

# Let's be entrepreneurs – Finnish youth's attitudes toward entrepreneurship

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## Abstract

**Purpose** – The purpose of the study is to clarify Finnish youth's attitudes toward entrepreneurship and evaluate both regional and background factors influencing those attitudes.

**Design/methodology/approach** – The authors conducted a survey of 1,497 students aged 15 to 24 years and analyzed the data using descriptive statistical analysis.

**Findings** – The study's results indicate positive attitudes toward entrepreneurship among the youth. One of the notable findings of the study was the number of students who had already worked as entrepreneurs. The study also revealed background factors that affected entrepreneurial attitudes, such as regional aspects, entrepreneurial background and gender.

**Practical implications** – The results of this study highlight the importance of regional-level entrepreneurial education activities for increasing the vitality and entrepreneurial intentions within remote areas of Finland. This study suggests to develop new teaching methods to further raise entrepreneurial attitudes and expand gender equal entrepreneurial education programs aimed at promoting entrepreneurship, especially in remote areas.

**Originality/value** – The study results reveal that the attitudes of young Finnish people toward entrepreneurship seem to be at a more positive levels than indicated by earlier studies. In previous Global Entrepreneurship Monitor studies, researchers evaluated Finnish youth's attitudes toward entrepreneurship. By contrast, this study's data was based on the opinions of youth in the region with the youngest population in Finland, and they described the entrepreneurial attitudes of themselves and their peers.

**Keywords** Entrepreneurial attitudes, Young people, Survey, Finland

**Paper type** Research paper

## 1. Introduction

Entrepreneurial activity has been described as being crucial for promoting inclusive and sustainable growth, employment and decent work for all ([United Nations, 2016](#)). However, as business owners in industrialized countries continue to age, many of their enterprises



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may be threatened with closure if there are no younger people interested in continuing them (Kunze *et al.*, 2011). Moreover, entrepreneurship has been increasingly seen as a notable solution toward the challenges experienced in public economic activities (Ratten, 2019) and a means for young people to employ themselves (Audretsch and Thurik, 2004).

Since the first decade of the 2000s, entrepreneurial education has, to a remarkable extent, aimed to impact the well-being of young people worldwide by targeting decent job creation and entrepreneurship (United Nations, 2016). In Europe, education in entrepreneurship mainly began to enter curricula in the 1990s (Twaalfhoven and Wilson, 2004) by being nationally and internationally emphasized in policy frameworks (Palalic *et al.*, 2017). The educational content in this area focused on building the necessary skills and actions to develop entrepreneurial attitudes (Wilson, 2008). According to the theory of planned behavior, attitudes lead to intentions and intentions to behavior (Ajzén, 1991). Therefore, more positive perceptions of entrepreneurship lead to greater intentions of becoming an entrepreneur (Joensuu *et al.*, 2014; Krueger *et al.*, 2000; Tonttila, 2001; Van Gelderen and Jansen, 2006).

Entrepreneurial education has also been systematically developed in Finland since the 1990s (Ristimäki, 2004). Despite the development efforts, entrepreneurial activity among the Finnish population is low. According to Global Entrepreneurship Monitor (GEM) research of different age groups, the youngest group (18–24 years) has the lowest amount of entrepreneurial activity in Finland (0.3%). By contrast, the European average among this age group is 1.2% (e.g. Estonia 2.0%, Sweden 0.8% and Greece 5.8%; Suomalainen *et al.*, 2016). Though attitudes toward entrepreneurship in Finland are comparatively more positive than in other countries, these attitudes have led to weaker intentions of becoming an entrepreneur and establishing a company than in other countries (Suomalainen *et al.*, 2016).

This disparity between positive entrepreneurial attitudes and low entrepreneurial activity was the inspiration for this research. Thus, the purpose of this study is to clarify Finnish youth's attitudes toward entrepreneurship and evaluate the factors that influence them. This issue is important because entrepreneurial attitudes are strongly related to the entrepreneurial education of a country (Mwasalwiba, 2010; Peterman and Kennedy, 2003). By focusing on the current conditions of Finnish youth's entrepreneurial attitudes and the factors behind them, this study clarifies factors related to personal characteristics and entrepreneurial education that can be used to further develop and improve entrepreneurial activity not only in Finland but also in other countries.

Bearing in mind that interest in entrepreneurship is also a driving force of the economy throughout Europe, the study was conducted based on the theory that entrepreneurial attitudes influence entrepreneurial intentions (Ajzén, 1991) and investigated the following questions:

*RQ1:* What are the attitudes of Finnish youth toward entrepreneurship?

*RQ2:* How do entrepreneurial family background, gender, school level and regional differences affect entrepreneurial attitudes?

This study focuses on young Finnish people's evaluations of their own and their peers' attitudes toward entrepreneurship. This is an important point of view to consider, because in some previous studies (e.g. GEM research), these perceptions have been interpreted by researchers (Suomalainen *et al.*, 2016). This study of young people's entrepreneurial views adds direct and authentic information to existing knowledge. The study focuses on ascertaining the attitudes of young people that influence entrepreneurial intentions and decisions to become an entrepreneur. Hereby, entrepreneurial attitudes are studied for two essential viewpoints:

- (1) the general state of attitudes toward entrepreneurship; and
- (2) an attitude that regards entrepreneurship as a possible career option.

These perspectives have also been used in GEM research, which has shown that attitudes toward entrepreneurship among young people in Finland are generally in a good state, but they do not lead people to making their own businesses (Suomalainen, *et al.*, 2016). In addition, the study explores the impacts of other factors on the development of entrepreneurial attitudes. The background factors include regional differences, entrepreneurial background, gender and school level. The selection of these factors was based on the work of previous research (Lopes *et al.*, 2020; Zellweger *et al.*, 2011; Vamvaka *et al.*, 2020).

The study's data were based on 1,497 replies from students between 15 and 24 years old in different educational levels living in the Finnish province of Northern Ostrobothnia. The province was selected because it has the largest youth population in Finland and because entrepreneurial attitudes seem to be on the rise, especially among young people (Haikkola and Myllyniemi, 2020). Northern Ostrobothnia has three distinct regions:

- (1) a large town area with a university, large industry and white-collar jobs;
- (2) a sparsely populated area with active micro-, small- and medium-sized industries and a low unemployment grade; and
- (3) a sparsely populated area with tourism-related clusters and a high unemployment grade.

The findings of this study offer novel knowledge in the research of entrepreneurial attitudes among students. Regarding the focus on young people's entrepreneurial attitudes, this study adds new knowledge to a seldom researched topic (Xu *et al.*, 2016). The study also reveals the influence of related factors such as regional aspects, entrepreneurial background, gender and school level on entrepreneurship. Thus, the paper offers a significant contribution to the promotion of entrepreneurial attitudes in society in general and suggests entrepreneurship education programs take into account regional impartiality, aspects of entrepreneurial background and gender.

This study is organized in the following manner. The next section, Section 2, presents the study's theoretical background. Section 3 contains the study's methodology. Section 4 presents the results of the study. Discussion of the results is in Section 5. Finally, in Section 6, the conclusions and suggestions for future research are offered.

## 2. Theoretical background

An entrepreneurial attitude has a strong correlation to intention and becoming an entrepreneur (Moi, Adeline ja Dyana, 2011; Robinson, Stimpson, Huefner ja Hunt, 1991; Krueger *et al.*, 2000; Van Gelderen and Jansen, 2006). Notably, several studies have shown positive entrepreneurial intentions to anticipate company establishment (Krueger *et al.*, 2000; Lortie and Castogiovanni, 2015; Schjoedt, 2018). Moreover, entrepreneurial attitudes have a significant effect on strengthening of the entrepreneurial intentions and becoming an entrepreneur (Ajzén, 1991; Moriano *et al.*, 2012). Education programs that teach about entrepreneurship can also affect attitudes toward entrepreneurship (Mwasalwiba, 2010; Peterman and Kennedy, 2003). Other aspects like regional differences, entrepreneurial background, gender and school level can also influence these attitudes (Lopes *et al.*, 2020; Zellweger *et al.*, 2011; Vamvaka *et al.*, 2020).

A nation's level of respect for entrepreneurs, as evidenced by people's attitudes toward those who have obtained personal wealth through entrepreneurial activities as well as positive publicity on the topic, strengthens people's attitudes toward entrepreneurship (Lounsbury and Glynn, 2001; Verheul *et al.*, 2002). Bosma and Schutjens (2011) have revealed that the components of entrepreneurial attitudes, such as fear of failure when

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starting a business, perceptions of start-up opportunities and self-assessment of personal capabilities to start a firm, have an effect on entrepreneurial activity. The relationship between cultural values and entrepreneurial intention is, however, complex (Rantanen and Toikko, 2017).

The relationship between individualism and entrepreneurial intentions is subsequently studied based on present country-level statistics. Xavier *et al.* (2013) have indicated that entrepreneurial intentions are at their lowest levels in Ireland, Germany, Denmark and Finland, which are all individualistic countries. Based on this country-level comparison, it would seem that in many individualistic countries, entrepreneurial intention is lower than in countries with a lower level of individualism (Rantanen and Toikko, 2017).

Numerous studies have analyzed entrepreneurial intentions by comparing different regions or countries, and a range of regional features that influence entrepreneurial activity at the individual level have been identified (Lopes *et al.*, 2020; Arranz *et al.*, 2019; Kibler *et al.*, 2014; Fritsch and Falck, 2007; Reynolds *et al.*, 1994). At the regional level, a positive relationship between entrepreneurial attitudes and activity is expected (Bosma and Schutjens, 2011). Entrepreneurial intention can be “driven by necessity” or can stem from the “attraction of opportunities” (Li and Dacosta, 2016). In explaining regional prevalence rates of phases in entrepreneurial activity, regional aspects were found to be significant entrepreneurial attitude components. The literature suggests that highly populated urban regions tend to be more supportive of business start-ups than sparsely populated rural areas. These urban regions typically provide more access to market opportunities and entrepreneurial resources (Kibler *et al.*, 2014; Reynolds *et al.*, 1994; Tödtling and Wanzenböck, 2003). Urban regions that demonstrate a high gross regional product (GRP) growth rate, low unemployment rates and vibrant entrepreneurial environments where people come across start-up entrepreneurs yield a situation that makes entrepreneurial attitudes easier to develop. In addition, a high regional population density and population growth coincide with relatively low fear of failure attitudes at the regional level (Bosma and Schutjens, 2011).

Entrepreneurial attitudes have an impact on future career choices (Matlay and Carey, 2007; Nabi, Holden, and Walmsley, 2010), which is why promoting positive entrepreneurial attitudes is important during studies in basic schools. An interesting perspective has been provided by Botsaris and Vamvaka (2016). In their study, they examined the relationship of cognitive and affective components of entrepreneurial attitudes to strengthened entrepreneurial intention. They noted that the effectiveness and predictability of the affective component, in terms of intentional reinforcement, is greater than that of the cognitive component (Botsaris and Vamvaka, 2016). In this case, positive and negative perceptions concerning entrepreneurship seemed to be more significant than cognitive factors. Known prejudices about entrepreneurship can be reduced through entrepreneurial information and education as well as real-life examples of entrepreneurs in field (Tonttila, 2001). Further research is still needed, especially to find the factors that cause young people to form positive or negative entrepreneurial attitudes and to determine how they assess their own entrepreneurial abilities (Tonttila, 2010; see also Kyrö, 2008; Pihkala, 2008).

Several studies (Joensuu *et al.*, 2014; Nabi *et al.*, 2010; Pihkala, 2008; Wu and Lingfei, 2008) have indicated that entrepreneurial intentions do not necessarily develop positively during entrepreneurship education in higher education. Instead, intentions remain relatively fixed or even decline. Among the factors influencing this occurrence, the studies have highlighted that education increases a student's uncertainty about their own entrepreneurial abilities (Pihkala, 2008), and that with entrepreneurship studies, it becomes clear to some students that an entrepreneur's career is not for them (Joensuu *et al.*, 2014). Among the factors behind the phenomenon in the context of Finnish education institutions, excessive goals of entrepreneurship studies, lack of encouragement

to become an entrepreneur, lack of related intellectual support, the quality of the entrepreneurship studies program and the timing of studies have been highlighted (Pihkala, 2008).

Entrepreneurship has not been seen as a natural pathway to employment after university studies (Mäki and Vafidis, 2000; Römer-Paakkanen, 2007). For example, although polytechnic students' attitudes toward entrepreneurship are highly positive, research has shown that almost half of them still do not want or intend to become entrepreneurs (Kivelä, 2002). In recent studies, more young people perceive entrepreneurship as a possible career option after graduation (Haikkola and Myllyniemi, 2020). Young people's entrepreneurial activity in Finland is however at a particularly low level in comparison to other countries (Suomalainen *et al.*, 2016). This trend may not remain constant as the number of prospective entrepreneurs – such as those among Finnish university students – is growing significantly. Since 2006, the reported level of entrepreneurial intentions among university students has doubled (Ruskovaara and Pihkala, 2019). It seems that entrepreneurship is by far the most attractive career option for Finnish university students, with 31.5% of the participants of the study. Ruskovaara and Pihkala (2019) have revealed that for male students, the percentage of those who consider entrepreneurship as a career more than triples after five years. For women, the attractiveness of entrepreneurship also rises dramatically after five years.

Having parents who are entrepreneurs has traditionally been one of the best predictors of who pursues an entrepreneurial career (Kuckertz and Wagner, 2010; Chlosta *et al.*, 2012; Uygun and Kasimoglu, 2013; Pihkala *et al.*, 2016). Moreover, paternal role models were emphasized in a study by van Auken *et al.* (2006). Some previous studies have concluded that young people in entrepreneurial families have a more realistic understanding of the work of an entrepreneur than children in non-entrepreneurial families (Kivelä, 2002; Zellweger *et al.*, 2011). Zellweger *et al.* (2011) have indicated that students with a family business background are pessimistic about being in control of an entrepreneurial career but are optimistic about their efficacy to pursue such a career. Nevertheless, they consider themselves to be less able entrepreneurs than other young people. Despite conventional thinking, the study by Pihkala *et al.* (2016) in Finland found that having parents who are entrepreneurs explained only a modest share of students' entrepreneurial intentions. This finding has indicated that students' entrepreneurial drive arises from somewhere other than their homes.

The effect of gender on a person's entrepreneurial intentions is perhaps the most studied characteristic (Nevanperä, 2019). Self-employment and entrepreneurship for women have been a part of the political agenda for some decades (Holmquist and Sundin, 2015), but the percentage of female students who have established their own businesses is 6.1%. By contrast, among male students, the number is 14.2% in Finland (Suomalainen *et al.*, 2016). Nevanperä's (2019) study on secondary school students supports the belief that men's entrepreneurial roles and intentions are more prominent than those of women. Concurrently, women make up 34% of the entrepreneurs in Finland (OSF, 2019). The reasons for the difference between genders are abundant. However, it is likely that an entrepreneurial career presents more risks to female students than it does to male students (Wilson *et al.*, 2007; Diaz-Garcia and Jiménez-Moreno, 2009; Vamvaka *et al.*, 2020). For women, there are negative implications when choosing an entrepreneurial career in terms of weaker social policy benefits related to family and children. The personal and social risks are thus higher for women than for men. Suomalainen *et al.* (2016) has revealed that fear of failure is also higher among young women than men. It is, however, necessary to exert caution when offering gender-based explanations for lower entrepreneurial activity rates among women. Research has documented several structural reasons for the differences between genders, such as

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gendered educational and occupational choices that affect the attractiveness of entrepreneurship among women and men (Ahl and Nelson, 2010).

Youth's attitudes  
toward  
entrepreneurship

### 3. Data, methods and background factors

The purpose of this research is to study entrepreneurial attitudes. For this goal, students ( $N = 1,497$ ) who live in the Northern Ostrobothnia province of Finland were surveyed using a Webropol questionnaire in December 2019 and January 2020. The survey included questions concerning background information, young people's interest toward entrepreneurship and questions based on GEM surveys (Suomalainen *et al.*, 2016). A descriptive and comprehensive approach is used to give a broad picture of the differences between various kinds of regions of Northern Ostrobothnia.

As entrepreneurial attitudes are especially rising among young people (Haikkola and Myllyniemi, 2020), it was decided that research data would be collected from the province of Northern Ostrobothnia, where most of Finland's young population lives. Entrepreneurship education has also been conducted throughout the Northern Ostrobothnia region – e.g. in the form of an integrated strategy for entrepreneurship education (Eskola *et al.*, 2017).

The questionnaire was administered to classes and groups in seven secondary schools, six upper secondary schools, five vocational schools, three polytechnics and one university. Secondary school students in ninth grade (age 15) responded to the questionnaire during regular school lessons. The researchers attended lessons on site, shared the purpose of the research and provided students with a link to an electronic Webropol survey. In upper secondary schools, the target group was primarily third-year students at the age of 18, and the survey was conducted through teacher collaboration. In vocational schools (students mainly aged 16 to 18), a member of the research team visited the site to conduct the survey except for one school in which the survey was conducted through teacher collaboration. In polytechnics, the survey was conducted by the school's teachers or a member of the research group. In addition, in one polytechnic, a questionnaire link was made visible to students on the local network within the institution. At the university, information was mainly obtained under the guidance of a member of the research group in connection with information acquisition courses organized by the library. This approach allowed students from various fields to be reached. Furthermore, the online material was supplemented by surveys conducted in the campus hallways by a member of the research group and teacher cooperation. In addition, a description of the study and a link to the questionnaire were sent via the university's student mailing list.

The survey was focused on entrepreneurial attitudes of young people. The ages of the respondents were from 15 to 24 years old. Students under 18 years of age comprised 55% of the total respondents. The backgrounds of the participants were defined by the following factors: region, entrepreneurial background, entrepreneurial background in regions, gender, entrepreneurial background compared to gender, gender in different regions, school level and entrepreneurial background compared to school level. The gender factor was divided into "female"; "male"; and "inter" to broaden the gender approach and include all gender variations (Kusakabe *et al.*, 2017). Research sampling in relation to selected factors is depicted in Table 1.

Northern Ostrobothnia is a geographically large area with three zones that can be distinguished in terms of the age and economic structure of the population: Oulu ("Urban"), Oulu South ("Rural 1") and the Northeast ("Rural 2"). Oulu (Urban) is the most important technology, education and cultural center in the region. The university and one polytechnic are situated in this area. Oulu South (Rural 1) includes four sub-regions with different profiles. The *Raahe* sub-region has both an industrial center, a major steel company and a

Region	Northern Ostrobothnia	Urban	Rural 1	Rural 2
Entrepreneurial background compared to gender				
	100.0%	43.5%		9.5%
% (N)	(N = 1,497)	(N = 651)	47.0% (N = 704)	(N = 142)
<i>Entrepreneurial background</i>				
% (N)/Yes	42.2% (N = 632)	39.2% (N = 255)	44.3% (N = 312)	45.8% (N = 65)
% (N)/No	57.8% (N = 865)	60.8% (N = 396)	55.7% (N = 392)	54.2% (N = 77)
<i>Gender</i>				
% (N)/Female	52.0% (N = 778)	56.7% (N = 369)	49.4% (N = 348)	43.0% (N = 61)
% (N)/Male	46.1% (N = 690)	41.6% (N = 271)	48.4% (N = 341)	55.0% (N = 78)
% (N)/Inter	1.9% (N = 29)	1.7% (N = 11)	2.1% (N = 15)	2.1% (N = 3)
<i>School level</i>				
Secondary school	15.6% (N = 233)			
Vocational	23.9% (N = 358)			
Upper secondary school	15.9% (N = 238)			
Polytechnics	21.6% (N = 323)			
University	23.0% (N = 345)			
<i>Entrepreneurial background compared to gender</i>				
% (N)/Female/Yes		43.6% (N = 339)		
% (N)/Female/No		56.4% (N = 439)		
% (N)/Male/Yes		40.4% (N = 279)		
% (N)/Male/No		59.6% (N = 411)		
% (N)/Inter/Yes		48.3% (N = 14)		
% (N)/Inter/No		51.7% (N = 15)		
<i>Entrepreneurial background compared to school level</i>				
% (N)/Secondary school/Yes		45.1% (N = 105)		
% (N)/Secondary school/No		54.9% (N = 128)		
% (N)/Vocational/Yes		37.7% (N = 135)		
% (N)/Vocational/No		62.3% (N = 223)		
% (N)/Upper secondary school/Yes		40.3% (N = 96)		
% (N)/Upper secondary school/No		59.7% (N = 142)		
% (N)/Polytechnics/Yes		47.4% (N = 153)		
% (N)/Polytechnics/No		52.6% (N = 170)		
% (N)/University/Yes		41.4% (N = 143)		
% (N)/University/No		58.6% (N = 202)		

**Table 1.**  
Webropol research  
sampling in relation  
to background  
factors (N = 1,497)

deep harbor as well as construction activities and primary production. There are many small businesses in the *Haapavesi-Siikalatva* sub-region. The *Ylivieska* sub-region has a concentration of specialty stores. Finally, the *Nivala-Haapajärvi* sub-region is an industrialized countryside and is the primary area of milk and meat production. In the Northeast (Rural 2), the regional activity is the exploitation of natural resources and tourism. The economic activities include food production and industry, production of metal products, forest and wood industries, natural products industries, reindeer husbandry and winter sports (Jokela *et al.*, 2016).

To clarify the characteristics of the region, Table 2 presents the comparative number of inhabitants in Finland and Northern Ostrobothnia and of the target regions. The table also describes the population in terms of age.

Northern Ostrobothnia has a relatively higher concentration of young people when compared to national averages. The proportion of the population 0–14 years old is 19.2%, whereas the national

average is 15.8%. People aged 15–24 years account for a higher percentage of the population in Northern Ostrobothnia (12.6%) than in the general population of Finland (11.1%; OSF, 2019). Within Northern Ostrobothnia, the Urban region has the highest proportion of 15 to 24-year-olds (14.1%). The share of people aged 15–24 years old in Rural 1 is 10.7%, and Rural 2 has the lowest share (9.0%) of this population.

Table 3 depicts further relevant information of the three zones within Northern Ostrobothnia. The data indicates that the Urban region is the most densely populated, with 46.6 inhabitants per km<sup>2</sup>. The number of companies is highest in the Rural 2 region, which has 69.4 companies per 1,000 inhabitants. This information later proved to be significant in the participants' background factors. When asked about their entrepreneurial background, the highest percentage of respondents with entrepreneurial experience was found in the Rural 2 region (45.8%), compared to the Rural 1 (44.3%) and Urban (39.2%) regions.

In the survey, the respondents were first asked to answer the question “Do you think young people are interested in entrepreneurship?” Participants responded to the statement by choosing between the answers “Yes” and “No.” The second survey question was “Are you ever going to become an entrepreneur?” Participants responded to this question by choosing from three options: “Yes,” “No” and “Possibly, but now is not the appropriate time.” Of these options, “Yes” and “Possibly” were interpreted as indicating a positive attitude toward entrepreneurship. The third option, “No,” was categorized as showing a negative attitude toward entrepreneurship.

To evaluate possible background factors influencing youth's attitudes toward entrepreneurship, the participants were also asked questions concerning their region of origin, entrepreneurial background, gender and school level. After the background factors,

	Inhabitants	Age structure			
		Aged 0–14 years (%)	Aged 15–24 years (%)	Aged 25–29 years (%)	Aged over 30 years (%)
Finland	5,525,292	15.8	11.1	6.4	66.7
Northern Ostrobothnia	412,830	19.2	12.6	6.4	61.9
- Urban	252,559	19.5	14.1	7.6	58.9
- Rural 1	117,976	19.5	10.7	4.6	65.2
- Rural 2	42,295	16.7	9.0	3.9	70.4

**Table 2.**  
The population of Finland and of the Northern Ostrobothnia area (OSF, 2019)

	Urban	Rural 1	Rural 2
Inhabitants per km <sup>2</sup> (population density)	46.6	8.6	2.4
Number of companies per 1,000 inhabitants	55.1	64.4	69.4
Unemployment rate (from labor force November 2020)	12%	9.9–14.2% *	12%
Entry rate (Number of starting enterprises per 1,000 inhabitants (2019))	6	5	4

**Table 3.**  
The background information of urban and rural areas (OSF, 2019)

**Note:** \*Varies between four sub-regions



the participants were also asked “Do you work (or have you worked) as an entrepreneur yourself?” For this question, respondents could choose from a variety of options: “Yes”; “No”; “Yes, in part, I have a company related to the study”; or “Yes, in part, I am involved in my family’s or my friend’s company.”

The responses collected from the Webropol survey were analyzed using descriptive statistical analysis (R Studio Version 1.2.5001 and R Version 3.6.2). Pearson’s chi-squared test was used to examine the independence of the variables studied in the contingency table. If the contingency table was a  $2 \times 2$  table, Pearson’s chi-squared test and Yates’ continuity correction are reported. Results of Pearson’s chi-squared tests marked with (\*) had an expected frequency lower than five, and R indicated that the chi-squared approximations may be incorrect (Ott and Longnecker, 2010). Young people’s interest in entrepreneurship was then examined in relation to the background factors: the region they are from, entrepreneurial background, gender and school level.

#### 4. Results

The survey results revealed that 66.5% of the students who participated in the survey answered “Yes” when asked if young people are interested in entrepreneurship (Table 4). When asked if they themselves shall ever become an entrepreneur, 64.4% of students answered “Yes” or “Possibly” (Table 4). These replies are considered to express a positive attitude toward entrepreneurship for the purposes of RQ1. The number of students who already work or have worked as entrepreneurs was notably high. Based on the research data, up to 9% of the young people who participated in the study work or have worked as entrepreneurs. In addition, 3% reported themselves as being self-employed in a company related to their studies, and 6% reported that they work in a company related to their family or friends. Of those who already work or have worked as entrepreneurs, 45% were female, 52% were male and 3% were intergender. Most of those who already work or have worked as entrepreneurs studied at polytechnics (32%), universities (28%), upper secondary schools (21%) or vocational schools (15%).

The results of RQ2, the entrepreneurial attitudes of respondents in relation to background factors – regions, entrepreneurial background and gender – are presented in Table 4. Differences between the surveyed groups were statistically significant compared to regional influence, entrepreneurial background and gender (Table 5). Differences between school levels were not found to be statistically significant. The percentage of “Yes” and “Possibly” replies were slightly higher among upper secondary school students (70.2%), while these positive responses were the lowest among vocational students (64.8%). The

Replies	All (%)	Ur- ban		Rural		Entrepr. back-gr. (%)	No entrepr.		Inter (%)
		(%)	(%)	1 (%)	2 (%)		back-gr. (%)	Fe-male (%)	
Are young people interested/ %/Yes	66.5	66.1	69.7	52.8	70.3	63.8	70.8	62.3	51.7
Are young people interested/%No	33.5	33.9	30.3	47.2	29.7	36.2	29.2	37.7	48.3
Are you going to become%/Yes or possible	64.4	63.7	66.1	59.2	74.1	57.3	58.2	71.0	72.4
Are you going to become/%No	35.6	36.3	33.9	40.8	25.9	42.7	41.8	29.0	27.6

**Table 4.** Entrepreneurial attitudes of young people in relation to background factors

responses from students at other school levels were between these two percentages, 67.0% (secondary school), 66.4% (university students) and 65.6% (polytechnics).

The amount of students with entrepreneurial backgrounds were higher in both areas of Rural 2 (45.8%) and Rural 1 (44.3%). In the Rural 1 area, where were many students had an entrepreneurial background, entrepreneurial attitudes were also positive: 69.7% answered yes when asked if young people are interested in entrepreneurship and 66.1% answered yes or possibly when asked if they shall ever become an entrepreneur. In the Rural 2 area, the high level of entrepreneurial background did not correspond to a positive entrepreneurial attitude: 52.8% answered yes when asked if young people are interested in entrepreneurship, and 59.2% answered yes or possibly when asked if they shall ever become an entrepreneur. That was why three different regions were explored more deeply between entrepreneurial background, gender and positive attitudes toward entrepreneurship (Table 6).

#### 4.1 Regional influence

There were differences among young people's entrepreneurial attitudes based on their region of origin in Northern Ostrobothnia. Of the students in the educational institutions of the Rural 2 region, 52.8% chose "Yes" when asked whether young people are interested in entrepreneurship. In the Rural 1 region, the corresponding percentage of "Yes" respondents was 69.7%, and in the Urban region, it was 66.1%. The differences between the regions were statistically significant ( $p = 0.0005$ ) (Table 5).

	Regional influence	Entrepreneurial background	Gender	School level
$\chi^2$	15.326	6.798	14.789	2.03203
df	2	1	2	4
$p$	0.00046996*	0.009126*	0.000615*	0.7298675

**Note:** \*Statistically significant differences

**Table 5.**  
The statistical significance of differences between student groups to ("are young people interested")

	Urban		Rural 1		Rural 2	
	Eb. yes (%)	Eb. no (%)	Eb. yes (%)	Eb. no (%)	Eb. yes (%)	Eb. no (%)
Entrepreneurial background = Eb.						
Are young people interested%/Yes	71.4	62.6	71.8	68.0	58.5	48.1
Are young people interested%/No	28.6	37.4	28.2	32.0	41.5	51.9
Are you going to become%/Yes or possible	73.3	57.6	75.7	58.3	69.2	50.7
Are you going to become%/No	26.7	42.4	24.3	41.7	30.8	49.3
<b>Gender*</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
Are young people interested%/Yes	65.3	67.2	62.4	77.3	51.3	55.7
Are young people interested%/No	34.7	32.8	37.6	22.7	48.7	44.3
Are you going to become%/Yes or possible	72.0	57.5	72.1	60.1	62.8	52.4
Are you going to become%/No	28.0	42.5	27.9	39.9	37.2	47.6

**Note:** \*Inter gender replies are not included because of small amount of their replies when divided into three regions

**Table 6.**  
Entrepreneurial attitudes of young people in three different regions compared to entrepreneurial background and gender

When asking participants if they themselves shall ever become an entrepreneur, the differences between regions were slightly smaller. For the Rural 2 region, 59.2% of the respondents answered “Yes” or “Possibly,” compared to 66.1% of the respondents in Rural 1 and 63.7% of the respondents in the Urban region. The entrepreneurial attitudes of the respondents in the Rural 2 region were slightly lower than in other regions, but they still perceived themselves as more personally interested in becoming entrepreneurs.

#### *4.2 Entrepreneurial background*

The results indicate that 70.3% of students with an entrepreneurial background presume that young people are interested in entrepreneurship (Table 4). For those with a non-entrepreneurial background, this figure is 63.8% (Table 4). The difference between answer groups was statistically significant ( $p = 0.009$ ) (Table 5). The impact of respondents’ entrepreneurial backgrounds was slightly greater when asked if they themselves shall become an entrepreneur. Of the students with an entrepreneurial background, 74.1% answered “Yes” or “Possibly.” The corresponding percentage for those with a non-entrepreneurial background was 57.3%. Entrepreneurial attitudes of the students with an entrepreneurial background were slightly more positive in general, but their attitudes were shown to be even more positive when answering the question about becoming an entrepreneur as compared to students without an entrepreneurial background.

Of the students who had an entrepreneurial background in the Rural 2 region, only 58.5% answered “Yes” when asked if young people are interested in entrepreneurship (Table 6). Concurrently, 69.2% of them answered “Yes” or “Possibly” to the question of ever becoming an entrepreneur (Table 6). Regarding the students who had an entrepreneurial background in the Urban region, 71.4% were of the opinion that young people are interested in entrepreneurship, and 73.3% of them answered “Yes” or “Possibly” when asked if they shall ever become an entrepreneur themselves (Table 6). In the Rural 1 region, 71.8% of students with an entrepreneurial background answered “Yes” to the question of whether young people are interested in entrepreneurship, and 75.7% of them answered “Yes” or “Possibly” when asked if they considered the possibility of becoming an entrepreneur (Table 6).

#### *4.3 Gender*

As presented in Table 4, the study results indicate that 70.8% of female students believe young people are interested in entrepreneurship. The corresponding figure for male students was 62.3% and 51.7% for intergender students (Table 4). The differences between the respondent groups were statistically significant ( $p = 0.0006$ ) (Table 5). When asked if they shall ever become entrepreneurs, 58.2% of female, 71.0% of male and 72.4% of intergender respondents answered “Yes” or “Possibly” (Table 4). A discrepancy of attitudes can be observed in the female students’ responses. Although 70.8% of female respondents presumed that young people were interested in entrepreneurship, only 58.2% of them considered the possibility of becoming entrepreneurs themselves. The most significant difference between responses was found among students who identified as intergender. While only 51.7% of intergender respondents presumed that young people were interested in entrepreneurship, 72.4% of the intergender respondents believed that they may become entrepreneurs themselves. However, it should be noted that there were only 29 intergender respondents in the group; therefore, no further conclusions or generalizations can be made about this.

#### 4.4 School level

When assessing the impact of school level on students' entrepreneurial attitudes, the results reveal that school level had only a small effect on young people's entrepreneurial attitudes. Based on the responses, the upper secondary students had the strongest belief that young people are interested in entrepreneurship. More than two-thirds of upper secondary school respondents, 70.2%, answered that young people are interested in this activity. By contrast, only 64.8% of the vocational students answered "Yes" to the same question. The differences in responses by school level, however, were not statistically significant ( $p = 0.7$ ). On the question of becoming an entrepreneur themselves, the differences in relation to school level were even smaller.

### 5. Discussion

This study focused on clarifying Finnish youth's attitudes toward entrepreneurship and examining the influence of background factors on those attitudes with the descriptive and comprehensive survey. In general, the study revealed that the attitudes of young Finnish people toward entrepreneurship seem to be at a more favorable level than stated by earlier studies (Suomalainen *et al.*, 2016). Specifically, the results show that 66.5% of the students believed that young people were interested in entrepreneurship, and 64.4% of students were in favor of starting a business in some point (Table 4). Research data further indicated that up to 9% of the young people who participated in the study work or have worked as entrepreneurs. In addition, 3% reported themselves as being self-employed in a company related to their studies, and 6% answered that they worked in a company related to their family or friends. According to previous studies, the higher the entrepreneurial interest, the more positive entrepreneurial attitudes are, and thus, the greater the intentions a person has toward entrepreneurship (Ajzén, 1991; Krueger *et al.*, 2000; Schjoedt, 2018). The results are in line with Ruskovaara and Pihkala's study (2019), which stated that entrepreneurship has become more appealing to young people.

This study also examined the impact of students' regions on entrepreneurial attitudes. When analyzing the data, including all school levels, statistically significant differences were found between regions. Only 52.8% of students in educational institutions of the Rural 2 region chose "Yes" when asked whether young people are interested in entrepreneurship (Table 4). In the Rural 1 region, the corresponding proportion of respondents was 69.7%, and it was 66.1% in the Urban region (Table 4). In Northern Ostrobothnia, Rural 2 differs from other regions because of its greater number of companies per 1,000 inhabitants. There are 69.4 companies per 1,000 inhabitants in Rural 2, while in the Rural 1 region, there are 64.4, and in the Urban region there are 55.1 companies per 1,000 inhabitants (OSF, 2019) (Table 3). The study supports earlier research that found regional features and local entrepreneurial activity (Lopes *et al.*, 2020; Arranz *et al.*, 2019) influence entrepreneurial intentions. However, this study found that despite the larger number of companies per 1,000 residents (but lower number of starting enterprises) and high unemployment rate, students in the more remote Rural 2 area had less favorable attitudes toward entrepreneurship than in other regions. This disparity caused us to consider whether there was an unknown explanatory factor between regions that needed closer examination.

Most students with an entrepreneurial background were interested in becoming entrepreneurs (74.1%), but they rated young people's general interest toward entrepreneurship at slightly lower levels in comparison (70.3%) (Table 4). Young people with an entrepreneurial background seem to have more positive attitudes toward entrepreneurship than those with a non-entrepreneurial background. Botsaris and Vamvaka (2016), Joensuu *et al.* (2014) and Krueger *et al.* (2000) have stated that greater entrepreneurial

knowledge can influence entrepreneurial attitudes, and attitudes have a significant effect on strengthening entrepreneurial goals (Ajzén, 1991). Young people with an entrepreneurial background also demonstrated a more positive attitude toward becoming an entrepreneur than other young people (Table 4). The attitudes of those with a non-entrepreneurial background seemed to convey the opposite. Young people with an entrepreneurial background have a more realistic understanding of entrepreneurship and its positive and negative aspects, which reinforces intentions more significantly than cognitive factors (Botsaris and Vamvaka, 2016).

The Rural 2 region examined in this study has more companies per 1,000 inhabitants than the Rural 1 and Urban regions. This characteristic of the region became relevant when examining the different groups of students based on whether they had entrepreneurial background or not. The Urban region had the lowest percentage of participants with an entrepreneurial background (39.2%) compared to Rural 1 (44.3%) and Rural 2 (45.8%), which had the highest percentage of participants with an entrepreneurial background (Table 1). Despite their higher rates of entrepreneurial background, the participants in the Rural 2 region did not have the most positive attitudes toward entrepreneurship. Zellweger *et al.* (2011) have revealed that students with a family business background are pessimistic about having their own business but optimistic about their efficacy to pursue an entrepreneurial career. They consider themselves to be less suited to being entrepreneurs compared to other young people (Zellweger *et al.*, 2011).

The differences between entrepreneurial attitudes of young people in the regions could also be related to the general vitality of each particular region and its impact on the willingness of young people to start a business. In regions with young age structures and a low unemployment rate (e.g. Rural 1), the general economic atmosphere is positive for growth and development. However, in areas with an aging population and migration losses (e.g. Rural 2), setting up a business can be an important means of employment. In such an area, slightly lower but positive entrepreneurial attitudes may more likely lead people to start a business. This condition is notable and supports Li and Dacosta's (2016) study, which mentioned that entrepreneurship can arise from necessity or attractive opportunities. The area of Rural 2 attracts tourists and offers several opportunities for new entrepreneurship. Kibler *et al.* (2014), Reynolds *et al.* (1994) and Tödting and Wanzenböck (2003) have however suggested that urban areas support entrepreneurship by providing more readily available market opportunities and entrepreneurial resources than sparsely populated rural areas.

When the responses to the survey were examined in relation to gender, statistically significant differences were also found. Regarding the question of whether young people are interested in entrepreneurship, 70.8% of female respondents answered "Yes." Of the male respondents, 62.3% answered "Yes," and of those who identified as intergender, 51.7% answered affirmatively (Table 4). This outcome reflects the opposite of the gender distribution of business owners in Finland, as women make up just 34% of entrepreneurs (OSF, 2019). In Rantanen and Toikko's (2017) study of young students aged 17 to 18, entrepreneurial intentions were higher for males than for females. When asked about their personal readiness to start a business, the data were more in line with previous survey results: 58.2% of females and 71.0% of males were willing to start entrepreneurial activities at some point (Table 4). The difference in responses was greatest among intergender respondents. While only 51.7% of intergender respondents presumed that young people are interested in entrepreneurship, 72.4% of the respondents reported thinking that they may become entrepreneurs themselves (Table 4). The number of intergender respondents was however too small to draw generalizable conclusions from their responses.

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Suomalainen *et al.* (2016) have suggested that fear of failure is greater in females than in males. This could explain the results of this study. For example, though more females believed that young people are interested in entrepreneurship, they themselves were not as interested in establishing their own companies. This finding is in line with previous studies that have focused on female entrepreneurship (Wilson *et al.*, 2007; Diaz-García and Jiménez-Moreno, 2009; Vamvaka *et al.*, 2020).

From the point of school levels, there were no statistically significant differences between school levels found from the point of entrepreneurial attitudes in this study.

## 6. Conclusions and further research

This study examined young people's perceptions of their peers' and their own attitudes toward entrepreneurship. Additionally, the research used background factors, such as regional differences, entrepreneurial background, gender and school level, to evaluate their impact on entrepreneurial attitudes. For the study, a survey was conducted among 1,497 participants aged 15 to 24 years. The respondents lived in three different kinds of regions in the Northern Ostrobothnia province, where most of Finland's youth reside. The survey's goal was to collect data regarding Finnish youth's attitudes toward entrepreneurship and the influence of background factors on those attitudes.

The study revealed that young people generally regard their peers and themselves as having a positive attitude toward entrepreneurship. This indicates that young people see entrepreneurship as a considerable employment option too. The survey data showed that regional characteristics proved to influence respondents' personal entrepreneurial attitudes. Young people in the area with a younger population seem to be the most interested in entrepreneurship. This area corresponds to Rural 1, which has several small companies, agriculture and a major steel company. Having an entrepreneurial background seemed to have a positive effect on entrepreneurial attitudes. However, the effect of regional differences seemed to be even stronger. Survey data concerning gender demonstrated that youth who identified as intergender felt entrepreneurship was a possible employment choice for them. Female students had a less favorable attitude toward entrepreneurship. Finally, students' school levels indicated no statistically significant differences in entrepreneurial attitude.

Based on the results of this study, young people in remote areas have less positive attitudes toward entrepreneurship in general than young people in other regions. This result was found even though an important means of self-employment in remote areas is entrepreneurship. Measures to promote entrepreneurial activity and knowledge should therefore also aim to increase economic vitality and confidence in remote areas. For years, the Northern Ostrobothnia region has worked to develop entrepreneurship education programs throughout the province. Based on the results of this study, it is worth continuing these programs in the different regions of the province.

For young people with an entrepreneurial background, their general entrepreneurial attitudes were slightly higher than their peers on average. However, regional aspects seemed to be even stronger. According to these findings, both aspects have to be considered when planning entrepreneurship education programs in remote areas. Overall, the survey provides novel insights into Finnish youth's thoughts about entrepreneurship and how they perceive the possibility of starting their own businesses. The insights from this survey are important for both researchers and practical actors in the field of promoting entrepreneurship and developing entrepreneurship education.

Referring to the theoretical implications, this study offers new knowledge regarding entrepreneurial attitudes as an essential component promoting entrepreneurial intentions (Ajzén, 1991). This study also contributes to entrepreneurial education research by offering new

knowledge about how regional differences, entrepreneurial background, gender and school level impact entrepreneurial attitudes (Wilson *et al.*, 2007; Diaz-García and Jiménez-Moreno, 2009; Vamvaka *et al.*, 2020; van Auken *et al.*, 2006; Kivelä, 2002; Zellweger *et al.*, 2011; Bosma and Schutjens, 2011; Li and Dacosta, 2016). The results highlight the fact that the entrepreneurial background of young people influences their attitudes toward becoming entrepreneurs, as those with entrepreneurial background were more likely than those without entrepreneurial background to perceive entrepreneurship positively. Thus, this study suggests that entrepreneurship education includes realistic knowledge of entrepreneurship to promote activity among young people who have no entrepreneurial background.

According to the results of this study, young people consider entrepreneurship as an attractive opportunity in general. Specifically, some students already work as entrepreneurs or in family businesses. Therefore, self-employment and entrepreneurship could be considered a noteworthy means of employment for young people in remote areas. Measures to promote entrepreneurship education and entrepreneurial attitudes should therefore also aim to increase vitality and confidence in entrepreneurship in remote areas. This work has also been performed in Northern Ostrobothnia via entrepreneurial education strategy development (Eskola *et al.*, 2017), but there is still much to do in this field in relation to Northern Ostrobothnia, the whole of Finland and worldwide.

This paper highlights the importance of gender-equal entrepreneurial education at all school levels. As the findings of this study show, entrepreneurial attitudes among female students are not as positive as those who identify as male or intergender. One way to enhance entrepreneurial attitudes in general would be to encourage females to become entrepreneurs. This study suggests that future research investigate how female students could be encouraged to develop more positive attitudes toward entrepreneurship and whether entrepreneurial education programs for developing girls' and women's entrepreneurial activities are effective. Entrepreneurial education has been systematically developed in Europe since the 1990s (Twaalfhoven and Wilson, 2004). Since the 2010s, a global learner-centered approach emphasizing ethical and social responsibility and dialogue between the individual and society (Gabrielsson *et al.*, 2020) has been incorporated. Thus, the 2020s could be the time for gender equality to be a focus of entrepreneurial education.

This study focused on the state of young people's entrepreneurial attitudes and the background factors affecting them. A limitation of this research is that the study did not take a position on other factors that influence entrepreneurial attitudes. As a suggestion for further studies, it would be of interest to closely examine the factors that promote and prevent the formation of positive entrepreneurial attitudes. In practice, this could be done by analyzing the responses of participants to an open questionnaire. Additionally, as young people's entrepreneurial attitudes tend to be positive, it would be interesting to track the development of the attitudes of youth in the same area through longitudinal research. For example, attitudes could be surveyed again within a few years.

The results of this study are only valid in the context of Finland. An international comparative study would thus be welcome in the future. Finally, as the GEM survey has not been performed in Finland in the last few years, its relaunch should also be organized.

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#### Further reading

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