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Brandt, T. (2019). Relationship of gender, age and personality on entrepreneurial attitude. *Proceedings of the 14th European Conference on Innovation and Entrepreneurship, University of Peloponnese Kalamata, Greece, 19–20 September 2019*, 169–176. Reading : Academic Conferences and Publishing International Limited.

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Please cite the original version:

Brandt, T. (2019). Relationship of gender, age and personality on entrepreneurial attitude. *Proceedings of the 14th European Conference on Innovation and Entrepreneurship, University of Peloponnese Kalamata, Greece, 19–20 September 2019*, 169–176. Reading : Academic Conferences and Publishing International Limited.

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Relationship of Gender, Age and Personality on Entrepreneurial Attitude

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10.34190/ECIE.19.268

Abstract: When growing demand of entrepreneurship, there are lot of hidden potential with women, who still are clearly underrepresented among entrepreneurs. Men start more businesses and also their firms have more growth. This study is interested if the gender is related also in entrepreneurial attitude and if there may be other explanations to entrepreneurial attitude than gender. Earlier studies indicate that the personality impacts on entrepreneurship thus the both age and personality are studied also in addition to gender. Data consisted 1247 persons and they were grouped in the different age groups: under 30 years, 30-40 years, 40-50 years and over 50 years. Personality was measured with Myers-Briggs Type Indicator (MBTI), which is commonly used in business and organizational behavior, in both consultancy and research. MBTI describes personality in four dimensions: extraversion-introversion, sensing-intuition, thinking-feeling and judging-perceiving. Data analyses were made with ANOVA and with t-test. There were plenty of statistically significant results, and it could be seen that age, gender and personality separately and all together impact on entrepreneurial attitude. The main results indicated that men have higher entrepreneurial attitude than women. Women had the highest entrepreneurial attitude when they were under 30 years, when in case of men the age groups did not differ. Concerning personality, generally extraverted and intuitive preferences had the highest entrepreneurial attitude in both genders and in all age groups than their counterparts introverted and sensing preferences. Introverted and sensing women tend to have more entrepreneurial orientation when they are between 31 - 40 years, and feeling and judging women when they are under 30 years. The results are discussed related to entrepreneurship education and learning.

Keywords: Entrepreneurship, risk-taking, growth-orientation, gender, age

1. Introduction

Entrepreneurship has long been acknowledged as the basic engine for economy and wealth creation and plenty of research have tried to solve the entrepreneurial qualities and orientation. The identification of individuals with entrepreneurial attitudes could foster more people to entrepreneurial careers. Especially potential entrepreneurs may be among the women. It is well-known that men are more entrepreneurial, they start more businesses and also have higher growth-orientation of their companies but reasons for that are still unclear (Acs et al., 2005; Gupta et al., 2014). The Global Entrepreneurship Monitor (GEM) project has examined entrepreneurial activity in more than 70 countries, and the results show that the ratio of women to men in terms of entrepreneurship is low reflecting low participation by women (Kwong et al., 2009; Langowitz and Minniti, 2007; Minniti et al., 2005). Female entrepreneurs tend to be less motivated than their male counterparts by a desire to become their own bosses (social inclination) to make money and to have power (Scherer, 2010). Against this, women entrepreneurs may tend to be more motivated by economic necessity (Hisrich and Brush, 1987; Buttner, 1993). According to Strier and Abdeen (2009), the type of businesses started by male and female entrepreneurs generally differ, with females often engaged in specific industrial sectors such as hair dressing, catering and fashion. In the view of Pio (2007) female entrepreneurs are more likely to set up home-based and micro-enterprises than their male counterparts.

Even there are studies about entrepreneurial traits and intentions regarding gender (Manolova et al., 2012; Marlow and McAdam, 2013) there is only a few or no studies which have combined gender, age and personality in the context of entrepreneurial attitude. Thus this study focuses on entrepreneurial attitude which is measured with risk taking- and growth – orientation in relation to gender, age and personality.

Entrepreneurial intention is based on overall tenet of the psychological theory of the planned behavior (Ajzen, 1991). According to Ajzen (1991), intention is directly affected by three antecedents, they are: (i) attitude; (ii) subjective norm and; (iii) perceived behavioral control. In other words, the three factors mentioned above directly affect a person's intention to perform a behavior. Here the study focuses on the attitude. Exogenous influences (such as traits, demographics, skills and social, cultural and financial support) affect attitudes and indirectly intentions and behavior (Shapero and Sokol, 1982). For example Chen and Lai (2010) indicated in

their study that that student attitude toward entrepreneurship was affected by environmental cognition and personality traits, which indirectly affected attitude toward entrepreneurship.

Entrepreneurial intentions are mostly studied with data of students (Franco et al., 2010, Turkey and Selcuk, 2009; Yusof, 2007; Zaim et al., 2010), and it would be important to know the intentions of other population too, when many people start their business after working some time as employee. In this study the data consists in addition to them employees, leaders, managers and entrepreneurs themselves.

Entrepreneurs take more risks than others (e.g Begley and Boyd, 1987; Carland and Carland, 1991; Carland et al., 1995) and the ability to take risks have been defined one of the most crucial qualities of entrepreneur with innovativeness, creativity and proactivity (Frishamme and Andersson, 2009; Amonrat and Tansuhai, 2008).

Many researchers (e.g. Das and Teng, 1997; Stewart et al., 1998; Douglas and Shepherd, 2002) report that risk taking attitudes and behavior are distinguishing characteristics of entrepreneurship. For example, according to Karabey (2012), entrepreneurs' risk preference found to be higher than expected and for example, accountants' risk preference found to be lower than expected. Risk preference can be defined as the general tendency or the desire to pursue or avoid risks (Sitkin and Pablo, 1992). Also, risk reflects the degree of uncertainty and potential loss associated with the outcomes which may follow from a given behavior or a set of behaviors (Forlani and Mullins, 2000). Some research indicates that with risk-taking ability the need for autonomy in decision making is also needed. The stronger the risk-taking tolerance of the individual has, and the stronger is their preference for decision-making autonomy, the stronger is their intention to be self-employed (Douglas and Shepherd, 2002). The intervention study indicated that people can learn to take risks (Kyrö and Tapani, 2008). Gunawan et al. (2013) noted that risk-taking orientation reflects an individual's tolerance of uncertainty and the ability to involve in and make risky investments. Other authors have shown that, highly minded entrepreneurs are generally willing to take on high-risk ventures for the chance of high return (Covin and Slevin, 1989; Lumpkin and Dess, 1996). The important fact about risk taking is not just about the resources to be committed but also the probability of high failure (Wiklund and Shepherd, 2003).

It may be that age impacts on entrepreneurial tendencies, because older people are significantly less likely to engage in entrepreneurial activity than younger individuals (Curran and Blanckburn, 2001; Hart et al., 2004).

However, research evidence shows that the survival rates of businesses established by older entrepreneurs are higher than those of younger entrepreneurs (e.g., Cressy and Storey, 1995). Entrepreneurial competencies increase with age, entrepreneurial intentions tend to decrease (Rotefoss and Kolvereid, 2005). Concerning women entrepreneurs, the "typical" female entrepreneur was married with children, herself the first-born child of middle class parents. Her business is most likely to be service-oriented, and she tends to start it around the age of 40. Most of the businesses are small with low growth rates (Hisrich and Brush, 1984).

Certain personalities tend to participate on entrepreneurial fields more than others. Concerning Myers-Briggs Type Indicator (MBTI) many research shows that intuitive and thinking personality preferences are acting more as entrepreneurs than their opposite preferences sensing and judging (Barbato and Durlabhji, 1989; Carland, 1982; Carland and Carland, 1992). Reynierse (1997) found that entrepreneurs had significantly higher perceiving preferences and lower judging preferences. Further, entrepreneurs were more extraverted with perceiving, intuitives with perceiving, and thinking with perceiving than introverted with judging, sensing with judging, and feeling with judging. According to Ginn and Sexton (1988), fast-growth entrepreneurs tended to have significantly higher intuitives, perceiving, and intuitive-perceiving orientations than managers. These results were in line with Routamaa and Miettinen (2006), who found more extraverted, intuition, extraverted with intuition, intuition with thinking but also intuition and judging than introversion and sensing among internationally oriented entrepreneurs. These studies have not combine the entrepreneurial attitude and mindset, instead they have been mostly focused on personality and entrepreneurship as an occupation.

2. Method

Data was collected during the years 2015-2018 in different groups of students and people at working life. All in all, there was 1253 people at sample. Mean age was 40,8 years and it represented mostly women 59,9% (n=750). The data represented following age-groups: under 30 years old 18,6% (n=233), age 31-40 years 31,5% (n=395), age 41 – 50 years 30,1% (n=377) and over 51 years 19,8% (248).

Personality was measured with the validated Myers-Briggs Type indicator (MBTI), which is a self-assessment instrument, where the respondent selects one of two options for every item. The MBTI includes scores on four bipolar dimensions: extraversion-introversion (E/I), sensing-intuition (S/N), thinking-feeling (T/F), and judging-perceiving (J/P). Every item has two alternatives for the respondents to choose from. An individual is assigned a “type” classification based on one of 16 possible categories. The Finnish ‘F-version’ of the MBTI was used in this study, which has been translated and validated in Finnish culture and its construct validity and reliability have been found acceptable (see e.g. Routamaa and Hautala 2015). Jung’s (1921) work on psychological types was a base on which the Myers-Briggs theory was built. The eight different preferences, which describe a person’s orientation of energy (extraversion, E and introversion, I), the way of gathering information (sensing, S and intuition, N), the way of making decisions (thinking, T and feeling, F) and the lifestyle (judging J and perceiving, P). In every dimension a person has one preference stronger than another and from these stronger preferences emerges a person’s personality type. Altogether there are sixteen possible personality types (e.g. ISTP, ESTJ, ENFP). The personality types are more than simply just the combination of preferences, even if the research concentrates mostly on these preferences (Myers and Myers, 1990; Myers et al., 1998).

Entrepreneurial orientation was measured with five items which measured risk-taking and growth-orientation capacity. Factor analyses with Varimax were made to ensure that those items belong into different groups. Three items were measuring risk and two items growth-orientation. *Risk-taking* was measured with three items:

- When you make important decision, a) would you be afraid that risk-taking will endanger your current position or / possible loss of success
- Would it be better to avoid solutions which demand risk-taking as much as possible / If you want to be better than your competitors, you must have courage to take risks
- You would never start a business, unless you would be sure of its success / You cannot be sure about success, but you could still start

Growth-orientation was measured with two items:

- When owning a company, you would try to keep it as a living /You would try to do firm as the best in the field
- Your firm’s real purpose would be of gaining living for you and your family /You would like to get it grow and gain significant position in the field

The summing together these two and divided by two indicated the entrepreneurial orientation. Cronbach’s alpha of risk-taking was 0,426 and for growth-orientation 0,687. The latter one can be regarded very good. The analysis were made with Anova when comparing all types and with t-test when comparing only preference level.

3. Results

Personality types were measured altogether from 852 people and distribution of the data was as follows that there were more extraversion (63,8%) than introversion, more sensing (64,9%) than intuition, more thinking (59,3%) than feeling and more judging (59,2%) than perceiving. Personality distribution represent well Finnish type distribution when extraverted, sensing, thinking and judging personality preferences outnumbered their opposites (e.g Routamaa and Hautala, 2015). Even the risk-taking of entrepreneurs were not in the interest of this study, the results of the entrepreneurs’ were presenting here just for comparison. Results are presented at Table 1. Those people who are acting as entrepreneurs have clearly more entrepreneurial attitude when compared to whole data (including entrepreneurs).

Table 1: Results (means) of entrepreneurs compared all data

	Entrepreneurial attitude	Growth orientation	Risk-taking
Entrepreneurs (N=76)	1,74	1,70	1,79
All data (N=1305)	1,59	1,57	1,62

3.1 Gender differences

Firstly the men and women differences were studied and results indicated that men are clearly more entrepreneurially orientated. Both risk-taking and growth orientation were higher with men (see Table 2). When comparing the age groups there were no differences between men and women under 30 years old.

Other age groups had statistically significant differences, and men were consistently more entrepreneurially orientated than women. According to the means, the highest entrepreneurial orientation had men at age 41-50 years and weakest women over 51 years. In case of women, they have more entrepreneurial attitude when they are under 30 years. Interestingly, no age group had higher mean of entrepreneurial attitude than entrepreneurs themselves (1,74).

Table 2: Gender differences

All age groups	Entrepreneurial attitude	Growth orientation	Risk-taking
Men, n=521	1,66	1,63	1,69
Women, n=781	1,55	1,53	1,57
sig.	0,000***	0,000***	0,000***
Under 30 years	Entrepreneurial attitude	Growth orientation	Risk-taking
Men, n=81	1,67	1,69	1,65
Women, n=151	1,60	1,62	1,57
sig.	0,060	0,248	0,054
31-40 years	Entrepreneurial attitude	Growth orientation	Risk-taking
Men, n=170	1,68	1,65	1,71
Women, n=220	1,53	1,53	1,54
sig.	0,000***	0,011*	0,000***
41-50 years	Entrepreneurial attitude	Growth orientation	Risk-taking
Men, n=159	1,66	1,62	1,72
Women, n=212	1,56	1,51	1,60
sig.	0,000***	0,018*	0,000***
Over 51 years	Entrepreneurial attitude	Growth orientation	Risk-taking
Men, n=86	1,62	1,59	1,66
Women, n=155	1,49	1,44	1,54
sig.	0,002**	0,012*	0,006**

3.2 Personality opposites, gender and age

At next phase the opposites of personality preferences (i.e extraverts vs. introverts, sensing vs. intuitives etc.) were compared in related to age and entrepreneurial orientation. At Table 3 can be seen that at age group under 30 years extraverted and intuitive women were significantly more entrepreneurial than their counterparts. At the next age group 31-40 years more differences were found in case of men. Extraverted, intuitive and feeling men were more entrepreneurial than their counterparts. At the 41-50 years extraverted and intuitive people in both women and men outnumbered introverted and sensing types. In last age group the extraverted and intuitive women were more entrepreneurial as well as extraverted men than their counterparts introverted and sensitive personalities.

3.3 Similar personality preferences, age and entrepreneurial attitude

In Table 4 can be seen how age impacts on different personalities with gender. Men do not have difference. Introverted and sensing women tend to have higher entrepreneurial attitude when they are under 40 years and further, feeling and judging women have their entrepreneurial attitude highest when under 30 years. Interestingly extraverted and intuitive women do not behave in similar way, their entrepreneurial attitude does not get affected by age, and is always higher than with introverts and sensing personalities. This does not happen to men, when age impact only on feeling men, when they had interestingly highest entrepreneurial attitude at the age 31-40 years, and lower at other ages. In case of intuitive men, they had consistency having higher entrepreneurial attitude than entrepreneurs themselves (1,74).

Table 3. Gender, opposites of personality preferences, age and entrepreneurial attitude. E=Extraversion, I=Introversion, S=Sensing, N=Intuition, T=Thinking, F=Feeling, J=Judging, P=Perceiving

Gender	Under 30 y, means (n)		Sig.	31-40 years, means (n)		Sig.
	E	I		E	I	
Women	1,65 (69)	1,51 (34)	0,033*	1,58 (109)	1,52 (50)	0,261
Men	1,72 (27)	1,62 (16)	0,211	1,75 (49)	1,59 (53)	0,005**
Women	S:1,55 (64)	N:1,70 (39)	0,015*	S:1,55 (99)	N:1,59 (60)	0,46
Men	S:1,64 (25)	1,76 (16)	0,175	S: 1,62 (72)	N:1,78 (30)	0,011*
Women	T: 1,60 (51)	F: 1,60 (52)	0,974	T: 1,61 (76)	F: 1,53 (83)	0,124
Men	T: 1,72 (26)	F:1,62 (15)	0,211	T:1,64 (88)	F:1,83 (14)	0,026*
Women	J: 1,57 (61)	P:1,65 (42)	0,214	J:1,55 (98)	P: 1,58 (61)	0,537
Men	J:1,62 (18)	P:1,74 (23)	0,167	J: 1,65 (68)	P: 1,70 (34)	0,496
Gender	41-50 years, means (n)		Sig.	51 y and over, means (n)		Sig.
	E	I		E	I	
Women	1,61 (106)	1,38 (50)	0,00***	1,56 (75)	1,28 (36)	0,000***
Men	1,72 (69)	1,56 (37)	0,009**	1,73 (30)	1,50 (27)	0,007**
Women	S:1,46 (102)	N:1,67 (54)	0,00***	S:1,40 (74)	N: 1,61 (37)	0,001**
Men	S:1,62 (71)	N:1,77 (35)	0,003**	S:1,55 (32)	N:1,71 (25)	0,072
Women	T:1,54 (75)	F:1,53 (81)	0,921	T:1,51 (56)	F: 1,44 (55)	0,255
Men	T:1,67 (81)	F: 1,65 (25)	0,71	T: 1,65 (41)	F: 1,55 (16)	0,289
Women	J: 1,53 (88)	P:1,54 (68)	0,96	J: 1,43 (60)	P: 1,52 (51)	0,143
Men	J:1,65 (66)	P: 1,69 (40)	0,504	J:1,62 (36)	P: 1,62 (21)	0,988

4. Conclusions

This research focused on the elements related to entrepreneurial orientation, studying risk taking tendencies and growth orientation of 852 Finnish people. Interest was to see if age, gender and personality impact on the entrepreneurial orientation. Results indicated that those all have impact on entrepreneurial orientation. There were plenty of statistically significant results, and it could be seen that age, gender and personality impacts on entrepreneurial orientation. Interestingly entrepreneurs themselves had clearly highest means in case of entrepreneurial attitude when compared most of the groups. Only intuitive men had higher attitudes than entrepreneurs. Even some researchers claim that entrepreneurs are made and not born (Boulton and Turner, 2005; Mellor et al., 2009), this study indicates that some personalities have more tendencies towards entrepreneurial field. More research about personality and entrepreneurial attitude of entrepreneurs themselves would be needed. The main results can be presented as three points:

1. Men are more entrepreneurially orientated than women. When comparing different ages and gender the women tend to have more entrepreneurial orientation when they are under 30 years. The most potential time for women to start the business is under the 30 years, when they are most willing to take risks and interest to have growth orientated business. With men the age does not seem to impact on the entrepreneurial orientation, so in that sense every age is good for them to start the business. Earlier studies indicate that younger students are most likely to develop more positive attitudes to entrepreneurship (Hatten & Ruhland, 1995), but here it suits only to women.
2. Concerning personality, in generally extraverted and intuitive preferences have most tendency in both genders and in all age groups to have higher entrepreneurial orientation than their counterparts introverted and sensing preferences. Thus women under 30 years with extraverted and intuitive personalities are more potential entrepreneurs than older women and all women with introverted and

sensing personalities. Concerning men, at all age groups they have similar attitude to start the business, but more specifically when they are over 31 years, the extraverted and intuitive personality preferences have more entrepreneurial attitude than introverted and sensing types.

3. Introverted and sensing women tend to have more entrepreneurial attitude when they are under 40 years, and feeling and judging women when they are under 30 years. When introverted and sensing women are over 41 years and feeling and judging women over 30 years their entrepreneurial attitude diminishes significantly. Extraverted and intuitive women’s entrepreneurial attitude is not affected by age, and also extraverted and intuitive women’s entrepreneurial attitude is always higher than with introverts and sensing personalities. Thus introverted and sensing personalities to best timing for starting the business is when they are under 40 years old.

As a conclusion, this study offers new perspectives on studies of entrepreneurial attitude when showing that all: age, gender and personality separately and together have impact on entrepreneurial attitude. It could be consider if there should be more focus to educate especially those extraverted and intuitive personalities towards entrepreneurial field when they have more natural tendencies towards entrepreneurship. Additionally there should be more studies about how to motivate those introverted and sensing personalities and women especially over 30 years to establish enterprise. For example qualitative studies would be interesting of that area.

Table 4: Age, gender and personality in comparison (t-test) in relation to entrepreneurial attitude

Gender	Under 30 y	31-40 y	41-50y	51 over	Anova	– Post hoc
Women	1,60 (151)	1,53(220)	1,56 (211)	1,49 (155)	0,013*	1>3,2,4
Men	1,67 (80)	1,68 (169)	1,66 (158)	1,62 (86)	0,409	
Women E	1,65 (69)	1,58 (109)	1,61 (106)	1,56 (75)	0,355	
Women I	1,51 (34)	1,52 (50)	1,38 (50)	1,28 (36)	0,000***	1,2 >3,4
Men E	1,72 (26)	1,75 (49)	1,72 (69)	1,73 (30)	0,944	
Men I	1,62 (15)	1,59 (53)	1,56 (37)	1,50 (27)	0,569	
Women S	1,55 (64)	1,55 (99)	1,46 (102)	1,40 (74)	0,004**	2,1 >3,4
Women N	1,67 (39)	1,59 (60)	1,67 (54)	1,61 (37)	0,269	
Men S	1,64 (25)	1,62 (72)	1,62 (71)	1,55 (32)	0,628	
Men N	1,76 (16)	1,78 (30)	1,77 (35)	1,71 (25)	0,760	
Women T	1,60 (51)	1,61 (76)	1,54 (75)	1,51 (56)	0,207	
Women F	1,60 (52)	1,53 (83)	1,53 (81)	1,44 (55)	0,045*	1>2,3,4
Men T	1,72 (26)	1,64 (88)	1,67 (81)	1,65 (41)	0,614	
Men F	1,61 (15)	1,83 (14)	1,65 (25)	1,55 (16)	0,540	2>3,1,4
Women J	1,57 (61)	1,55 (98)	1,53 (88)	1,43 (60)	0,058	1>2,3,4
Women P	1,65 (42)	1, 58 (61)	1,53 (68)	1,52 (51)	0,157	
Men J	1,62 (18)	1,65 (68)	1,65 (66)	1,62 (36)	0,915	
Men P	1,74 (23)	1,70 (34)	1,70 (40)	1,62 (21)	0,599	

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