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# Entrepreneurial Tendencies by Different Personalities

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## Abstract

This study focuses on entrepreneurial aspects of different personality types in order to increase understanding of entrepreneurial mindsets in Finland. Our purpose is to identify the entrepreneurial personalities in Finland because there is high need to foster entrepreneurship and gaining more knowledge of entrepreneurial tendencies can support this. The data were gathered from 889 research participants. Personality was measured with Myers-Briggs Type Indicator (MBTI). MBTI includes 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). Altogether there are sixteen possible personality types (e.g., ISTP, ESTJ). Results indicated that entrepreneurial tendencies largely correlated with the personality preferences extraversion and intuition.

**Keywords:** Entrepreneurship, personality, entrepreneurial tendencies

## Introduction

An entrepreneurial mindset orients individuals' behavior towards entrepreneurial activities and outcomes (Lynch et al. 2017). Despite the large number of studies that have been done, this concept lacks empirical support because of methodological difficulties in discovering how entrepreneurs think. Plenty of studies have focused on entrepreneurial intentions and entrepreneurial identity in order to foster entrepreneurship (e.g., Pfeifer, Šarlija, and Sušac 2016). Fostering entrepreneurship in Finland is very important because the need for new businesses and a larger tax base is growing, and the corona situation has increased those needs vastly. One can hypothesize that if we were better able to recognize those students with an entrepreneurial mindset, universities could offer specifically tailored education to them, and, eventually, support them in choosing entrepreneurship successfully. This would enhance entrepreneurship growth in Finland.

A high-level definition of an entrepreneurial mindset is offered by Ireland, Hitt, and Sirmon (2003): “a growth-oriented perspective through which individuals promote flexibility, creativity, continuous innovation, and renewal” (968). In other words, even under the cloak of uncertainty, the entrepreneurially minded can identify and exploit new opportunities because they have cognitive abilities that allow them to impart meaning in ambiguous and fragmented situations (Alvarez and Barney 2002).

One recurring insight is that successful entrepreneurs can be characterized by an expert mindset (Krueger 2007), yet there is no clear understanding what that mindset is (Baron and Henry 2010). There has been a growing popularity of the term *entrepreneurial mindset* as an umbrella term for entrepreneurial cognition (Baron 1998), metacognition (Haynie et al. 2010), and character adaptations (Obschonka, Silbereisen, and Schmitt-Robermund 2011).

Earlier studies indicated that the main predictors of entrepreneurial intentions among business students were strength of entrepreneurial identity, aspiration, and entrepreneurial self-efficacy (Pfeifer et al. 2016). Entrepreneurs are generally considered to be “do-ers”; people who get on and take action toward their goals instead of those who might be orientated toward detailed planning and collecting more information before acting (Fisher 2012). Lynch et al. (2017) studied the linguistic content of interviews with fifty-one successful high-tech entrepreneurs from Silicon Valley and compared them to a control group of spoken text from average entrepreneurs. The results revealed five themes that occur more often with successful entrepreneurs than non-successful entrepreneurs. The first major theme visible to them was the concept of *taking actions* or steps toward achieving desired outcomes. Second, successful entrepreneurs seemed to be more concerned with the *future* than with the past when compared to the control group. They also had less focus on themselves, and they were more likely to use words demonstrating a *collective perspective*. The successful entrepreneurs seemed to have a very clear focus on their customers, and they understood their *customers’ needs and requirements*. Furthermore, the successful entrepreneurs were concerned with their customers’ success, not just their own personal success. This could be described as a win-win mentality. Lastly, this study indicated that entrepreneurs are *lifelong learners*: they are curious, and they see experiences as an opportunity to learn and improve themselves. For example, compared to the successful entrepreneurs, the control group was twice as likely to label an experience as a failure.

Furthermore, a fresh study of students’ entrepreneurial mindsets suggests that there are a few key attitudes that are characteristic of students who aim to become entrepreneurs. These are (1) self-efficacy, that is, the “I can create value” attitude; (2) opportunity, or the “I see opportunities” attitude; (3) risk, or the “I can manage risk” attitude, (4) focus, that is the “I know what’s important” attitude, and lastly (5) impact, or the “I take action” attitude (Hatt 2018).

## The Theoretical Base of Personality Types and Entrepreneurial Mindset

### *The Myers-Briggs Type Indicator (MBTI)*

The Myers-Briggs Type Indicator (MBTI) has been prolific and is a commonly used tool in research on leadership, organizational behavior, teams, strategy (e.g., Alberola et al. 2019; Berr, Church, and Waclawski 2000; Bono and Judge 2004; Brandt and Edinger 2015; Furnham and Crump 2015; Gallen 2009) and entrepreneurship (see the last chapter in this collection).

Jung's (1921) work on psychological types was the base on which the Myers-Briggs theory was built. MBTI includes 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, etc.). The personality types are more than just the combination of preferences, even if the research concentrates mostly on these preferences. The dominance order of personality types further deepens the meaning of the type theory, and this explains the wide possibilities of MBTI in the development purposes and research as well (Routamaa and Hautala 2015).

In this study, the focus is on the eight preferences (see Table 1) and their relation to the appraisals of transformational behavior. *Extraverted (E)* people derive energy from the world around them, and they feel a loss of energy (depression, anxiety) when it is necessary to be alone for a long period of time. *Introverted (I)* persons lose energy when they spend long periods of time with other people, whereas they get new energy when they have sufficient time alone. *Sensing (S)* types live in the moment, and they gather information via their five senses. This is why they are good at remembering and recognizing different tastes, outlooks, and sounds. They approach work step-by-step and focus on the small things more than intuitive people. *Intuitive people (N)* are good at using their imagination, and they are more able to see the big picture. Their approach to work thus takes account of the whole picture at the expense of smaller details. *Thinking (T)* people are logical and direct. They make decisions using impersonal points of logic. *Feeling (F)* persons use their personal values logically when making decisions. They are usually better at taking other people's feelings into account than thinking types, and thus are not so direct in their communication compared to thinking types. *Judging (J)* types like order and closure. Their lifestyle is decisive and they want to control their own life and schedule upcoming events. *Perceiving (P)* types are flexible, and their life style reflects a tendency to go with the flow (Myers and Myers 1990; Myers et al. 1998).

Orientation of Energy	
Extraversion (E) Gets energy from outer world	Introversion (I) Energized by time alone, reflection
Gathering Information	
Sensing (S) With senses from concrete world	Intuition (N) Getting ideas and new thoughts from own mind
Decision Making	
Thinking (T) Focus on things	Feeling (F) Focus on people
Lifestyle	
Judging (J) Lives orderly	Perceiving (P) Lives in spontaneous way

Table 1. MBTI preferences.

### MBTI and Entrepreneurs

There are many studies of the MBTI-profiles of entrepreneurs (e.g., Ginn and Sexton 1988; Routamaa and Miettinen 2007; Barbato and Durlabhji 1989; Carland 1982; Carland and Carland, 1992) but these studies do not combine the entrepreneurial attitude and mindset. Instead, they mostly focus on personality and entrepreneurship as an occupation.

These studies indicate that entrepreneurs tend to be more often intuitive and thinking (NT), whereas typical owners or managers are sensing and judging (SJ) (Barbato and Durlabhji 1989; Carland 1982; Carland and Carland 1992). According to Ginn and Sexton (1988), *fast-growth entrepreneurs* tended to have significantly more intuition and perceiving (NP) orientations than managers. These results were in line with Routamaa and Miettinen (2007) who found more extraversion (E), intuition (N), extraversion and intuition (EN), intuitive thinking (NT) but also intuitive judging (NJ) than introversion and sensing (IS) and introversion and judging (IJs) among *internationally oriented entrepreneurs*. Carland, Carland, and Higgs (1993) found NTs (intuitive thinking) display the highest *entrepreneurship tendency*; in other words, NTs, as distinguished from the other temperaments, fit the traditional view of entrepreneurship in that the NT preference was highly correlated with innovation (cf. also Keirsey and Bates 1984). Järnlström (2000) found that Ns (intuitive) and Ps (perceiving) *chose more often creativity* (entrepreneurial) and autonomous career anchors than Ss (sensing) and Js (judging). Järnlström (2002)

found later also that the J/P (judging/perceiving) dichotomy of the MBTI played the most important role separating entrepreneurial aspirations from organizational employment aspirations. *Intuitive and perceiving preferences* were more closely associated with entrepreneurial aspirations, whereas sensing and judging were more closely associated with organizational employment aspirations.

It could also be concluded that SPs (sensing and perceiving) and IPs (introvert and perceiving) are more *locally oriented* entrepreneurs, and also SJs (sensing and judging) seem to prefer traditional, local low-risk fields, that is, NPs (intuitive and perceiving) as entrepreneurs may be more suitable in global and new business areas with high risk. Reynierse (1997) found that entrepreneurs had significantly higher P (perceiving) and lower Js (judging) orientation. Furthermore, entrepreneurs were more often EPs (extravert and perceiving), NPs (intuitive and perceiving), and TPs (thinking and perceiving) than IJs (introvert and judging), SJs (sensing and judging), and FJs (feeling and judging).

At the type level, ESFP (extravert-sensing-feeling-perceiving), ESTP (extravert-sensing-thinking-perceiving), INTP (introvert-intuitive-thinking-perceiving), ISTP (introvert-sensing-thinking-perceiving), ENTP (extravert-intuitive-thinking-perceiving), and ENFP (extravert-intuitive-feeling-perceiving) are the six most entrepreneurial oriented types based on the occupation statistics of the sample (Routamaa and Miettinen 2007). The common preference among them is perceiving (P), that is, they all are spontaneous, interested in acting by watching, trying out, or adapting. The typical managerial types, ISTJ (introvert-sensing-thinking-judging), ESTJ (extravert-sensing-thinking-judging), and ENTJ (extravert-intuitive-thinking-judging) (see Routamaa and Ponto 1994;) are not among the top six entrepreneurial types.

### *Methodology*

Personality was measured with the validated questionnaire of Myers-Briggs Type Indicator (MBTI), which was developed by Katherine Briggs and Isabel Myers in 1942 and was licensed in the 1960s. The MBTI 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 sixteen possible categories. The Finnish “F-version” of the MBTI was used in this study, which has been translated, adjusted, and validated for use in Finnish by Routamaa, and its construct validity and reliability have been found acceptable (see, e.g., Routamaa and Hautala 2015).

Entrepreneurial attitude was measured with five items which emphasized risk-taking and growth-orientation capacity. Factor analyses with

Varimax were made to ensure that those items belonged to different groups. Three items measured risk, and two items growth-orientation.

*Risk-taking* was measured with these 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 aim to create a living for you / You try to develop the company as the best in the field;
- Your company's real purpose would be creating a living for you and your family / You would like to foster the company's growth and gain a significant position in the field

Cronbach's alpha of risk-taking was 0.426 and for growth-orientation 0.687. The latter can be regarded as very good.

The statistical analyses were made with SPSS-program using analysis of variance ANOVA when comparing all types, and using t-test when comparing only the preference level of the items that were measuring entrepreneurial attitude in the case of taking risks and growth-orientation. ANOVA and t-test are used to analyze the differences of means in a sample of groups. If the ANOVA shows the statistical difference among the means, post hoc range tests (e.g., Tukey-B) determine which means differ (Metsämuuronen 2006).

### *Sample*

This sample consisted of data from various fields, which were collected during the years 2015–18 for different purposes. There were 521 men and 780 women in the whole sample with different backgrounds. Personality types were known for the 889 persons.

### *Results*

Distribution of personality preferences can be seen in Table 3. There were more extraverted (64 percent), sensing (65 percent), thinking (59 percent), and judging (59 percent) preferences in the sample. At the personality type level there were mostly ESTJs (18 percent), ISTJs (15 percent), and ESFJs (9 percent). The least represented were INFJs (1.3 percent) and INFPs (2.4 percent) (see Table 2).

### *Personality Preferences as Comparison*

Table 3 shows that the extraverted and intuitive preferences tended toward risk-taking oriented and growth-oriented behavior when compared with

their counterparts' introverted and sensing preferences. Also, the thinking preference indicated growth-orientation when compared to the feeling preference. Statistical differences occurred between the five possibilities out of eight.

<b>ISTJ</b> N=133 Men=66 Women=67	<b>ISFJ</b> N=45 Men=6 Women=39	<b>INFJ</b> N=12 Men=5 Women=7	<b>INTJ</b> N=26 Men=15 Women=11
<b>ISTP</b> N=32 Men=21 Women=11	<b>ISFP</b> N=25 Men=5 Women=20	<b>INFP</b> N=21 Men=9 Women=12	<b>INTP</b> N=27 Men=14 Women=13
<b>ESTP</b> N=49 Men=25 Women=24	<b>ESFP</b> N=50 Men=10 Women=40	<b>ENFP</b> N=73 Men=23 Women=50	<b>ENTP</b> N=40 Men=11 Women=29
<b>ESTJ</b> N=158 Men=71 Women=87	<b>ESFJ</b> N=82 Men=13 Women=69	<b>ENFJ</b> N=53 Men=5 Women=48	<b>ENTJ</b> N=63 Men=30 Women=33

Table 2. Personality type distribution.

#### *Personality Types as Comparison*

Risk-taking and growth-orientation were merged in the one single item "Entrepreneurial-orientation" and the ANOVA was calculated here with the type level. ANOVA indicated statistical significance between personality types at the level of 0.000 (see Table 4). According to Tukey B, the post-hoc test indicated statistical differences between five groups. Most entrepreneurial types were ENTJs, and ENTPs were the second most prevalent. The least entrepreneurial types were found to be ISFJ, ISFP, and INFJ in that order.



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	<b>Risk-Taking Means</b>	<b>Significance Two-Tailed</b>	<b>Growth- Orientation Means</b>	<b>Significance Two-Tailed</b>
Men N=521 Women N=780	<b>1.69</b> 1.56	0.000***	<b>1.63</b> 1.52	0.000***
<b>Extraversion (E) N=568</b> <b>Introversion (I) N=321</b>	1.65 1.55	0.000***	<b>1.64</b> 1.44	0.000***
Men: Extraversion N=188	1.72	0.017*	1.72	0.000***
Men: Introversion N=141	1.65		1.50	
Women: Extraversion N=380	1.61	0.000***	1.59	0.000***
Women: Introversion N=180	1.48		1.39	
<b>Sensing (S) N=574</b> <b>Intuition (N) N=313</b>	1.56 <b>1.71</b>	0.000***	1.52 <b>1.65</b>	0.000***
Men: Sensing N=217	1.65	0.000***	1.58	0.001**
Men: Intuition N=112	<b>1.79</b>		<b>1.73</b>	
Women: Sensing N=357	1.51	0.000***	1.48	0.001**
Women: Intuition N=203	<b>1.67</b>		<b>1.60</b>	
<b>Thinking (T) N=528</b> <b>Feeling (F) N=361</b>	1.64 1.58	0.016	<b>1.60</b> 1.51	0.003**
Men: Thinking N=253	1.70	0.0853	1.64	0.284
Men: Feeling N=76	1.69		1.58	
Women: Thinking N=275	1.58	0.056	1.56	0.375
Women: Feeling N=285	1.55		1.49	
<b>Judging N=525</b> <b>Perceiving N=364</b>	1.60 1.63	0.184	1.55 1.59	0.212
Men: Judging N=206	1.68	0.260	1.62	0.513
Men: Perceiving N=126	1.72		1.65	
Women: Judging N=322	1.55	0.245	1.51	0.208
Women: Perceiving N=238	1.59		1.55	

Table 3. T-test of entrepreneurial tendencies.

Most Entrepreneurial	Second Most Entrepreneurial	Third Most Entrepreneurial	Weakly Entrepreneurial	Least Entrepreneurial
ENTJ – 1.81	ENTP – 1.79	ENFP – 1.69 INTP – 1.67 INTJ – 1.65	ESTP – 1.62 ESTJ – 1.61	ENFJ – 1.58 ESFJ – 1.57 ESFP – 1.54 ISTP – 1.52 INFP – 1.50 ISTJ – 1.48 INFJ – 1.42 ISFP – 1.40 ISFJ – 1.39

Table 4. Personality types and entrepreneurial orientation.

### Conclusion

According to the results, the most entrepreneurial preferences were extra-verted (E) and intuitive (N). Results of Routamaa et al.'s (1996) study were in line with these results. Other studies have also indicated that the perceiving (P) preference was in line with entrepreneurship (Ginn and Sexton 1988; Järnlström 2002), but in this study there were no differences between judging and perceiving preferences. The means indicate that the intuitive (N) preference had the highest tendencies toward entrepreneurship when compared to other personality preferences. Earlier studies confirm that intuition orientated (Ns) are strongly connected to entrepreneurship, but the result was still surprisingly strong here. Intuition oriented persons tend to focus on future possibilities, and they tend to be creative and innovative (Myers and Myers 1990), and maybe that is why entrepreneurship is so tempting to them as entrepreneurship may give them more unlimited opportunities than other career choices. Earlier studies indicate that creativity and innovativeness are strong predictors for entrepreneurship with risk-taking (Langkamp-Bolton and Lane 2011; Levenburg and Schwarz 2008; Macko and Tyszka 2009). Thus, these results are logical when intuitives as creative personalities show a tendency toward entrepreneurship. Persons with preferences of the sensing personalities are more practical, and thus they see more easily the restrictions of ideas and possible risks also (Myers and Myers 1990).

Introverted (I) and sensing (S) personalities are not inclined toward entrepreneurship according to the results. However, in many fields which focus on arts and crafts there are plenty of entrepreneurs with these personalities. Many educators in these fields say that a large number of their students become entrepreneurs even if they do not have any motivation to do so. Finnish entrepreneurial education should find ways to motivate those people who are not tempted to be entrepreneurs, but whose choice in education and whose interests do not give them many other choices.

Focusing on areas other than risk-taking and competition, such as emphasizing the freedom to design their own schedules and working in a field that matches their main interests, could be more tempting to those people.

According to these results, gender has an impact on entrepreneurial tendencies when men rated themselves higher than women, but when looking at both personality and gender there were no differences, that is, both men and women with extraversion and intuition were more entrepreneurial compared to introversion and sensing.

At the type level, the most entrepreneurial personality types were ENTJ (extravert-intuitive-thinking-judging) and ENTP (extravert-intuitive-thinking-perceiving). Those personality types are described in Table 5. The only difference between them is the last preference pair, so it seems like extraverted, intuitive, and thinking personalities mostly tend toward entrepreneurship. Their common characteristics consist usually of high energy, good communication skills, and high self-esteem. They also have an abundance of ideas (Myers and Myers 1990). All in all, according to this study, people with extraverted and intuitive personality preferences as well as at type level ENTJ and ENTP have strong tendencies toward entrepreneurship. Students with those personalities could perhaps be encouraged to study and try entrepreneurship because it would give them a possibility to take risks, grow business and innovate new solutions, which are the strengths and enjoyment of those personalities.

ENTJ	ENTP
ENTJs are strategic leaders, motivated to organize change, and they usually want to take charge. They excel at logical reasoning and are usually articulate, quick, energetic, and logical.	ENTPs are inspired innovators and eager to find new solutions to challenging problems. They are curious, open-minded and unconventional.

Table 5. Descriptions of the most entrepreneurial types.

This study has limitations in terms of the measurement items. First, the questionnaire of entrepreneurship orientation measured mostly risk-taking and competitiveness, and even though these are important aspects of entrepreneurship, there are still some others that should be connected to entrepreneurship. Second, there should be more comprehensive indicators that can be used to measure entrepreneurial tendencies. However, when being an entrepreneur in Finland, high uncertainty avoidance and risk-taking is needed. Despite these limitations, the results relayed strong indicators that some personalities are naturally more inclined toward entrepreneurship than others. These results of the present study also supported earlier studies. However, more studies of Myers-Briggs

Type Indicator and entrepreneurial tendencies as well as more focused entrepreneurial education systems are needed in the future. Hatt (2018) has found in her research that higher education is a functional place for supporting entrepreneurship. Still there is lack of understanding of how to educate students effectively to choose an entrepreneurship route.

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