Entrepreneurship Education Differences between the Generations of Socialism and Post-Socialism*

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Abstract

The study investigates the generational differences in entrepreneurship education between socialist and post-socialist eras in Hungary, addressing an often-overlooked aspect of entrepreneurial studies. We analysed data from a Hungary-specific question block in the 2022 Global Entrepreneurship Monitor (GEM) dataset to examine disparities in access to entrepreneurial knowledge. Our findings reveal significant generational differences influenced by the natural evolution of education and historical events. A positive correlation was found between participation in entrepreneurship education and entrepreneurial activity. These findings highlight the need for tailored training programs that consider generational nuances. The study advocates for integrating entrepreneurship education at all levels to promote entrepreneurial ventures effectively.

Keywords: entrepreneurship education, Central and Eastern Europe, CEE, Hungary
JEL Codes: A20, L26, P29

1. Introduction

Entrepreneurship catalyses employment, economic growth, and regional progress (Galvão et al., 2017; Urbano et al., 2019). It is significantly fostered by dedicated entrepreneurship education and training initiatives (Martínez-Gregorio et al., 2021). Consequently, entrepreneurship education has garnered prominence on political agendas, exemplified by the European Commission's launch of the Entrepreneurship 2020 Action Plan (European Commission, 2013). This strategic initiative underscores the societal and economic significance of fostering entrepreneurial skills and knowledge in the educational landscape.

Although entrepreneurship education is often regarded as a homogeneous entity, a critical oversight neglects the variances in entrepreneurship education across different generations, especially in the post-socialist countries of Central and Eastern Europe (CEE) (Banha et al., 2022; Ensari, 2017). Here, disparities transcend the natural evolution of entrepreneurship education, extending into historical events that have shaped diverse generations' access to distinct forms of entrepreneurial knowledge (Festeu et al., 2020; Potter, 2008).

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Within this context, our study addresses the following research questions:

- How did participation patterns in entrepreneurship education evolve before and after the regime change in a post-socialist country?
- What were the primary sources for acquiring entrepreneurial skills and knowledge across different generations?
- How does educational attainment influence participation in entrepreneurship education among various generations?

Thus, we suggest that ignoring the influence of generational dynamics in entrepreneurship education hinders a comprehensive understanding, particularly in transformational economies within the European Union. General generational theories provide a valuable framework for examining participation in entrepreneurship education, especially relevant to CEE countries (Róbert & Valuch, 2013).

Intergenerational differentiation can affect the content and methodology of entrepreneurship education. Varied generational needs for knowledge and distinct preferences in teaching methods necessitate tailored approaches. Classical methods may prove effective for the older generation, while digitialised learning materials become imperative for the younger cohort (Kauppinen & Iftikhar Choudhary, 2021).

Our work contributes to the knowledge of entrepreneurship education in CEE, which is underrepresented in the literature. The uniqueness of our work lies in the intergenerational approach to entrepreneurship education in a post-socialist country.

The ensuing chapter explores the literature on entrepreneurship education, with a particular emphasis on findings relevant to CEE, and presents the hypotheses. Subsequent sections outline the dataset underpinning our analysis, detail the variables considered, and discuss our research findings. Ultimately, the paper concludes by delineating potential avenues for future research.

2. Literature review and hypothesis development

Entrepreneurship is pivotal in generating value, employment, and overall economic advancement. In CEE countries, entrepreneurship is pivotal in socio-economic development, as entrepreneurs are seen as key drivers of progress (Festeu et al., 2020). Entrepreneurship education cultivates entrepreneurial intentions and equips individuals with essential entrepreneurial competencies vital for entrepreneurs and employees. The European Commission's Entrepreneurship Competence Framework offers a standardised definition of entrepreneurship as a competence and serves as a foundational tool for the development of entrepreneurship curricula (Bacigalupo et al., 2016). Recognising their role in stimulating entrepreneurial activity, higher education institutions in the region

have integrated entrepreneurship into their curricula (Varblane & Mets, 2010). Consequently, the emphasis is on producing a growing cohort of graduates equipped with diverse enterprising competencies and the skills and aspirations requisite for entrepreneurial pursuits (Blenker et al., 2014).

The distinctive evolution of entrepreneurship in transition economies, like those in CEE, underscores the need for a deeper understanding of societal and economic progress.

Scholars employ a range of terminologies to describe the regimes of the former Soviet bloc. Some scholars prefer the term "communist," while others opt for "socialist," and some use these terms interchangeably. Socialism and communism are economic ideologies that advocate for public rather than private ownership of resources (Çam & Kayaoğlu, 2015; Roberts, 2004). Regime change refers to the transition from Soviet-imposed one-party dictatorships to parliamentary democracies with multi-party systems in Eastern Europe and the shift from centrally planned economies based on state ownership to market economies based on private ownership (Romsics, 2014, p.1).

Entrepreneurs are the architects of new business ventures, which persisted in CEE despite challenging political conditions (Kuczi & Lengyel, 2001). Before the significant transitions at the end of the 1980 s, the private sector in these countries operated within various categorisations, such as (1) the grey (optimise tax payments to the minimum (Papp, 2008), (2) second (invisible income, economic production carried out outside the main working place (Andorka, 1990) and (3) underground (illegal economic transactions not meeting government reporting requirements) economy. This sector was typically characterised by its small-scale, labour-intensive nature and informal structure. Initial reforms in the 1980 s marked a shift as socialist governments began easing restrictions on the private sector, resulting in an initial surge of entrepreneurship. Without clear legal frameworks for private property, entrepreneurship flourished in this ambiguous environment, mainly where government restrictions on the private sector were relatively few (Kuczi & Lengyel, 2001; Sereghyová, 1993).

The 1990 s witnessed a substantial surge in private entrepreneurship, driven by the dismantling of communism and the ongoing decline of the state sector (Peng & Shekshnia, 1993). Although Lelkes (2006) found that entrepreneurs were considered major winners of the political transition, the transition itself resulted in a transformational recession (Kornai, 1994) as large masses became unemployed after former state-owned companies went bankrupt (Csizmadia et al., 2016). These times were described with gates “thrown wide open, resulting in some cases [in] rampant capitalism and illicit profiteering” (Mosolygó-Kiss et al., 2019, p. 4). Capitalism, however, became an attractive prospect, acting as a pull factor, while the failures of state-owned enterprises acted as a push factor. These

dynamics led to the dismantling of restrictions on private firms, paving the way for the rapid growth of entrepreneurship (Peng & Shekshnia, 1993).

The socialist regime diminished the entrepreneurial spirit due to a lack of self-reliance fostered by decades of socialist education and socialisation, particularly evident in East Germans compared to their West German counterparts (Bauernschuster et al., 2012). However, entrepreneurship education can develop the essential traits, abilities, and skills needed for entrepreneurship for example Kuratko (2016) or Liu et al. (2019).

Entrepreneurship education, the development of skills and knowledge for entrepreneurship, affects the intention to start a business based on the theory of planned behaviour, which is a prerequisite for starting an enterprise (Ajzen, 1991). In post-socialist countries, where there has been no opportunity to start a business for decades, the role of entrepreneurship education in stimulating entrepreneurial propensity is vital. Evidence shows that entrepreneurship education has a positive impact on students' entrepreneurial intention in high-income (e. g., Hungary see Szerb & Lukovszki, 2013; Gubik & Farkas, 2019 or Trinidad and Tobago see Mack et al., 2021), emerging (e. g., India see Jena, 2020), and developing countries (e. g. Nigeria see Ediagbonya, 2013). (The World Bank categorises countries according to gross national income.)

Nowiński et al. (2019), in a study examining the impact of entrepreneurship education on entrepreneurial intentions among university students in the Visegrad countries (Czech Republic, Hungary, Poland, Slovakia), found that entrepreneurship education exerts a notable influence on entrepreneurial intentions, primarily mediated by the enhancement of entrepreneurial self-efficacy. This underscores the positive effect of structured entrepreneurship education programmes on shaping the mindset and intentions of aspiring entrepreneurs.

Empirical evidence shows that a myriad of factors influences entrepreneurial intention, for example, (1) age as a moderating factor on the influence of work experience (Miralles et al., 2017), (2) gender and university education (Maslakcı & Sürücü, 2021), (3) entrepreneurship education (Putri & Widiyanti, 2022), or even (4) parents and friends, government support, and university support (Yu & Ma, 2022). Conversely, attributes like narcissism, psychopathy, and Machiavellianism, representing the opposite of proactive personality, also exert a substantial effect on entrepreneurial intention (Gubik & Vörös, 2023; Wu et al., 2019).

The growing importance of entrepreneurship education fostered related research (Huszák & Jáki, 2022). However, the research landscape in entrepreneurship education exhibits conceptual and methodological fragmentation. Existing findings indicate that research methodologies in entrepreneurship education tend to coalesce into two predominant groups: first, quantitative studies focusing on

the scope and impact of entrepreneurship education, and second, qualitative single-case studies delving into various courses and programmes (Blenker et al., 2014).

Professional education, work experience, and previous management roles can positively influence entrepreneurship and business formation. In transition economies, education and professional experience gain additional significance, especially since many entrepreneurs initially lack private business experience. Entrepreneurship became more appealing to educated individuals once the transition commenced, surpassing the attractiveness of entrepreneurial activities tolerated under communism (Smallbone & Welter, 2009).

Doan (2022) asserts that countries aspiring to foster entrepreneurship and enterprise development should prioritise entrepreneurship education.

As the literature suggests, entrepreneurship education, like several other factors, significantly affects entrepreneurial activity. However, generations have had different access to entrepreneurship education in transitional economies like Hungary. Thus, we formed the first hypothesis:

H1: The participation rates in entrepreneurship education before and after the regime change are equal in Hungary.

The generation socialised during the decades of socialism due to the lack of entrepreneurship curriculum in formal education (secondary school, university); if they wanted to improve their entrepreneurial knowledge, they did so outside the school system through courses, training or other courses. Furthermore, it is assumed that the opening up opportunities for business start-ups and the availability of non-formal forms of entrepreneurship education after the regime change will equalise the proportion of participants in entrepreneurship education across the generations. The generational difference was analysed using the following hypothesis.

H2: In Hungary, the older generation (generations of socialism) tended to acquire their knowledge of entrepreneurship outside formal education.

Higher education is generally correlated with the years spent in formal education. As a result, individuals with higher education are more likely to have received training during their studies to prepare them for entrepreneurial activities than those who completed their education earlier. However, during the socialist era in Hungary, entrepreneurship was not allowed, and education was not available in this area. Once private business ownership became possible, individuals who recognised the need to develop their entrepreneurial skills would likely pursue such opportunities regardless of their educational background. Assuming that the older generation has received entrepreneurship education outside the formal school system and that the younger generation has sufficient

opportunities to learn entrepreneurship at all levels of the education system, we believe that participation in entrepreneurship education is not dependent on educational attainment. The relationship between entrepreneurship education and educational attainment was analysed to better understand the phenomena using two sub-hypotheses reflecting the two generations.

H3 a: Participation in entrepreneurship education is independent of educational attainment in the case of the generation of socialism in Hungary.

H3 b: Participation in entrepreneurship education is independent of educational attainment in the case of the generation of transformational crisis and post-socialism in Hungary.

Accepting the positive effect of entrepreneurship education on becoming an entrepreneur highlighted in the literature (Martínez-Gregorio et al., 2021) and assuming that entrepreneurs with no prior knowledge of entrepreneurship attend entrepreneurship courses as practising entrepreneurs to increase their knowledge, we expect the data to confirm the positive relationship between entrepreneurship education and becoming an entrepreneur. Based on this, the following hypothesis was formulated.

H4: For both Hungarian generations studied, there is a positive relationship between participation in entrepreneurship education and becoming an entrepreneur.

3. Methodology

We aim to contribute to the topic of entrepreneurship education in Central and Eastern Europe by analysing data from the Hungarian Global Entrepreneurship Monitor (GEM) Adult Population Survey (APS) 2022. GEM conducts survey-based research on entrepreneurship and entrepreneurship ecosystems worldwide by collecting data on entrepreneurship directly from individual entrepreneurs. The APS examines the role of the individual in the life cycle of the entrepreneurial process. The APS is administered to a nationally representative sample of active-aged adults in each economy. Data collection for the APS is coordinated centrally; thus, all surveys are subject to several quality assurance checks before data collection begins. The resulting data are repeatedly checked before publication (GEM (Global Entrepreneurship Monitor), 2024).

Data from the 2022 GEM Hungary APS were used during our work. The initial dataset comprises 2014 respondents representing the 18–64 year old population. However, the subsample of entrepreneurs contains 336 elements. The standard GEM questionnaire was complemented with questions on entrepreneurship education. For variables measured on a scale, GEM employs a 5-point Likert scale. For the analysis, the following variables were used:

Table 1. Description of variables (own compilation)

Variable	Description	Values
UNEDUC	Educational attainment using harmonised categories of the United Nations (updated in 2018)	Pre-primary education Primary education, or first stage of basic education Lower secondary or second stage of basic education (Upper) secondary education Post-secondary non-tertiary education Short-cycle tertiary education Bachelor or equivalent Master or equivalent Doctor or equivalent
huaentredu	Participation in education aiming to prepare for becoming an entrepreneur or motivating to become one?	Yes No
huaentreduwhe	Source of entrepreneurship education	Elementary school High school University Other (training, other course)
ANYBUSOW	The respondent is an entrepreneur (nascent, new or established)	Yes No
GENERATIONS	Generations	Generations of socialism Generations of transformational crisis and post-socialism

For the analysis, a dummy variable was created based on the generations identified by Róbert and Valuch (2013) (see Table 2) in Hungary. In their detailed generational map, the authors identified eight generations and then, by combining them, created a categorisation with six generations. In our work, we further narrowed the categories and distinguished two generations: (1) generations of socialism and (2) generations of transformational crisis and post-socialism. Our sample reasoned this reduction as the survey was conducted among the 18–64-year-old adult population. For this reason, the first generation involved in the study is the generation socialised during the times of economic growth called Goulash Communism, which provided some legitimisation for the system (Beichelt, 2015). With this categorisation, we divided the population involved in the data collection into the generation of socialism and post-socialism using 1990, the first national election after the regime change, as a cut-off point. As with every generational categorisation, ours has its flaws, but as the age cohorts with the highest entrepreneurial activity 35–54 years (see Csákné Filep et al., 2023) are technically split, this approach can be a satisfactory solution for classification.

Table 2. Generational map (Róbert & Valuch, 2013, p. 112)

Detailed generation map	Merged generational map	Reduced generational map
before 1945: generation socialised during the Horthy era	before 1949: presocialist generation socialised before 1949	Population at or close to the age of retirement
1939–1945: generation socialised during the war period		
1945–1948: generation of bright-winds		
1949–1962: generation socialised in the long 50 s	1949–1962: generation socialised in the long 50 s	1949–1989: generations of socialism
1963–1979: generation socialised during the Kádár consolidation (including the "big generation" and the technocrat generation)	1963–1979: generation socialised during the Kádár consolidation (including the "big generation" and the technocrat generation)	
1980–1989: generation of Kádár-crisis	1980–1989: generation of Kádár-crisis	
1990–1995: generation of transformational crisis	1990–1995: generation of transformational crisis	1990-present: generations of transformational crisis and post-socialism
1996-present: generation of post-socialism	1996-present: generation of post-socialism	

Data from a representative survey of the Hungarian adult population were analysed using a quantitative methodology. Given the categorical nature of the variables involved in the analysis, chi-square tests were conducted.

4. Results & Discussion

The sample analysed is representative of the Hungarian active-aged population. Accordingly, the distribution of gender and age in the dataset corresponds to the population distribution, but educational attainment was also considered. It is important to highlight that if a respondent refuses to give his/her year of birth exactly, it is feasible to give an age category instead. Thus, in some cases, the generations could not be computed (see missing values in the case of the Generations variable in Table 3). The majority of the sample is considered to be older, as 71.5 % of them belong to the generation of communism, i. e., born before 1990. Almost one-fifth (18.1 %) of the sample reported ever participating in entrepreneurship education, slightly higher than the similar figure in the GEM Hungary National Report of 2023/2024 (see Csákné Filep et al., 2024). The majority of them (52.3 %), however, received it outside of the formal education.

Table 3. Distribution of demographic variables of the sample and the variables analysed (own compilation)

Gender		**Education**	
Male	49.5 %	Pre-primary education	0.2 %
Female	50.5 %	Primary education, or first stage of basic education	8.7 %
Total	**100.0 %**	Lower secondary or second stage of basic education	21.0 %
Age		(Upper) secondary education	33,4 %
18–24	13.1 %	Short-cycle tertiary education	8.7 %
25–34	19.8 %	Bachelor or equivalent	14.4 %
35–44	25.0 %	Master or equivalent	13.0 %
45–54	20.0 %	Doctor or equivalent	0.7 %
55–64	22.1 %	**Total**	**100.0 %**
Total	**100.0 %**	**Have you ever participated in education to prepare you to become an entrepreneur or to motivate you to become one?**	
Generations		Yes	18,1 %
generations of socialism	71.5 %	No	81.6 %
generations of transformational crisis and post-socialism	28.3 %	missing	0.2 %
missing	0.2 %	**Total**	**100.0 %**
Total	**100.0 %**	**Where did you receive entrepreneurship education?**	
Any Business Owner: Nascent New Established		High school	19,4 %
Yes	16.8 %	University	28.3 %
No	83.2 %	Other (training, other course)	52.3 %
Total	**100.0 %**	**Total**	**100.0 %**

Table 4. Entrepreneurship education of generations crosstabulation (own compilation)

		Have you ever participated in education to prepare you to become an entrepreneur or to motivate you to become one?				Total	
		Yes		No			
		N	%	N	%	N	%
Generations	generations of socialism	237	64.9 %	1202	73.2 %	1439	71,7 %
	generations of transformational crisis and post-socialism	128	35.1 %	439	26.8 %	567	28,3 %
Total		365	100,0 %	1641	100.0 %	2006	100.0 %

The Pearson Chi-square test shows a significant relationship (p=0.001) between the generations and their participation in entrepreneurship education. Our findings show that the generation of transformational crisis and post-socialism are more likely to participate in entrepreneurship education than the generations of socialism. The odds ratio also confirms it, as the older generations are 0.676 times (CI: 0.531 – 0.861) more likely to participate in entrepreneurship education than younger ones. However, this relationship is rather weak as the Cramer's V value is 0.071. This finding suggests that in addition to genera-

tional affiliation, many other factors influence an individual's participation in entrepreneurship education, so further in-depth analysis and verification of the results obtained are desirable.

Based on the results, hypothesis H1 is rejected. Generations did not have the same access to entrepreneurship education. For those born after the regime change, entrepreneurship education is more accessible than for those born during the decades of socialism, most of whom did not even have the opportunity to start a business during their active years.

For the two generations concerned, there are differences in participation in entrepreneurship education and the source from which entrepreneurial knowledge is acquired. The Pearson Chi-square test yielded a significant relationship between the generations and the source of entrepreneurship education ($p< 0.001$). The strength of the correlation is weak ($V=0.276$). For the generations of socialism, entrepreneurship education was less available in formal education, and they tended to learn about entrepreneurship outside the formal education system (training and other courses). This may also indicate that entrepreneurship knowledge was a priority for them and that they were willing to mobilise financial resources and time to acquire it. The result may also be influenced by the fact that the older generations were more likely to have had opportunities to expand their knowledge of entrepreneurship outside the school system during their lifetime. Most of the younger generations of transformational crisis and post-socialism had received entrepreneurship education during their university studies or in secondary school, and they were less likely to have taken advantage of non-formal entrepreneurship education (Table 5). The older generation may have acquired knowledge outside the formal framework through experience and learning by doing (Woods & Burley, 2021). The learning-by-doing approach, the practical experience of the older generation, equipped them with a holistic understanding of market conditions after the regime change.

The analysis confirmed hypothesis H2, that the different generations acquired entrepreneurial knowledge from different sources. The results highlight the importance of entrepreneurship education, suggesting that members of the older generation who did not have access to entrepreneurship education in formal schooling were later willing to invest their resources and time to develop their knowledge of entrepreneurship outside the school system to acquire the necessary skills. In post-socialist countries, it is possible to examine the attitudes towards entrepreneurship education of two generations socialised in very different circumstances. The results suggest that entrepreneurial knowledge is so essential that people are willing to mobilise their resources to acquire it. This confirms the importance of including the development of entrepreneurial knowledge and skills in the curriculum at all levels of public education.

Table 5. Source of entrepreneurship education crosstabulation (own compilation)

		Generations				Total	
		generations of socialism		generations of transformational crisis and post-socialism			
		N	%	N	%	N	%
Where did you receive entrepreneurship education?	Refused	2	0.8 %	0	0.0 %	2	0.5 %
	Don't Know	5	2.1 %	1	0.8 %	6	1.6 %
	High school	36	15.3 %	32	25.0 %	68	18.7 %
	University	50	21.2 %	51	39.8 %	101	27.7 %
	Other (training, other course)	143	60.6 %	44	34.4 %	187	51.4 %
Total		236	100.0 %	128	100.0 %	364	100.0 %

Since becoming an entrepreneur is not linked to participation in any prior compulsory education, ideally, educational attainment and participation in entrepreneurship education should be independent. This means that access to entrepreneurship education should be available at all levels of the education system. However, our findings show a significant relationship ($p<0.001$) between educational attainment and entrepreneurship education participation in both generations analysed. These relationships are weak, as the Cramer's V values are 0.196 and 0.206 for the older and younger generations, respectively. Accordingly, hypotheses H3 a and H3 b must be rejected. Our figures suggest that people with tertiary education participate in a higher proportion of entrepreneurship training in both generations (Table 6).

Table 6. Educational attainment and entrepreneurship education crosstabulation (own compilation)

		Have you ever participated in education to prepare you to become an entrepreneur or to motivate you to become one?				Total	
		Yes		No			
		N	%	N	%	N	%
UNEDUC. UN harmonised educational attainment (Categories updated in 2018)	Pre-primary education	0	0,0 %	3	0,2 %	3	0,1 %
	Primary education, or first stage of basic education	9	2,5 %	165	10,0 %	174	8,7 %
	Lower secondary or second stage of basic education	49	13,4 %	370	22,5 %	419	20,9 %
	(Upper) secondary education	115	31,5 %	559	34,0 %	674	33,5 %
	Short-cycle tertiary education	45	12,3 %	129	7,8 %	174	8,7 %
	Bachelor or equivalent	64	17,5 %	226	13,7 %	290	14,4 %
	Master or equivalent	76	20,8 %	184	11,2 %	260	12,9 %
	Doctor or equivalent	7	1,9 %	8	0,5 %	15	0,7 %
Total		365	100,0 %	1644	100,0 %	2009	100,0 %

If a respondent has participated ever in entrepreneurship education, another question was related to the source of that education. Accordingly, this is a subsample because answers from those not participating in entrepreneurship education are excluded. There is a relationship between educational attainment and participation in entrepreneurship education, with those with higher educational attainment more likely to receive entrepreneurship education. It is plausible that entrepreneurship education is mainly concentrated in higher education. However, more than half of the respondents participated in entrepreneurship education outside the formal education system, and only one in four reported that the university was the source of this knowledge. Not only do those with tertiary education have a higher proportion of entrepreneurship education, but they also tend to have acquired entrepreneurial skills through university education. Based on the analysis, the effect size is moderate ($p<0.001$, $V=0.358$). Among the respondents without tertiary education, we also found respondents who said that they had acquired entrepreneurial skills and knowledge in higher education. This may be because there are Hungarian universities that organise free or market-oriented training courses and conferences where a university degree is not a requirement for participation (Table 7).

Table 7. Educational attainment and source of entrepreneurship education crosstabulation (own compilation)

		Where did you receive entrepreneurship education?						Total	
		High school		University		Other (training, other course)			
		N	%	N	%	N	%	N	%
UNEDUC. UN harmonised educational attainment (Categories updated in 2018)	Primary education, or first stage of basic education	5	7,1 %	1	1,0 %	3	1,6 %	9	2,5 %
	Lower secondary or second stage of basic education	11	15,7 %	1	1,0 %	36	19,1 %	48	13,4 %
	(Upper) secondary education	24	34,3 %	16	15,8 %	71	37,8 %	111	30,9 %
	Short-cycle tertiary education	14	20,0 %	5	5,0 %	26	13,8 %	45	12,5 %
	Bachelor or equivalent	10	14,3 %	30	29,7 %	23	12,2 %	63	17,5 %
	Master or equivalent	6	8,6 %	44	43,6 %	26	13,8 %	76	21,2 %
	Doctor or equivalent	0	0,0 %	4	4,0 %	3	1,6 %	7	1,9 %
Total		70	100,0 %	101	100,0 %	188	100,0 %	359	100,0 %

For a deeper look at the impact of entrepreneurship education, we split the generations by whether or not they had received entrepreneurship education.

Based on this breakdown, we grouped the respondents into four categories: (1) generations of socialism with entrepreneurship education (N=237), generations of socialism without entrepreneurship education (N=1202), generations of transformational crisis and post-socialism with entrepreneurship education (N=128), generations of transformational crisis and post-socialism without entrepreneurship education (N=439).

There is a relatively large literature on the relationship between participation in entrepreneurship education and entrepreneurship. However, the primary source of knowledge on the subject is the Global University Entrepreneurial Spirit Students' Survey (GUESSS), which provides comprehensive, internationally comparable data on the entrepreneurial propensity of students in higher education, but data on the adult population are not available with a similar regularity and structure (Sieger et al., 2021).

Our findings suggest that people who participate in entrepreneurship education are more likely to be entrepreneurs (Table 8). The odds ratio is 2.21 for the total population, while it is 1.79 for the older and 4.14 for the younger generations. However, this result does not determine the direction of the relationship. Chi-Square tests confirm a significant relationship between participating in entrepreneurship education and becoming an entrepreneur for both generations analysed ($p<0.001$). The relationship is, however, rather weak, $V=0.092$ and $V=0.250$ for the older and the younger generations, respectively. The higher V-value for the younger generation and the strikingly low V-value for the older generation may indicate that the older generation acquired entrepreneurial knowledge mainly by learning by doing.

Table 8. Entrepreneurship education and entrepreneurship crosstabulation (own compilation)

Generation	Participation in education aiming to prepare for becoming an entrepreneur or motivating to become one?	Owns or manages a business				Total	
		No		Yes			
		N	%	N	%	N	%
Generations of socialism	Yes	176	14.9 %	61	23.8 %	237	16.5 %
	No	1007	85.1 %	195	76.2 %	1202	83.5 %
	Total	1183	100.0 %	256	100.0 %	1439	100.0 %
Generations of transformational crisis and post-socialism	Yes	89	18.3 %	39	48.1 %	128	22.6 %
	No	397	81.7 %	42	51.9 %	439	77.4 %
	Total	486	100.0 %	81	100.0 %	567	100.0 %
Total	Yes	266	15.9 %	99	29.5 %	365	18.2 %
	No	1408	84.1 %	237	70.5 %	1645	81.8 %
	Total	1674	100.0 %	336	100.0 %	2010	100.0 %

However, the motivation and purpose of participation in entrepreneurship education are likely to differ between the older and younger generations. Many

members of the older generation became entrepreneurs after the regime change out of necessity to secure the standard of living they had been used to. It is likely that many of them, already active entrepreneurs, were faced with a lack of entrepreneurial skills to run their businesses successfully and efficiently and developed their skills outside the formal education system or learning by doing. For the younger generation, the aim of entrepreneurship education is quite different, as an essential element of formal education is the inclusion of educational modules that motivate them to become entrepreneurs. In their case, entrepreneurship education aims to stimulate interest in becoming an entrepreneur and to develop the necessary skills and basic knowledge.

Table 9. Summary of hypotheses analysed (own compilation)

Hypothesis	Variables	Result
H1: Generations' participation rates in entrepreneurship education do not differ.	Generations × HUAENTREDU	rejected (p=0.001)
H2: The older generation (generations of socialism) tended to acquire their knowledge of entrepreneurship outside formal education	Generations × HUAENTREDUWHE	confirmed (p< 0.001)
H3a: Participation in entrepreneurship education is independent of educational attainment in the case of the generation of socialism.	UNEDUC × HUAENTREDU	rejected (p<0.001)
H3b: Participation in entrepreneurship education is independent of educational attainment in the case of the generation of transformational crisis and post-socialism.	UNEDUC × HUAENTREDU	rejected (p<0.001)
H4: There is a positive relationship between participation in entrepreneurship education and becoming an entrepreneur for both generations studied	GENERATIONS × HUAENTREDU × ANYBUSOW	confirmed (p<0.001)

5. Conclusion & Future Research Directions

Our work plays a pioneering role in mapping the impact of the post-socialist era on entrepreneurship education and, in addition to other aspects of a specific historical past already studied (Csákné Filep, Martyniuk et al., 2023; Gittins et al., 2022), draws attention to the differential access to entrepreneurship education across generations. The findings of this study underscore a pronounced variance in the accessibility of entrepreneurship education between cohorts belonging to the generation of socialism and the generation of transformational crisis and post-socialism in Hungary. The older generation, primarily shaped during the socialist era, faced limited access to entrepreneurship education during their formal educational years. Regrettably, this educational deficit persisted into their later stages of life, as evident in the efforts undertaken by this cohort to bridge the knowledge gap through extracurricular means.

Contrastingly, the younger generation benefits from integrating entrepreneurship education within formal educational frameworks. This inclusion suggests a potential explanation for the proclivity of the older generation to seek supple-

mentary entrepreneurial knowledge outside the formal education spectrum. Consequently, our study advocates for a nuanced approach when crafting training programmes geared towards cultivating entrepreneurial skills, underscoring the importance of tailoring such initiatives to the unique needs of each generation. Entrepreneurship education in Central and Eastern Europe requires a unique approach, evidenced by publishing a book dedicated to the subject (Żyminkowska & Ożańska-Ponikwia, 2023).

Notably, our results elucidate a disparity in the availability of entrepreneurship education across different echelons of the education system. While higher education institutions, particularly universities, play a pivotal role in offering such programs, a more inclusive approach warrants consideration, as Festeu et al. highlighted (2020). Introducing entrepreneurship education into the curricula of primary and secondary schools as recommended by the Eurydice report (Education, Audiovisual and Culture Executive Agency. Eurydice (Brussels, Belgium). et al., 2016) holds promise for equalising access to foundational skills, competencies, and knowledge crucial for embarking on successful entrepreneurial ventures.

This research confirms the critical role that entrepreneurship education has already been shown to play in fostering entrepreneurial aspirations (Ediagbonya, 2013; Gubik & Farkas, 2019; Jena, 2020; Mack et al., 2021; Szerb & Lukovszki, 2013). A positive correlation between participation in entrepreneurship education and entrepreneurial pursuits emerges prominently within both the socialist and post-socialist generations. These findings are relevant for policymakers and practitioners in entrepreneurship education, providing valuable insights into formulating practical strategies and raising awareness of the need to adapt curricula to generational needs.

Despite these contributions, it is imperative to acknowledge the study's limitations. The exclusive focus on a single country precludes international comparisons that could corroborate or challenge the observed trends within a broader context. Additionally, the inherent complexities in demarcating generational cohorts present potential points of contention in the methodology. Notwithstanding these constraints, our results represent a substantial addition to the knowledge of entrepreneurship education in the CEE region.

This research suggests several avenues for future exploration. The hypotheses warrant validation through comparable studies in other Eastern and Central European countries employing similar methodological frameworks. An interesting complement to these results could be to repeat and compare a study by Varblane and Mets (2010) to map the entrepreneurship education practices available in higher education institutions in the region with the previous results and the conclusions drawn from the GEM data. Delving into diverse generations' nuanced needs, expectations, and experiences regarding entrepreneurship educa-

tion through qualitative research methodologies presents an enticing prospect for future investigations. The role and importance of learning by doing in the acquisition of entrepreneurial skills and knowledge among the older generation and as highlighted by Ratten and Usmanij (2021) longitudinal approach, the examination of macro-effects of entrepreneurship education and the role of female teachers play in entrepreneurship education opens up new avenues for research.

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