

# Entrepreneurial personality and motive: A study of Hungarian early-stage entrepreneurs using GEM data

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**Abstract:** This study investigates the motives of Hungarian early-stage entrepreneurs and the relationship between these motives and aspects of the entrepreneurial personality. Using the 2021 GEM data, it is found that key motives for these entrepreneurs are both push and pull: 'making a difference in the world' and 'earning a living because jobs are scarce'. The pull motive of 'making a difference in the world' is significantly correlated with positive aspects of creativity and a confidence in one's own abilities. Conversely, the push motive of 'earning a living because jobs are scarce' correlates with negative aspects of a fear of failure and a lack of confidence in setting up a business. Through the correlations found between motives and entrepreneurial personality traits, a theoretical model is developed to offer future research directions. Recommendations for policymakers are put forward based upon the findings.

**Keywords:** motive; personality; entrepreneur; GEM; Hungary

## 1. Introduction

In the past decade, entrepreneurship has gained increased attention often due to its economic role of creating jobs and encouraging development of the economy (Fakhreldin, 2017), as well as social and environmental benefits (Veleva & Bodkin, 2018). This need for attention is heightened in the case of emerging European economies, such as Hungary (Bruton, Ahlstrom, & Obloj, 2008).

Research into the motives of entrepreneurs to set up firms can, thus, help governments ensure the creation and continuation of circumstances that promote the creation of entrepreneurs through financing (e.g., Yang et al., 2021; Sági & Juhász, 2019), data-sharing (Malkawi, Al-khasawneh, & Mohailan, 2021) or other means. Empirical studies of entrepreneurs' motives to start a business often focus on individual motives, such as the bequest motive (Faria & Wu, 2012), or the need for achievement (Johnson, 1990). In the past few years, research has shifted focus towards certain categories of entrepreneurs such as women entrepreneurs (Priya & Bose, 2020), social entrepreneurs (Bhusan, 2020) or farmer entrepreneurs (Semin & Kislitskiy, 2020). Recent studies have also begun to consider motive alongside other factors, such as earnings (van Stel et al., 2018) and socioeconomic status (Yu et al., 2021). Some studies have also examined the link between motive and business success (e.g., Abrar ul Haq, Victor, & Akram, 2021; Srimulyani & Hermanto, 2022).

This study seeks to add to this discussion by examining the relationship between motive and aspects of personality of entrepreneurs, using the 2021 Global Entrepreneurship Monitor (GEM) data for Hungarian early-stage entrepreneurs. To the author's knowledge there have not been any studies to date examining the link between these two aspects. Although some studies have examined motives using GEM data, they have not considered the link between motivational and other personality traits. Moreover, the 2021 GEM data extends the previous GEM data through having four categories of motives for entrepreneurs rather than the previous two (necessity or opportunity). With this in mind, the research questions are as follows: which motives are held by Hungarian early-stage entrepreneurs? And, what, if any, is the link between motives and personality traits?

Through this study, not only will it aid in uncovering the key elements needed for the encouragement of potential entrepreneurs to set up businesses in Hungary, but through an

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understanding of the link between personality traits and motive, new avenues may open up as to how these entrepreneurs may be encouraged. For example, if a fear of failure correlates with the motive of wanting to continue the family tradition, then there is potential to motivate entrepreneurs not only through, for instance, offering support and advice for family business entrepreneurs, but also some forms of 'safety net' or assurance, aimed at alleviating the associated fear of failure. In this way, it is an intended outcome of this study to produce a theoretical framework for further research. Beyond the potential usefulness of this study to policymakers, it will also offer deeper understanding for entrepreneurs of how they and their contemporaries operate, as well as for students of enterprise education.

This paper first presents an overview of the theoretical areas upon which this study is based, followed by a review of the empirical work in these areas to-date. These sections will be split between motive and personality. Following this, existing studies of the link between motive and personality are considered, leading to the methodology employed with the GEM data. Subsequent to the results, discussion will consider the findings in light of the literature and offer implications for research and partitions. The paper concludes with an overview of the study, and its limitations.

## 2. Theoretical background

This section will present an overview of the two main aspects of this study: motive to start up a business and personality traits and will consider which theories apply, given the context of the study, followed by a review of the empirical studies conducted in this field.

### 2.1. Motives

Although authors such as Johnson (1990) have highlighted the need for some time that research into motivation in entrepreneurship should be theory-driven, current researchers are first faced with a plethora of diverse theories that have been used in studies thus far. Lloyd (2019) classifies studies in relation to motives for entrepreneurs to start a businesses into four theoretical areas: Push / Pull Theory; Shapero's model concerning entrepreneurial intent; Process Theories (Vroom, Goal-setting, Equity); and Content theories (Maslow, Alderfer, Herzberg and McClelland).

Under push-pull theory, Dana (1997) puts forward that this theory involves investigation of the entrepreneur due to personality determined behaviour, culturally influenced behaviour; and behaviours relating to the host society. In contrast, Shapero's model indicates that an entrepreneur's intention to start a business is based upon desirability, feasibility, and a propensity to act. Thus, there is a degree of overlap between Shapero's model and push-pull theory, the aspect of desirability is plainly evident in both models, with the distinction that Shapero's model considers the role of externalities and circumstances affecting whether a business is established or not, as well as desirability being associated with the capability to start a business.

Process theories such as Vroom's theory has come under scrutiny in the entrepreneurial context as it does not take into account the entrepreneur's belief in their ability or capacity to actually start their own business (Lloyd, 2019). Although Vroom's theory does highlight the role of goal setting in motives, goal setting theory is questionable in its relevance to the early stages of entrepreneurship when goals may not be evident or understood (Lloyd, 2019). The final process theory considered here of equity theory. However, Robbins (1993) highlights that this theory of 'fairness' relating to employee satisfaction in the workplace is often a backward-looking process that seeks to explain actions.

The content theories centre on the factors within the individual. Whilst there is some overlap with push and pull theories, the push and pull considers both personal and external elements affecting motive. Moreover, the models such as Maslow's hierarchy of needs are not without their weaknesses. The hierarchy has been found to be culturally divisive as it is formed based on the individualist perspective (USA) and as such falls short in collectivist cultures (Idemobi, 2011). Although Alderfer moves from the concept of hierarchy towards an individual having these needs simultaneously or in a non-hierarchical order, the specificity required for applying the law of individual differences indicates, according to Lloyd (2019) that each entrepreneur would need to be assessed separately, i.e., negating the usefulness of large-

scale studies such as the GEM survey. The Herzberg model has two significant weaknesses for this study. First, motivation is regarded as focussing on extrinsic rather than intrinsic elements. Secondly, Herzberg's two-factor model has been found to be invalid in a management context (Stello, 2011). The final content theory is that of McClelland (1965), who explained motivation based upon three needs: the need for achievement, the need for power and the need for affiliation. Much of McClelland's work was centred upon entrepreneurs and figures in push and pull theory.

In summary, it is clear, that the context of this study of Hungarian early-stage entrepreneurs in a large-scale study impact upon the relevance of theory to this study. The focus on early-stage entrepreneurs negates the use of Vroom and Goal setting theory. Alderfer's focus on the individual renders the GEM data unsuitable for this theory. Whilst Hungary is at the higher end of individualism, it is not as high as US and UK and so there may be discrepancies in applying the Hungarian context. Likewise, this study is concerned with personality as an intrinsic element affecting motive and as such Shapero's model seems less relevant. It therefore remains, that the context of this study puts it closest to the push-pull theory that consider the role of personality-determined behaviour in entrepreneur motives and doesn't preclude other elements such as McClelland's three needs. With this in mind, the following section examines the theoretical role of personality in this study.

## **2.2. Personality traits**

The need for achievement as an entrepreneurial characteristic is considered by authors such as Dollinger (1995; 48-49) as a personality trait. In its broadest sense, personality traits include abilities (e.g., numerical, verbal, spatial, intelligence), motives (e.g., need for achievement, power or affiliation, attitudes, and temperament (e.g., mood, intensity, adaptability, distractibility, etc.)). The overarching style of these traits is often reflected in the broad domains or 'states' of Openness, Conscientiousness, Extroversion, Agreeableness, and Neuroticism (OCEAN). Authors, such as Kanfer & Heggstad (1997), distinguish motivational traits from other personality traits inasmuch as they are stable characteristics that are not related to ability, but influence the direction, intensity and persistence of a person's goal-directed behaviours.

As Brandstätter (2011) points out, from a theoretical perspective, nothing has been said about the how these traits influence an entrepreneur's decision to start up a business. However, there is little doubt that personality traits originate and regulate individual's experiences and actions. Although Brandstätter (2011) considered traits as the causes of mental and behavioural processes, this study accepts that personality traits are complex structure and rather seeks to look for correlations between motivational traits and other personality traits, not for causation.

In summary, motivation is intrinsically linked to personality, despite a lack of studies considering this link in the context of entrepreneurs. The following sections consider the empirical studies undertaken in the field of entrepreneurship.

## **2.3. Empirical studies**

Many studies consider a single motive, such as Stewart & Roth's (2007) study comparing entrepreneurs to managers in terms of their achievement motivation. Other studies consider types of entrepreneurs and how their idiosyncratic motives, such as Maritz & Beaver (2011) who found that lifestyle entrepreneurs were opportunity-based and found greater independence as a primary motive

for setting up a business. In contrast, Foley et al.'s (2018) study of entrepreneur-mothers found that independence was borne out of necessity rather than desire, which brings into play the distinction between push and pull factors. In either case, there is an apparent link between a personal characteristic and motive.

A large number of studies have also used GEM data to examine entrepreneurs. According to Karadeniz & Ozdemir's (2009) study of Turkey's entrepreneurs, it was found that knowing someone personally was the key factor in a necessity-driven entrepreneur deciding to set up a business and self-confidence for opportunity-driver entrepreneurs. Other empirical studies also divide motive into two categories, necessity or opportunity (e.g., Belkacem & Mansouri, 2010; Ashourizadeh et al., 2021). However, the 2021 GEM data extends the

existing categories with four motives, namely: to make a difference in the world; to build great wealth or earn a very high income; to continue a family tradition; to earn a living because jobs are scarce.

A large number of studies have also examined personality of entrepreneurs, such as in relation to business performance (e.g., Gupta & Muita, 2013) or strategic orientation (Di Zhang & Bruning, 2011). In an analysis of entrepreneurial personality, Chell et al. (2008) ascertained that the main characteristics are need for achievement, locus of control, and risk-taking propensity and this is also reflected in the focus of research work (see e.g., Korunka et al., 2003). However, Kithaka (2016) add to this list by highlighting research that also examines a need for autonomy, decisiveness, initiative, creativity, self-confidence and trust. However, the most suited for this study is the personality type approach, which groups entrepreneurs into categories according to certain behaviours (Wickham, 2006).

Some studies have investigated the links between motivational and other personality traits of entrepreneurs. Bipp, Steinmayr, & Spinath (2008) found some aspects of achievement motivation correlated with qualities of the Big Five. Likewise, in an earlier study, Heggstad & Kanfer (2000) put forward a relationship between the Big Five and measures of achievement motivation.

Studies using the GEM data for investigation into aspects of the personality of entrepreneurs are somewhat sparse. Barazandeh et al. (2015) defined competencies as entrepreneurial personality and skills. However, the entrepreneurial personality was later dropped from the study following a confirmatory factor analysis. Muñoz-Bullón, Sánchez-Bueno, & Vos-Saz (2015) investigated nascent entrepreneurs' personality attributes in relation to the international dimension. As they mention, GEM data targets only those personality attributes representing an entrepreneurial orientation and from that they focussed on proactiveness, risk taking and innovativeness.

### 3. Methods

For measures of motives and personality we use data from the Global Entrepreneurship Monitor (GEM) Adult Population Survey 2021. The data relate to early-stage entrepreneurs, who are a part of the adult population (18–64 years old) and actively involved after starting a new firm. From the total sample of 2014 respondents, 197 are in the category of early-stage entrepreneurs.

**Table 1. Personality traits and statements from the GEM study. Source: own work, based on 2021 GEM data**

Personality trait	Statement
Opportunistic	Sees good opportunities for starting a business in the next 6 months
Spot opportunities	You rarely see business opportunities, even if you are very knowledgeable in the area
Proactive	Even when you spot a profitable opportunity, you rarely act on it
Confidence in own abilities and knowledge	Has the knowledge, skill and experience required to start a new business
Confidence in ability to start up	In your country, it is easy to start a business
Fear of failure	
Creativity	Other people think you are highly innovative
Visionary	Every decision you make is part of your long-term career plan

The respondents of the GEM survey were asked to indicate whether they are motivated by the following: To make a difference in the world; to build great wealth or a very high income; to continue a family tradition; and to earn a living because jobs are scarce. Previous GEM data covered two motives: necessity and opportunity. Thus, GEM 2021 extends upon previous surveys by having these four motives. Although opportunities could be seen as the overarching motive, it is also used in the aspects of personality and the use of opportunity as both a motive and opportunity were seen as superfluous. The personality traits are categorized in the following table (Table 1) from the aspect of the GEM study and, as mentioned in the

previous section, the traits for this study are closely entwined with those traits associated with an entrepreneurial orientation, rather than a range of general traits.

As can be seen in the table, some of the statements are intended for reverse-scoring, namely spotting opportunities and proactiveness.

To assess the correlation between motivational and other personal traits, the authors will use Spearman's correlation test as the study involves ordinal data with at least three categories and the categories have a natural order. The author decided to use this statistical analysis because of the categorical variables in this part of the research, as used in previous studies in this area with the GEM data (e.g., Bobera, Leković, & Berber, 2017; Hormiga & Bolívar-Cruz, 2014).

#### 4. Results

In this section the motives for the sample will be first presented separately in Table 2, and then the correlations between motive and personality traits are presented in Tables 3 to 6.

**Table 2. Motives of Hungarian early-stage entrepreneurs. Source: own work, based on 2021 GEM data**

Motive	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree	Total
To make a difference in the world	22	27	29	50	69	197
To build great wealth or a very high income	34	54	45	39	25	197
To continue a family tradition	101	42	13	15	25	196*
To earn a living because jobs are scarce	17	26	24	31	99	197

\* Note: One respondent refused to answer.

From Table 2, with a sample of 197 entrepreneurs, the two main motives are 'making a difference in the world' (119 out of the sample agree with this motive) and 'earning a living because jobs are scarce' (130 out of the sample). In contrast, 'continuing a family tradition' was not seen as a motive for the sample. 'Building wealth or a very high income' was somewhat split although leaning towards not being a motive for the majority of the sample (88 out of 197, with an additional 45 indifferent).

**Table 3. Spearman's test of personality traits against the motive, 'to make a difference in the world' for Hungarian early-stage entrepreneurs. Source: own work, based on 2021 GEM data**

Personality trait	r	Sig. (2-tailed)	N
Opportunistic	0.143	0.105	129
Confidence in own abilities and knowledge	0.169*	0.026	172
Fear of failure	-0.054	0.453	197
Confidence in starting up	-0.059	0.480	147
Spot opportunities	0.056	0.437	197
Proactive	0.042	0.564	194
Creative	0.178*	0.017	178
Visionary	0.105	0.144	195

From Table 3, two significant positive relationships were found for the motive of making a difference in the world. The first is the confidence in one's own abilities and knowledge, and

creativity. Spearman's  $r$  value is between 1 and -1 with the closer to 0 indicating a weaker relationship between variables. Whilst these may be weak relationships, they are significant at the 0.05 level (2-tailed).

**Table 4. Spearman's test of personality traits against the motive, 'to build great wealth or a very high income' for Hungarian early-stage entrepreneurs. Source: own work, based on 2021 GEM data**

Personality trait	$r$	Sig. (2-tailed)	N
Opportunistic	0.084	0.346	129
Confidence in own abilities and knowledge	-0.049	0.519	172
Fear of failure	0.008	0.910	197
Confidence in starting up	0.107	0.198	147
Spot opportunities	0.135	0.058	197
Proactive	0.049	0.494	194
Creative	0.076	0.313	178
Visionary	0.025	0.733	195

No significant relationships were found between the motive of 'to build great wealth or a very high income' for Hungarian early-stage entrepreneurs and the listed personality traits relating to an entrepreneurial orientation.

**Table 5. Spearman's test of personality traits against the motive, 'to continue a family tradition' for Hungarian early-stage entrepreneurs. Source: own work, based on 2021 GEM data**

Personality trait	$r$	Sig. (2-tailed)	N
Opportunistic	0.185*	0.036	129
Confidence in own abilities and knowledge	0.055	0.472	171
Fear of failure	-0.025	0.729	196
Confidence in starting up	-0.121	0.145	146
Spot opportunities	-0.001	0.992	196
Proactive	0.020	0.780	193
Creative	0.064	0.396	177
Visionary	0.053	0.460	194

For the motive, 'to continue a family tradition' for Hungarian early-stage entrepreneurs a significant positive relationship was found with the personality trait of 'being opportunistic' at the 0.05 level (2-tailed), although the  $r$  value indicates a somewhat weak relationship.

**Table 6. Spearman's test of personality traits against the motive, 'to earn a living because jobs are scarce' for Hungarian early-stage entrepreneurs. Source: own work, based on 2021 GEM data**

Personality trait	$r$	Sig. (2-tailed)	N
Opportunistic	-0.063	0.478	129
Confidence in own abilities and knowledge	-0.037	0.633	172
Fear of failure	.150*	0.036	197
Confidence in starting up	-.176*	0.033	147
Spot opportunities	-0.130	0.069	197
Proactive	-0.035	0.624	194
Creative	0.055	0.464	178
Visionary	0.023	0.745	195

For the motive, 'to earn a living because jobs are scarce' for Hungarian early-stage entrepreneurs a significant positive relationship was found with the personality trait of having a fear of failure, significant at the 0.05 level (2-tailed). A significant negative relationship was found with confidence in starting up, which indicates that the higher the rating of the motive of

necessity (earning a living due to a lack of jobs), the lower the level of confidence the entrepreneur has in setting up a business.

## 5. Discussion

This study sought to explore the motives for Hungarian early-stage entrepreneurs and then investigate if there is a relationship between motivational traits and those personality traits associate with an entrepreneurial orientation. From Table 2, with a sample of 197 entrepreneurs, the two main motives are 'making a difference in the world' and 'earning a living because jobs are scarce'. In contrast, building great wealth or continuing a family tradition were not seen as motives for the sample. These findings raise some important implications for entrepreneurship in Hungary.

Firstly, there seems an important relationship between available employment and starting an entrepreneurship as this was the highest motivator of the sample. This not only highlights the prevalence of necessity entrepreneurs in Hungary but also the need for further research into the impact of increasing employment opportunities upon entrepreneurship. Moreover, if necessity entrepreneurs make up the majority of entrepreneurs in Hungary, then consideration of the idiosyncrasies of this type of entrepreneur need to be considered in a Hungarian context, such as how "necessity entrepreneurs are more likely than other entrepreneurs to pursue a cost leadership strategy, and less likely to pursue a differentiation strategy" (Block et al., 2015). The findings of this study also support the works of authors such as Munoz (2010) who found that in economically challenged regions people are more likely to be pushed towards entrepreneurship.

The findings that continuing a family tradition and building wealth are not motives for the sample raises the question of the future of family businesses in Hungary. The family businesses are already going through the challenges associated with succession (Heidrich, Csákné Filep, & Mosolygó-Kiss, 2018; Madarasiné Szirmai & Németh, 2019). After the initial influx of entrepreneurs in the 1990s and with few entrepreneurs setting up with family in mind, it raises the question of the future of family businesses in Hungary. As Hungary has a pro-family policy, it seems that this could be extended to offer incentives for setting up Hungarian family businesses.

Moving onto the correlations found in this study: the Spearman's correlations indicate the strength and direction of the monotonic relationship between the variables, i.e., as the value of one increases, so does the value of the other variable, and vice versa, but this is a curvilinear relationship. In other words, the correlations are not attempts to uncover causation but potential relationships between personality traits, and this is not the same as the linear relationship determined by the Pearson correlation. The relationships found, although offering 2-tailed significance, are somewhat on the weak side. There are three motivational traits for which correlations were found.

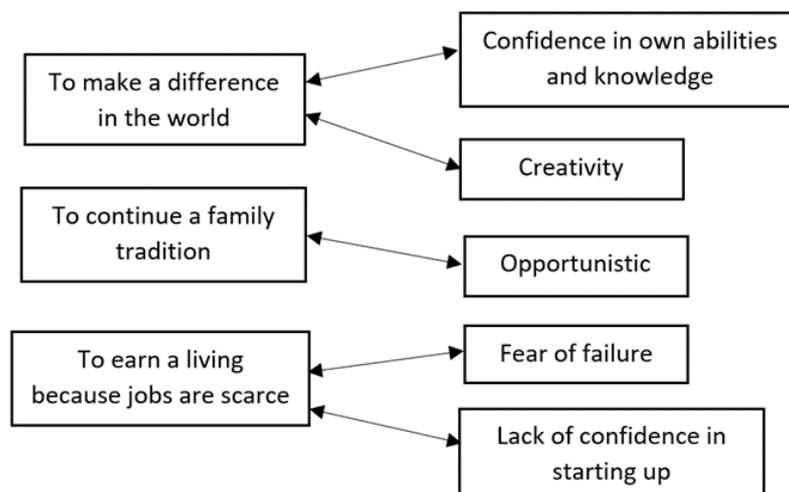


Figure 1. Theoretical model of interrelationships between motivational and entrepreneurial personality traits. Source: own work

Firstly, the motive 'to make a difference in the world' has a weak positive monotonic relationship with the personality traits, confidence in own abilities and knowledge, and being creative. Secondly, the motive 'to continue a family tradition' has a weak positive monotonic relationship with the personality trait of being opportunistic. Thirdly, the motive 'to earn a living because jobs are scarce' has a weak positive monotonic relationship with the personality traits of having a fear of failure and a weak negative monotonic relationship with having confidence in starting up. Using these findings, we can create a theoretical model as a means for consideration of directions for future research. As one of the relationships found was a negative one, the name of the variable has been changed from 'confidence in starting up' to, 'lack of confidence in starting up'. The significant relationships are summarized in the theoretical model (Figure 1).

From the figure, not only does it provoke certain research directions, but also raises important implications. For example, as it was found in this study that Hungarian early-stage entrepreneurs are not motivated to continue the family tradition. Does this imply that they also are therefore less opportunistic or are there other factors at play? If the majority of entrepreneurs have the motive of earning a living as jobs are scarce, this appears to indicate a potential (albeit a weak one) of a fear of failure and lack of confidence. Moreover, it raises the question of whether necessity entrepreneurs pushed into starting a business are encumbered with insecurity, fears other negative traits as this is not something they chose to do. However, it maybe that these aspects reduce over time as confidence increases.

The finding that a person who wants to make a difference in the world also has confidence in their own abilities and a degree of creativity seems a likely coupling as with a person wanting to continue a family tradition having opportunism. In contrast to the previous paragraph, this seems to indicate that entrepreneurs starting up due to pull factors are associated with more positive traits. Further research would be needed to confirm this, but the different personality traits relating to push and pull factors appears to be a fruitful potential research direction.

## 6. Conclusions

This study sought to answer the research questions: which motives are held by Hungarian early-stage entrepreneurs? And, what, if any, is the link between motives and personality traits? As no other research has considered the interplay between motivational traits and other traits relating to an entrepreneurial orientation, this study took an explorative approach, looking for potential correlations that may provide a theoretical framework for future research directions.

The findings not only offer research directions, but also areas for policymakers to consider, in relation to the preferred direction that they wish Hungarian entrepreneurs to head in. The Hungarian entrepreneurs start up a business due to both push and pull factors, namely 'earning a living because jobs are scarce' and 'making a difference in the world' respectively. The former has been found in this study to be linked to positive traits of confidence in one's abilities and creativity. In stark contrast, the latter is linked to a fear of failure and a lack of confidence in starting up. In sum, there appears a distinct divide between Hungarian early-stage entrepreneurs, both in motives and associated personality traits. It is the latter grouping that seems to need further attention. Policymakers will need to consider how to build confidence in starting up with the latter type, which could be achieved through support and advice for entrepreneurs in Hungary, data-sharing, and training in starting up and avoiding pitfalls. These elements may not only increase confidence at this early stage of the business but also decrease the fear of failure.

This study is limited to the use of the 2021 GEM data and there is no doubt a strong argument for exploring these variables through a qualitative approach. It is hoped that by raising the issues and these initial findings, avenues will be opened for more in-depth studies of Hungarian early-stage entrepreneurs, as they face a range of challenges, extending beyond the pandemic and regional challenges to those that affect the entrepreneur on a personal level. As mentioned in the discussion, the entrepreneur faces a distinct learning curve as they overcome the liability of newness, especially in the case of necessity entrepreneurs that may have had less time to plan and prepare to set up a business. As such, it is feasible that aspects

such as confidence may increase and fear of failure decrease, indicating the need for a longitudinal study of how these personality traits relating to the entrepreneur as well as the motivational traits change over time.

Finally, like many businesses, the Covid-19 pandemic has taken its toll on entrepreneurship in general and in Hungary, which appears to have an impact not only on the entrepreneur's business, but on the perceptions of the entrepreneurs themselves (e.g., Gosztonyi, 2022). There is certainly a need to consider further how motives may have changed during and after the pandemic, alongside changes in other personal characteristics which may impact upon the operations of entrepreneurships (e.g., Chandler, 2019).

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