Men are supposed to be assertive, tough, and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life." In

addition, highly materialistic individuals consider material goods to be signs of success, whereas in feminine cultures quality of life is a sign of success (Hofstede, 2001). Based on Hofstede's dimensions, Romania has a low score on Individualism and on Masculinity, both variables potentially influencing the entrepreneurial spirit and intention. As a collectivistic culture, the values associated to family and religion might carry more weight than the values related to materialism.

#### **2.4. Materialism and entrepreneurship.**

The individual variables that influence entrepreneurial intention can broadly be categorized into 1a) self-efficacy, i.e. the confidence in own ability in successfully achieving satisfactory results in completing a task or engaging in a behavior and 1b) the perceived behavioral control, i.e. the belief that the respective behavior is under control, evaluated by the difficulty of the behavior, 2) attitude based, such as attitudes towards risk, independence, and achievement, and 3) demographics such as age, gender or social background (Farouk, Ikram, & Sami, 2014; Fatoki, 2015). The attitude or the importance ascribed to the accumulation of wealth can also have an impact on intention (Van Gelderen, Brand, Van Praag, Bodewes, Poutsma, & Van Gils, 2008).

Materialism can be perceived as a personal value that can influence entrepreneurial intention and behavior through the importance given to wealth and accumulation of income (Burns & Gupta, 2014). Economic materialism, combined with a lack of financial security can provide a motive to work harder and succeed (Sidhu & Foo, 2015). Materialistic individuals work harder to increase their ability to purchase more goods and to improve their living standards. This indicates that materialism can influence entrepreneurial intention.

The perception of wealth and increasing income can motivate individuals to start a new venture, or to start a small side business to run in parallel with their primary job. While the individual works for a company the income and potential for wealth is fixed or relatively limited, whereas in entrepreneurship the potential for wealth is less fixed (Van Gelderen, et al., 2008). Therefore, materialistic inclinations can have a positive correlation with intention. For example, research shows materialistic values are positively correlated to real estate purchases, and it impacts consumer buying intention overall (Ong, Kamaruddin, Bulathsinalage, & Seneviratne, 2013). Materialism also ignites motives such as the need to achieve (Kamineni, 2005). Therefore, it is hypothesized that a correlation between materialism and the level of entrepreneurial intention in students exists.

### **3. Research objectives**

The study is expected to provide additional insight regarding the level of materialism, as well as the influence of materialistic individual behavior on entrepreneurship in Romania, and to expand the discussion in the area of entrepreneurial intention while acting as theoretical support for future research in the field of entrepreneurship. This study may also prove useful because economic materialism is a truly global phenomenon and a focus in research in other countries.

Exploring the level of materialistic inclinations in Romania, as well as the link between materialism and entrepreneurship may provide new insights that may help policy makers create policies to support and enhance the entrepreneurial



environment in Romania. Furthermore, there are signs that materialism can act as a negative value in regards to entrepreneurship and not only. For example, as individuals in the western world seem to be particularly attracted on consumption, consequences such as reduced well-being and happiness along with high debt levels have been observed (Inglehart, 1989; Roberts & Clement, 2007); such effects could be avoided if a better understanding of materialism would exist (Podoshen & Andrzejewksy, 2012). Additionally, the education system in Romania can be adapted and improved in order to identify and address, through education, the unwanted consequences of materialism in the younger generations.

There is a need to better understand Romanian individuals' behavior, as Romanians are an important part of European individuals. The large number of Romanian migrants across the world requires more research, and the disparity in the amount of research - that may be explained by the fact that psychology was not a main focus in Romania before 1989 - should be addressed.

The present study intends to evaluate the level of economic materialism in Romanian students, and to identify the relationship that may exist between economic materialism and entrepreneurial intention in Romanian students. Considering the limited amount of research on economic materialism and entrepreneurship in Romania, the present study can provide important information and fill the gap in literature.

Based on these variables, we formulate the following working hypothesis.

H1: A correlation exists between materialism and entrepreneurial intention

H2: The level of materialism is relatively low, according to the cultural profile of Romania

### **3.1. Methodology of research**

This study used a survey to measure students' Materialism and Entrepreneurial Intention, while in addition collecting a number of demographic information. The survey collected data regarding participant age, gender, location, previous work experience, parent education, parent workplace type and family income. The sample consisted of West University of Timisoara students from various programs. Students from various levels were invited to participate and therefore Bachelor, Master and Doctoral students from Management, Marketing, Accounting and Finance and other specializations took part in this study. 250 questionnaires were administered and 230 participants fully answered the surveys for a 92 % response rate.

Materialism was measured by using the 9 item material values scale used by Richins and Dawson (1992) and Richins (2004). The 5-point Likert scale ranging from strongly disagree to strongly agree contains statements such as "My life would be better if I own certain things I don't have"; "I'd be happier if I could afford to buy more things"; "I like to own things that impress people"; "I like a lot of luxury in my life". The materialism values survey instrument has three subscales, centrality, happiness and success (Richins & Dawson, 1992).

In defining materialism, Richins and Dawson proposed materialism is a value that governs people's lives, behavior and choices in a myriad of situations, including but not limited to consumption (Richins and Dawson, 1992). They suggested that materialistically inclined individuals focus on acquisitions and material possessions, and therefore proposed materialism has three components: centrality, success and happiness. The focus on acquisitions is evaluated through the 'centrality' part of the

instrument. Centrality is explained by the fact that materialistic individuals are somewhat less satisfied with their lives, and therefore these individuals seek pleasure in acquisitions, 'acquisition centrality' being the first dimension evaluated through their Material Value Survey (MVS) instrument (Richins and Dawson, 1992; Ioane, 2017). Next, Richins (2004) described materialism as 'the importance ascribed to the ownership and acquisition of material goods in achieving major life goals or desired states' (p. 210) (Richins, 2004). Furthermore, MVS evaluates 'success' characterized as the use of possessions as indicator of success in life, and 'happiness' defined as the view that material possessions are required for happiness (Richins and Dawson, 1992; Richins, 2004; Ioane, 2017).

Entrepreneurial intention was measured with the 7 item scale used previously by Zhao, Seibert and Hills (2005), Zampetakis and Moustakis (2006) and Fatoki (2015). The questionnaire is a 5-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. Examples of statements are: "I will start my business in the near future"; "Starting my own business is an attractive idea to me"; "I spent a lot of time thinking about owning my own business." (Zhao, Seibert, & Hills, 2005) (Zampetakis & Moustakis, 2006) (Fatoki, 2015). In this study, the entrepreneurial intention scale had a good internal consistency of Cronbach alpha = 0.96. The scales were translated into Romanian language by using a double blind back translation process to ensure comparability of language, similarity of interpretability, and degree of understandability (Ioane, 2017).

After processing the collected surveys, 230 participant questionnaires were valid, the sample including 158 women and 72 male participants who constituted 69 %, respectively 31 % of the entire sample. 150 participants were older than 21 years old while 80 were between 18-20 years old. 114 participants were students in Management, 71 in Accounting/Finance and 46 in other colleges. While 165 had very little (less than 1 year) of work experience, 65 had more than 1-year of work experience. The collected demographics included information regarding the highest parent education level, where our participant family education is as follows: 8.7 % finished general school, 64 % high school, 23.5 % college, 3 % master, 0.8 % doctorate, and parent workplace type; our participant parent workplace type are as follows: 36.7 % work in state owned organizations, 49.8 % in private organization, 10.9 % have their own business, and 2.6 % were currently unemployed. The family income was also collected, our sample families reporting income that is very low (17.9 %), low (47.6 %), average (31.4 %) and high (3.1 %).

#### **4. Results**

Entrepreneurial intention was measured by using the instrument used by Zhao, Seibert and Hills (2005), Zampetakis and Moustakis (2006) and Fatoki (2015). The instrument is a 5-point Likert scale that ranges from 'strongly disagree' to 'strongly agree'. There are seven statements, example of statements: 'I will start my business in the near future'; 'Starting my own business is an attractive idea to me'; 'I spent a lot of time thinking about owning my own business.' (Zhao, Seibert, & Hills, 2005) (Zampetakis & Moustakis, 2006) (Fatoki, 2014). In this study, the entrepreneurial intention scale had an internal consistency of Cronbach alpha = 0.96.

Respondents were asked about to select the answer that reflect their view and intention regarding starting a new business. Suitability of the data was checked using

the KMO test and Bartlett's test. The KMO value (.924) indicated that there is an adequate sample to detect the structure. Bartlett's test results indicated that the correlation matrix is not an identity matrix,  $\chi^2(21) = 1734.01$ ,  $p < .01$  reflecting that study variables are related in some way.

**Table 1**

**Aggregated answers for the Entrepreneurial Intention scale**

		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I will start my business in the near future	3.4 %	13.0 %	36.0 %	30.0 %	17.6 %
2	It has been my intent to start my own business	3.4 %	8.3 %	23.9 %	37.0 %	27.4 %
3	Starting my own business is an attractive idea to me	3.4 %	5.6 %	18.2 %	39.1 %	33.7 %
4	I am enthusiastic about starting my own business	4.3 %	7.8 %	22.6 %	37.4 %	27.9 %
5	It is desirable for me to start my own business	6.1 %	9.5 %	23.0 %	26.5 %	34.9 %
6	I spent a lot of time thinking about owning my own business	3.9 %	10.4 %	16.9 %	33.9 %	34.9 %
7	Owning my own business is the best alternative for me	3.9 %	9.1 %	35.2 %	27.8 %	24.0 %

The table shows that while a sizable number of participants intend to start their business in the near future (47.6 % agree and strongly agree), an important percentage of respondents are still unsure about that (36 % are neutral), and only some participants do not intend to (16.4 % disagree or strongly disagree). A large number of unsure respondents can be seen in Statement 7, where 35.2 % are not sure whether entrepreneurship is the best alternative for them. A majority of participants intend to start a business (64.4 % agree and strongly agree). A large majority (72.8 agree and strongly agree) find the idea of starting their own business as attractive. 65.3 % are enthusiastic about starting their own businesses, and 61.4 % agree and strongly agree with the idea that it is desirable to them to start their own businesses. 68.8 % spend a lot of time thinking about owning their own businesses, maybe about starting a business, possibly evaluating business ideas or looking for opportunities.

Materialism was measured using nine items where respondents were asked to report how they feel about owning things. Next, we conducted the principal factor

analysis, and after having the factor scores we performed a one-way analysis of variance test in order to investigate whether between-group differences exist. This test was performed once for each demographic variable. None of the demographic variables (gender, age, education level, subject studied, work experience, location, highest parent education level, parent workplace type, family income) were found to be statistically significant when it comes to between-group differences with regards to materialism. A dummy variable regression model was then created to check whether demographic factors can predict materialism or not. The overall model was not significant,  $F(28, 201) = 1.289, p > .05$ . Hence, it was decided that demographic factors can't predict materialism level. In addition, the analysis showed no correlations between materialism and entrepreneurial intention. H1 is not confirmed.

Reliability of the scales signaled some interesting findings. As indicated by the greater than .7 alpha value, the entrepreneurial intention scale was reliable. Similarly, the overall reliability of the materialism scale was .804 hinting towards a reliable result. However, out of the three subscales of the materialism scale only happiness and success were found to be reliable, as seen in Table 2. The Centrality subscale had a lower inter item correlation and hence this subscale was found to be not reliable. The inter item correlation table (Table 3) provides details.

**Table 2**

**Reliability of the scales**

Scale	Sub scale	Number of items	Cronbach's Alpha value
Materialism	Happiness	3	.810
	Success	3	.726
	Centrality	3	.178

**Table 3**

**Inter item correlation**

		Q 5	Q 8	Q 9
Q 5	Pearson Correlation	1	.496**	-.095
	Sig. (2-tailed)		.000	.150
	N	230	230	230
Q 8	Pearson Correlation	.496**	1	-.262**
	Sig. (2-tailed)	.000		.000
	N	230	230	230
Q 9	Pearson Correlation	-.095	-.262**	1
	Sig. (2-tailed)	.150	.000	
	N	230	230	230

Note. \*\*. Correlation is significant at the 0.01 level (2-tailed).

Suitability of the data for structure detection was checked using the KMO test and Bartlett's test. The KMO value (.924) indicated that there is an adequate sample to detect the structure. Bartlett's test results indicated that the correlation matrix is not an identity matrix,  $\chi^2(21) = 1734.01$ ,  $p < .01$  reflecting that the study variables are related in some way.

Since the assumptions were not violated, using principal axis factoring method and orthogonal rotation (Varimax) factors were extracted. Items that had loading lower than .6 were suppressed. From this analysis two underlying factors were identified to account for 58.65 % of the variance, as seen in Table 4.

**Table 4****Total variance explained**

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.061	45.118	45.118	3.649	40.543	40.543	2.267	25.187	25.187
2	1.218	13.529	58.647	.767	8.526	49.069	2.149	23.881	49.069
3	.981	10.895	69.542						
4	.754	8.374	77.915						
5	.576	6.397	84.312						
6	.493	5.479	89.791						
7	.345	3.837	93.628						
8	.311	3.457	97.085						
9	.262	2.915	100.000						

When the rotated factor loadings were taken into consideration, question 1, 3 and 4 were loaded to factor 1. These questions belong to the happiness subscale, recognized in this sample. Hence the first identified factor can be named as happiness. Questions 6, 7 and 8 were loaded to factor 2. These questions belong to two subscales or dimensions of materialism where question 6 and 7 belong to success and 8 belongs to centrality. In addition, the confirmatory factor analysis also evidenced that above-identified 6 items load highly on two factors. Furthermore, questions 2 and 9 did not load on any of the factors. Therefore, it can be concluded that using this sample, the dimensions of materialism can't be clearly identified.

**Table 5**

**Rotated factor matrix**

	Factor	
	1 (Happiness)	2
1. "My life would be better if I own certain things I don't have." (H)	.666	
2. "The things I own say a lot about how well I'm doing." (S)		
3. "I'd be happier if I could afford to buy more things." (H)	.852	
4. "It bothers me that I can't afford to buy things I'd like." (H)	.704	
5. "Buying things gives me a lot of pleasure." (C)		
6. "I admire people who own expensive homes, cars, clothes." (S)		.776
7. "I like to own things that impress people." (S)		.765
8. "I like a lot of luxury in my life." (C)		.725
9. "I try to keep my life simple, as far as possessions are concerned." (C)		

To obtain further information from the data, we looked at the aggregated answers for each materialism scale item.

**Table 6**

**Aggregated answers for materialism items (N=230); higher proportion of answers shaded**

Subscale		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
H	"My life would be better if I own certain things I don't have"	5.6 %	13.5 %	44.3 %	21.3 %	15.3 %
S	"The things I own say a lot about how well I'm doing"	13.9 %	28.2 %	40.4 %	13.9 %	3.6 %
H	"I'd be happier if I could afford to buy more things"	10.9 %	19.6 %	28.3 %	27.4 %	13.8 %
H	"It bothers me that I can't afford to buy things I'd like"	12.1 %	28.7 %	29.6 %	21.3 %	8.3 %
C	"Buying things gives me a lot of pleasure"	8.7 %	14.8 %	31.7 %	26.1 %	18.7 %
S	"I admire people who own expensive homes, cars, clothes"	24.3 %	25.7 %	30.4 %	14.8 %	4.8 %

S	"I like to own things that impress people"	30.4 %	30.9 %	24.3 %	11.3 %	3.1 %
C	"I like a lot of luxury in my life"	18.6 %	17.8 %	32.1 %	19.6 %	11.9 %
C	"I try to keep my life simple, as far as possessions are concerned"	5.2 %	6.1 %	27.4 %	39.1 %	22.2 %

The materialism subscale for Happiness is composed from three items for which the Chronbach alpha was good (0.81):

"My life would be better if I own certain things I don't have." For this item a larger number of respondents (36.6 %) agreed and strongly agreed with the statement, only 19.1 % disagreed and strongly disagreed, while a large number (44.3 %) were neutral.

"I'd be happier if I could afford to buy more things." For this item 41.2 % agreed and strongly agreed, while 30.5% disagreed or strongly disagreed and 28.3 % were neutral.

"It bothers me that I can't afford to buy things I'd like." For this item, 40.8 % disagreed or strongly disagreed with the statement, while 29.6 % agreed or strongly agreed and 29.6 % were neutral.

For this scale, most respondents agreed they would be happier if they could buy more things, but at the same time they don't seem to be bothered by not having the purchase power to buy more things.

The materialism subscale for Success is composed from three items for which the Chronbach alpha was good (0.726). For all the items here there were more respondents who disagreed or strongly disagreed than those who agreed or strongly agreed. In addition, the first item "The things I own say a lot about how well I'm doing" did not load on any factor, hinting towards a potential problem with this item.

"The things I own say a lot about how well I'm doing." For this item, 42.1 % disagreed or strongly disagreed, while 17.5 % agreed or strongly agreed and 40.4 % were neutral.

"I admire people who own expensive homes, cars, clothes." For this item, 50% of the respondents disagreed or strongly disagreed, while 19.6 % agreed or strongly agreed and 30.4 % were neutral.

"I like to own things that impress people." For this item, 61.3 % disagreed or strongly disagreed, while 14.4 % agreed or strongly agreed and 24.3 % were neutral.

Here, most respondents disagreed with the idea that owning things reflects success, and seem to not admire those who own expensive homes, cars and clothes. Additionally, most respondents don't believe material goods will impress others. These results suggest that our respondents don't believe that success can be reflected by the possession of material goods.

The materialism subscale for Centrality is composed from three items for which the Cronbach alpha was inadequate (0.178). In addition, 2 items of 3 did not load on any factor, hinting towards potential problems with these items: "Buying things gives me a lot of pleasure" and "I try to keep my life simple, as far as possessions are concerned".

“Buying things gives me a lot of pleasure.” For this item, 44.8 % agreed or strongly agreed, 23.5 % disagreed or strongly disagreed and 31.7 % were neutral.

“I like a lot of luxury in my life.” For this item, 36.4 % disagreed or strongly disagreed, 31.5% agreed or strongly agreed and 32.1 % were neutral.

“I try to keep my life simple, as far as possessions are concerned.” For this item, only 11.3 % disagreed or strongly disagreed, while 61.3 % agreed or strongly agreed and 27.4 % were neutral.

Respondents seem to prefer a simple life that is not based on a focus on material possessions. At the same time, a majority of respondents agreed that buying things gives them pleasure.

We can observe the student sample portrays reduced materialistic inclinations. For most items, the larger cumulative percentages are those of Strongly Disagree, Disagree, and large percentage of neutral answers. For the last item, the interpretation is reversed, so in this case too the result points towards low materialistic inclinations. H2 is confirmed.

## 5. Discussion

The use of economic materialism in entrepreneurship research has been relatively scarce (Morales & Holtschlag, 2013) (Hechavarria, et al., 2016). However, in these few studies, authors such as Uhlaner and Thurik argued that material gains are essential for entrepreneurship, and since material gains are of reduced value to those from post materialist societies, these post materialist societies are expected to be somewhat less entrepreneurial (Uhlaner & Thurik, 2007). The authors also found that post-materialist values are correlated negatively with entrepreneurial activity when controlling for education, life satisfaction and economic development, finding contradicted by other reports such as the Global Entrepreneurial Activity Monitor, that systematically ranks highly developed countries such as Finland, Norway or Sweden among the highly ranked in entrepreneurial activity driven by opportunity (Global Entrepreneurship Monitor GEM, 2019). At the same time, Scandinavian countries rank highly in Inglehart’s rational dimension, being described as post materialist cultures.

Other authors found further contradictory results, for instance Hechavarria and Reynolds (2009) who found self-expression values positively impacts entrepreneurship (Hechavarria & Reynolds, 2009). Some of these contradictory results should be clarified, such as the correlations between post materialism and the motivations behind entrepreneurial activity, as these may vary across cultures (Urbano, Aparicio, & Querol, 2016).

These conflicting results emphasize the complexity of this concept of economic materialism. Inconcludent results are seen in other materialism research such as that related to personality (Ashton & Lee, 2008) (Otero-López & Villardefrancos, 2013) (Watson, 2015) (Malgorzata, 2020) or to social behavior (Northover, Pedersen, Cohen, & Andrews, 2016). Another limitation is the social desirability bias that may influence responses in self-reporting questionnaires, consistency bias and respondents who fail to recall their behavior accurately (Kormos & Gifford, 2014).

The results of the current study fit with the previously reported results, materialism being a complicated construct, measured by an instrument that can give contradictory results that are difficult to interpret. Along with the increase of the



economic development in Romania, the profile of the studied group shows low materialistic inclinations, suggesting that cultural values related to collectivism and femininity dominate the materialistic values. At the same time, the results cannot be generalized because first, the sample is not representative for the country, and second because the results raise questions related to the usability of the research instrument as is in Romania.

This, because we used, in this study, a back translated instrument to collect data. This method of translation is found in most fields such as business, technical and medical instrument translation (Ioane, 2017). However, the difficulty of translating some items into another languages and used in other cultures has been recognized by researchers. For example, Behling and Law (2000) examined the various levels of equivalence and identified differences based on the types of questions asked. They identified that in some question types like demographic questions semantic and conceptual equivalence is relatively easy to achieve as they cover concepts, ideas and words that are more universal and commonly used. In addition, in behavioral, and knowledge related questions, even though they are more of a challenge, semantic and conceptual equivalence can be achieved. However, they emphasized the difficulty to achieve normative equivalence, as words are not used in the same ways in similar contexts in different cultures, as cultures and communication and interpretation of words differ radically (Behling & Law, 2000). Furthermore, achieving equivalence is a challenge as abstract concepts may not be equivalent or equally relevant across cultures (Behling & Law, 2000). In addition, other research found that sometimes there are no equivalent terms for a given concept, and Western ideas of risk, health, and need, among others, may be interpreted differently and be less prevalent in other cultures, which leads to the question of improving the survey questions (Hunt & Bhopal, 2004).

While the original Richins and Dawson (1992) materialism survey was used in the original form, the simple back translation resulted in items that need to be examined further and improve their reliability and validity. In addition, when the instrument developed in a culture is used translated in a different culture, simple translations may not be sufficient to attain cultural equivalence with the original instrument (Cannino, Bird, Rubio-Stipec, & Bravo, 1997).

Similarly, for the present study, using a back translation of an instrument developed in a different culture but not culturally adapted for Romania could explain the questions raised by the results.

It has been proposed before that research instruments may need cultural adaptation before use in other cultures than the culture of the original instrument, or the culture of the authors who developed the instrument (Ioane, 2017). Each item has to include the subtleties and nuances of the original instrument, and if the items are not adapted culturally, and if the target culture does not include the same views as the original culture on that particular topic, a risk exists that the simply translated item will refer to a less broad, or broader, or to an adjacent concept or meaning (Ioane, 2017). Here, even the slightest change in meaning, the unnoticed narrowing down; broadening of coverage can be significant issues. To exclude this possibility and for rigorosity, a process of cultural adaptation is superior to item changes decided arbitrarily inconsistently by researchers during research, because it calibrates the cultural appropriateness of the adapted scale and its cultural fit (Sumathipala & Murray, 2000).

At the same time, we consider that the role of the national culture should be taken into consideration more consistently. As explained by Flynn et al (2013), inconclusive factor analysis results prove that 'materialism is culturally dependent' (Flynn et al, 2013, p.62). In our study, the results may suggest a similar cultural issue that may arise from the cultural adaptation of the scale, or from the particularities of the Romanian culture. Further research should clarify the question of cultural appropriateness of the materialism value scale for the Romanian culture and context. Furthermore, in regards to materialism and entrepreneurship, there are still questions that will need to be answered, such as whether materialistic tendencies differ between full time and hybrid entrepreneurs and whether materialistic tendencies differ between the Romanian nationals who left the country and Romanians who preferred to stay in Romania.

### ***5.1. Particularities of the Romanian culture***

Previous research done by Ger and Belk (1996) attempted to describe the place of materialism values within the Romanian culture, and found unique particularities. One such difference is in the perception of materialism in Romania: while in other countries such as the US individuals see materialism as a weakness or a negative behavior, in Romania most individuals seem to perceive materialism as being a positive type of behavior, one that expresses empowerment and freedom (Ger and Belk, 1996). The same Ger and Belk study suggested that Romanians are the most materialistic individuals, more materialistic than Turkey, Ukraine, Germany or the US. We consider that the results of this study may have been influenced by the context and timing of data collection, just after the fall of the communist regime that happened in 1989, and that cultural values in Romania have changed dramatically in the last three decades.

In addition, we can take into consideration another variable, religion. Consider the fact that Romania is the most religious country in Europe. According to the 2018 Pew study (Pew Research, 2018), Romania has the highest number of highly religious individuals in Europe, a number (55 %) that is much higher than those from other European countries. For comparison, Romania's neighbors have a significantly lower number of highly religious individuals, for example Bulgaria 18 %, Hungary 17 %, Ukraine 31 %.

In religious countries, materialism comes in direct conflict with religious values and beliefs. Materialism has been described before as almost being a religion (Bredemeier & Toby, 1960), and individuals who believe possessions can bring happiness are focused on profit and success, which seems to drive them away from being religious in the long term (Gallagher & Tierney, 2013). In religious cultures, values do not center around material success, comfort or purchasing power, but on idolizing and devoting self towards a divinity (Masoom & Sarker, 2018). Some studies argued that countries with materialistic inclined cultures tend to move away from religion (Pace, 2013), and that economic activity does not work well with religious centered behavior (Belk, 1985) (Gould, 1991) (Norris & Inglehart, 2005). Romania is a relatively religious culture and at the same time seems to have materialistic inclinations. It is possible that this profile to be specific to Romania, due to the four decades of poverty and indigence during the communist regime, this hypothesis needs to be looked into in future research.

Some individuals may feel certain cultural pressures on materialism; this can be seen in some cultures pressuring individuals towards more materialism as those societies reward individuals who appear more successful (Ioane, 2017). Alternatively, some cultures pressure individuals away from materialism as that society rewards individuals who follow non materialistic norms, such as religious cultures (Gallagher & Tierney, 2013).

In cultures that pressure individuals towards materialistic values, concepts such as face are essential and they support materialistic tendencies in many Asian cultures, rewarding individuals who pose as successful. In these cultures, the successful are revered, while the less successful are pressured towards making steps to become more successful. In these cases, one factor is the pressure from having large societies competing for limited attention and resources, resulting in a reality where individuals who can signal they are special have an additional chance to win attention and additional resources. Other cultures pressure individuals away from materialistic values, such as religious countries. In theory, Romania having such a large number of religious individuals should be less materialistic, but research suggests Romanians to be more materialistically inclined than other, less religious countries (Ger and Belk, 1996). Our study suggests that materialism is related to the concepts of happiness and success; however, due to the nature of the result, we propose that future research focus on culturally adapting the materialism instrument for usage in Romanian culture, or develop an instrument able to measure materialism in Romania.

## **6. Conclusions**

The present study attempted to analyze the economic materialism profile for business students in Romania, and the potential correlations between the level of economic materialism and entrepreneurial intention. In the context of a materialistic cycle where individuals are motivated to work and make more money, some individuals may consider starting new businesses in order to satisfy their materialistic inclinations.

The results of our study indicate the following: first, the results suggest a low level of materialistic inclinations, even though the economic development of Romania would justify a higher level of materialism. At the same time, recent WVS wave 6 research indicates a higher level of materialism in Romania (Inglehart, et al., 2014). Possibly, the sample of business students used in the present study is a niche with particular characteristics, that cannot be generalized to the entire country population. A question for future research is whether the sample of business students present similar characteristics across different cultures and countries, since they are presented with similar information, experiences and knowledge that may influence their personas in a comparable way.

Second, our results seem to show our sample is not focused on acquisitions. The level of materialism in our sample is manifested mostly through happiness, and the majority of our sample does not seem to look for material possessions, and they do not admire those individuals who own expensive things. These results indicate a match with the national cultural profile characterized by low masculinity and collectivism.

Third, we did not identify a significant correlation between the level of economic materialism and entrepreneurial intention. Here it is possible that the back translation method to have imposed limitations due to the mot a mot translation of an instrument developed in and for a very different cultural profile.

Future research should attempt to culturally adapt the materialism instrument and make it usable for the Romanian culture and context. In addition, a complete cultural profile for Romania should be created, to include cultural, materialism and religiosity variables, for a better view of the Romanian cultural profile. Furthermore, future research should attempt to identify whether the business student samples are similar across cultures, and whether such a sample is similarly differentiated from the general population.

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