

FACTORS INFLUENCING ENTREPRENEURS' DECISION- MAKING CONCERNING SDGs

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Abstract Many studies highlight the importance of entrepreneurs in achieving SDGs. While their role is undeniable, mapping their motivations to act according to SDG principles is still in its infancy. The aim of this study is to examine whether the environment surrounding entrepreneurs, their characteristics, and their motivation for starting a business are related to whether SDGs are considered in business decisions. Following a review of the relevant literature, the paper provides empirical evidence for the existence of the hypothesized relationships. The 215-item database of the Hungarian Global Entrepreneurship Monitor Adult Population Survey 2022, restricted to business owner-managers, was used. Chi-Square test and correlation analysis were applied to analyse the relationship between sustainability decisions and the environment, personal characteristics, and start-up motivations of owner-managers. The research shows a relationship between entrepreneurial decisions made with sustainability in mind and the entrepreneur's environment, personality, and motivation to start a business.

Keywords:

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1 Introduction

Scientists have proposed the term 'Anthropocene' for the current geological epoch, given the increasing impact of human activities on the Earth and its atmosphere (Crutzen & Stoemer, 2000). The Anthropocene marks a fundamental shift in the relationship between humans and the Earth system as humans are not passive observers of Earth's functioning (Lewis & Maslin, 2015). Rockström et al. (2009) defined nine planetary boundaries: (1) climate change, (2) ocean acidification, (3) stratospheric ozone depletion, (4) interference with the global phosphorus and nitrogen cycles, (5) rate of biodiversity loss, (6) global freshwater use, (7) land-system change, (8) aerosol loading, and (9) chemical pollution, at least three of which humanity has already transgressed (rate of biodiversity loss, interference with the global phosphorus and nitrogen cycles, climate change). The challenge for humanity is to meet the needs of all people within the means of the planet (Raworth, 2017). To achieve this goal, the United Nations (2015) is leading the transformation to put the world on a sustainable and resilient path. The 2030 Agenda for Sustainable Development, published in 2015, defines 17 Sustainable Development Goals (SDGs). The 17 SDGs were adopted form a global framework covering the social, economic, and environmental dimensions of sustainable development. The Agenda 2030 explicitly calls on businesses, including micro-enterprises and multinationals, to contribute to sustainable development (United Nations, 2016).

Pomar (2018) highlights the importance of SMEs in achieving the SDGs, citing their significant number, role in employment and contribution to GDP. Schaltegger and co-authors (2018) emphasize that entrepreneurship is very important for sustainability because the transformation to a sustainable future urgently requires the creative destruction of unsustainable patterns of production, consumption and living. Venancio and Pinto (2020) come to the opposite conclusion, finding that entrepreneurship contributes negatively to the achievement of the SDGs in the case of necessity and non-innovative entrepreneurship. Dhahri and co-authors (2021) further explore the issue and conclude that opportunity entrepreneurship has a positive impact on the three dimensions of sustainable development, while necessity entrepreneurship has a negative impact on the environmental sustainability dimension.

Table 1 summarizes the role of entrepreneurship in achieving sustainable development (SD).

Table 1: Role of entrepreneurship in achieving sustainable development.

SD Dimension	Entrepreneurship contribution
Economic	“(. . .) entrepreneurship drives economic growth by creating jobs, promoting decent work and sustainable agriculture and fostering innovation”
Social	Entrepreneurship can make a positive contribution to “promoting social cohesion, reducing inequalities and expanding opportunities for all, including women, young people, persons with disabilities and the most vulnerable people”
Environmental	“(. . .) entrepreneurship can help to address environmental challenges through the introduction of new climate change mitigation and adaptation technologies and resilience measures, as well as by promoting environmentally sustainable practices and consumption patterns”

Source: Filser et al. (2019, 2).

Scholars suggest that adoption of a sustainable strategy in entrepreneurship leads to greater resilience and long-term performance (Avery & Bergsteiner, 2011; Moya-Clemente et al., 2019; DiVito & Bohnsack, 2017; Johnsen et al., 2018).

Sustainability-oriented entrepreneurs may be motivated primarily by a desire to contribute to sustainable development, rather than by conventional profit maximisation. This motivation is often closely linked to the entrepreneur's personal values and passion for sustainable business (Schaltegger et al., 2018). Nevertheless, the pursuit of environmental protection does not mean a reduction in profitability, according to the model of Schaltegger and Synnestvedt (2002) environmental protection can support economic success.

Our research seeks to answer the question of what factors influence the decisions of micro and small enterprises in relation to the SDGs.

The rest of our paper presents the data, methods used, the hypotheses formulated and the analysis. After highlighting the results of the research, in the conclusion the main findings, limitations of the research and future research directions are presented.

2 Methodology

The aim of our paper is to contribute to the topic of entrepreneurs achieving the SDGs by analyzing data from the Hungarian Global Entrepreneurship Monitor (GEM) Adult Population Survey (APS) 2022. GEM conducts survey-based research on entrepreneurship and entrepreneurship ecosystems around the world 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 at least 2000 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 (<https://www.gemconsortium.org/>).

Data from the 2022 GEM Hungary APS have been used in the course of our work. The initial sample size of the database was 2014, from which business owner-managers (n=215; owner-managers are respondents who, alone or with others, own a business that they help to manage or are self-employed, regardless of its nascent, new or established status.) were selected for analysis and to test the following five hypotheses:

H1a: Business owners who are aware of the UN's SDGs are more likely to take steps to minimize the environmental impact of their business.

H1b: Business owners who are aware of the UN's SDGs are more likely to take steps to maximize the social impact of their business.

H2: There is a positive correlation between the consideration of the social implications of decisions and the motivation to start a business – “to make a difference in the world”.

H3: There is a positive correlation between the consideration of the environmental implications of decisions and the innovativeness of owner-managers.

H4: There is a positive correlation between the prioritization of the social and/or environmental impact of the business above profitability or growth and the motivation to start a business – “to make a difference in the world”.

The non-representative subsample contains small and medium-sized enterprises, where the average number of employees is 2.75 and the maximum number of employees is 45.

A quantitative approach was used for the analysis. All variables included in the analysis (see Table 2) were measured on a five-point Likert scale. Descriptive statistics, chi-square test and Spearman's correlation analysis were used to analyze the relationship between entrepreneurial motivation, personal characteristics, environment and owner-managers' decisions on sustainability dimensions.

Table 2: Descriptions of variables

Variable	Variable name	Description
Entrepreneurial networks	KNOWENT	How many people do you know personally who have started a business or become self-employed in the past 2 years? Would it be none, one, few or many people?
Innovativeness	CREATIV	Other people think you are highly innovative.
Long term thinking	VISION	Every decision you make is part of your long-term career plan.
'To make a difference in the world	SUMOTIV1	Please indicate to what extent the following statements reflect the reasons why you are involved in this business. To make a difference in the world.
'To build great wealth or a very high income	SUMOTIV2	Please indicate to what extent the following statements reflect the reasons why you are involved in this business. To build great wealth or a very high income
Social implications	SUSDG_SOC	When making decisions about the future of your business, you always consider social implications such as access to education, health, safety, inclusive work, housing, transportation, quality of life at work, etc.
Environmental implications	SUSDG_ENV	When making decisions about the future of your business, you always consider environmental implications such as the preservation of green areas, reduction of the emission of pollutants and toxic gases, selective garbage collection, conscious consumption of water, electricity and fuels, etc.
Social and/or environmental impact outweigh profitability or growth	SUSDG_PRI	You prioritize the social and/or environmental impact of your business over profitability or growth

Source: Authors' research.

3 Results

Only 24.3% of the Hungarian entrepreneurs surveyed are aware of the 17 United Nations Sustainable Development Goals, while 67.7% of those who are familiar with the SDGs claim that they are a priority for their company. 60.1% of the entrepreneurs in the sample took steps to minimize the environmental impact of their business in the past year, however, increasing the social impact of their business is considerably lower (38.4%).

Using the Chi-Square test, we examined whether awareness of the SDGs had a positive effect on minimizing the environmental impacts and maximizing the social impacts of the companies surveyed. The relationship between SDG awareness and steps taken to minimize the business' environmental impact was significant ($\chi^2(1, N=208) = 5.031, p=0.025$). Entrepreneurs, who are aware of the SDGs are more likely to take steps to minimize the environmental impact of their business. The relationship between SDG awareness and steps taken to maximize the business' social impact was not found to be significant ($\chi^2(1, N=206) = 3.791, p=0.52$).

Correlation coefficients were calculated to assess the linear relationship between social implications, environmental implications, social and/or environmental impact over profitability or growth and entrepreneurial networks, innovativeness, long-term thinking, "To make a difference in the world" motivation, „To build great wealth or a very high income" motivation (see Table 3).

Social implications showed a positive correlation with entrepreneurial networks, long-term thinking, and "To make a difference in the world" motivation. There was a positive correlation between environmental implications and "To make a difference in the world" motivation. Social and/or environmental impact over profitability or growth showed a positive correlation with innovativeness and the "To build great wealth or a very high income" motivation.

Table 3: Results of the correlation analysis

		Entrepreneurial networks	Innovativeness	Long term thinking	To make a difference in the world	To build great wealth or a very high income
Social implications	Correlation Coefficient	.239**	0.016	.161*	.349**	0.086
	Sig. (2-tailed)	0.000	0.822	0.014	0.000	0.191
Environmental implications	Correlation Coefficient	0.105	0.050	0.063	.223**	0.068
	Sig. (2-tailed)	0.109	0.475	0.339	0.001	0.297
Social and/or environmental impact outweigh profitability or growth	Correlation Coefficient	0.052	.173*	0.102	0.122	.140*
	Sig. (2-tailed)	0.435	0.014	0.124	0.065	0.034

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

* Correlation is significant at the 0.05 level (2-tailed).

4 Conclusions

The research findings confirmed that business owners who are aware of the UN SDGs are more likely to take steps to minimize the environmental impact of their business, but at the same time did not substantiate the claim that business owners who are aware of the UN SDGs are more likely to take steps to maximize the social impact of their business.

The results of our research reveal that entrepreneurs who consider social impact in their decision-making process are more embedded in the entrepreneurial community, their decisions are part of their long-term career plan and their strong motivation for starting a business is to make a difference in the world. Entrepreneurs who consider environmental impacts are also characterized by a desire to make a difference in the world.

Entrepreneurs who prioritize the social and/or environmental impact of their business over profitability or growth consider themselves to be innovative and building great wealth or a very high income is their strong motivation for starting a

business. The results are consistent with those found by Schaltegger et al. (2018) and Schaltegger and Synnøstvedt (2002).

The originality of the paper lies in that it sheds light on the little-studied relationship between entrepreneurs' decisions on sustainable development and their environment, personality and motivation to start a business.

The study's main limitation is that only one economy was examined, and the data used for the analysis were not representative, which reduces the reliability and generalizability of the results.

A comparative analysis of more countries and the creation of a sophisticated model describing the relationship between entrepreneurs' SDG decisions and their environment, personality, and motivation to start a business are promising future research directions.

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