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The Influence of Prior Experience on Innovativeness and Development Decisions of Serial Entrepreneurs

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Abstract:

Purpose: *The aim of the paper is to examine the effects of prior entrepreneurial experience (failure or success) in relation to innovativeness and development priorities in subsequent business ventures undertaken by serial entrepreneurs.*
Design/Methodology/Approach: *The study was conducted using the CATI technique on a sample of 400 micro and small serial entrepreneurs operating in Poland. The chi-square test of independence and Fisher's exact test were used to evaluate the research hypotheses.*
Findings: *The conducted study enhances knowledge on how the nature of prior experience affects the innovativeness of subsequent business ventures as well as the development orientation of serial entrepreneurs. The research indicates that serial entrepreneurs with positive experience are more oriented towards the development of their entrepreneurial ventures, both in the current business activity and over the three subsequent years.*
Practical implications: *The impact of prior experience on innovativeness has been demonstrated only in certain types of innovation (product and marketing innovations). Entrepreneurs with positive prior experience have shown a greater ability to successfully innovate in these two areas.*
Originality value: *The results of the study suggest that the potential cognitive benefits derived from experienced failures can be neutralised by their demotivating consequences.*

Keywords: *Serial entrepreneurship, entrepreneurial experience, innovativeness.*

JEL Classification: *J24, L26, O31.*

Paper type: *Research article.*

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1. Introduction

Entrepreneurs are initiators of changes and growth in a market economy and can accelerate the creation, dissemination and implementation of innovative ideas (Mittelstädt and Cerri, 2008). There is a growing awareness that entrepreneurship is not focused solely on setting up a new enterprise as a one-off event (Ucbasaran *et al*., 2006; Plehn-Dujowich, 2009; Sarasvathy *et al*., 2011), and empirical research confirms that a significant part of worldwide business is conducted by serial entrepreneurs (Westhead and Wright, 1998; Westhead *et al*., 2005; Hyytinen and Ilmakunnas, 2007; Headd, 2003).

There is, however, no unambiguous evidence of benefits of entrepreneurial experience (Ucbasaran *et al*., 2009). Positive or negative experience associated with previous entrepreneurial ventures can influence in various ways future decisions regarding the establishment of a new enterprise. In the literature, it is not clear whether entrepreneurs who have experienced business failure or success are owners of less or more innovative companies (Ucbasaran *et al*., 2010).

Scholars even argue that entrepreneurs can learn more from their failures than from their successes (McGrath, 1999). Entrepreneurs can derive various benefits from learning from failure, such as identifying new opportunities (Ucbasaran *et al.,* 2009), managing new entrepreneurial ventures (Cope, 2011), and increasing the chances of success in future ventures (Minniti, Bygrave, 2001).

Therefore, this study contributes to the current debate and seeks to explore the effects of prior positive or negative experience on innovativeness and business development in subsequent entrepreneurial ventures.

The aim of the paper is to measure the effects of prior entrepreneurial experience, both negative and positive, on the innovativeness and attitude towards development priorities in subsequent business ventures implemented by serial entrepreneurs. The conducted empirical research was carried out by means of a questionnaire among 400 Polish micro and small entrepreneurs.

Data were collected in October and November 2019. The analysis of the obtained research results was performed on the basis of analyses of correlations and contingency tables. The main part of the research was the statistical testing of the formulated research hypotheses using the Chi-square test and Fisher's exact test.

The structure of the paper is organised as follows: the introduction defines the entire thematic scope of the paper and the research goal, the literature review presents the theoretical basis of the research topic, and the research methodology describes the sample and statistical methods used. The next section presents the most important results obtained in the conducted research, while the discussion provides the

evaluation of the research results. The conclusions present implications for the practice, as well as limitations and directions of the author' future research.

2. Literature Review

Serial entrepreneurship is a common phenomenon in the economies of various countries (Hyytinen and Ilmakunnas, 2007; Plehn-Dujowich, 2009; Sarasvathy *et al.*, 2011; Ucbasaran *et al*., 2006) and is considered important for the creation of wealth (Scott and Rosa, 1996), job creation (Westhead *et al.,* 2005), and overall economic performance (Westhead *et al*., 2003). As a result, more and more researchers are exploring the characteristics, behaviour, and reentry decisions of serial entrepreneurs (Amaral *et al*., 2009; Ucbasaran *et al*., 2008; Westhead *et al.*, 2005; Westhead and Wright, 2017).

Business exit can take many forms. Although it is often associated with business closure and bankruptcy or insolvency, exit can also be related to a successful business sale or may be the result of finding alternative employment opportunities. The contemporary literature on entrepreneurship emphasizes the need for a distinction between business failure and exit (Wennberg and DeTienne, 2014, Coad, 2013).

There is no universally accepted definition of business failure. Klimas *et al.* (2020, p. 2) define failure as a psycho-economic phenomenon characterised by a given organisation entering a spiral of poor performance (e.g., insolvency), and thus the entrepreneur entering a psychological state of disappointment caused by failure to meet certain business expectations (e.g., related to insufficient current returns, a lack of expected growth, poor productivity, too slow pace of innovation, etc.) as opposed to personal reasons.

McGrath (1999) defines failure broadly as the termination of business activity that has not achieved its intended goals. One of the most popular definitions of business failure, which is gaining importance in the literature on entrepreneurship, characterises entrepreneurial failure as "the cessation of involvement in a venture because it has not met a minimum threshold for economic viability as stipulated by the entrepreneur" (Ucbasaran *et al*. 2012). This definition is broad and comprehensive, and it examines failure from the perspective of the entrepreneurial process.

On the other hand, serial entrepreneurs often leave their companies to increase their own private benefits, take advantage of emerging opportunities or take on new entrepreneurial challenges (Ucbasaran *et al.*, 2012; Wennberg and DeTienne, 2014) in a different business setting. These serial entrepreneurs do not experience a failure event.

In the existing literature, the relationship between the past experience of

entrepreneurs and their later achievements in the field of entrepreneurship is ambiguous. Studies on the impact of prior experience of entrepreneurs on the subsequent results of their business activity yield mixed results.

For example, Alsos and Kolvereid (1998) do not find a significant relationship between entrepreneurs' experience and the implementation of successive ventures by serial entrepreneurs, while Ucbasaran *et al*. (2009) indicate the existence of non-linear relationships between these two variables.

Studies conducted by Lafontaine and Shaw (2016) on Texas companies show that serial entrepreneurs who use their prior experience are more successful than novice entrepreneurs. Similarly, studies of Danish companies (Shaw and Sørensen, 2019) indicate that serial entrepreneurs have higher sales than novice entrepreneurs and that their ventures are characterised by higher efficiency (see also Parker, 2013).

Other researchers argue that serial entrepreneurs have more developed skills and networks of contacts (Zhang, 2009; Amaral *et al.*, 2009). On the other hand, prior entrepreneurial experience that is associated with both positive values (faster achievement of development thresholds) and negative ones (overconfidence and blindness) may also have the opposite effect (Ucbasaran *et al*., 2006).

For example, a study conducted by Gottschalk *et al.* (2016) among German companies does not indicate the impact of knowledge and experience from prior entrepreneurial activities on creating more successful and more fail-safe business ventures.

The nature of prior experience (success or failure) can influence the cognitive process as well as the perception of current problems and business situations. Eggers (2012) emphasizes the fact that entrepreneurs can easily draw wrong conclusions from failure and can pull back from potentially real opportunities. In addition, learning from entrepreneurial failure can be difficult because it requires recognising and accepting the causes of failure (Cannon and Edmondson, 2001).

Other scientists view failure as an opportunity for learning (McGrath, 1999). Researchers say that entrepreneurs can learn from their mistakes as long as they can use feedback on why their business failed to revise their existing knowledge of how to effectively manage their own company (Shepherd, 2003).

Positive past entrepreneurial experience is more conducive to reentry decisions than negative experience (Amaral *et al.*, 2009; Ucbasaran *et al.*, 2006; Westhead *et al.*, 2005), and it increases the ability to identify business opportunities as well as innovativeness (Ucbasaran *et al.*, 2008; Westhead and Wright, 2017).

The recognition and exploitation of opportunities is strongly linked to innovation. Opportunities are the basis for bringing innovative or new products/services to the

market (Lee and Venkataraman, 2006). For companies in the SME sector, innovations at company level are also very significant. According to the Oslo Manual (OECD 2005), innovation is the implementation of a new or significantly improved product (product or service), a new or significantly improved process, a new marketing method or a new method of organization in the field of business practices, organization of the workplace or relationship with the environment. Products, processes and methods are innovations if they are new or significantly improved, at least from the point of view of the implementing enterprise.

The role and importance of the entrepreneur in the implementation of innovation is emphasised by Schumpeter (1934) as well as by later researchers (Heunks, 1998; Quinn, 1985; Shepherd and DeTienne 2005).

Carbonara *et al.* (2020) found that portfolio entrepreneurs are more likely than serial entrepreneurs to innovate. According to Lahiri and Wadhwa (2020) serial entrepreneurs focus on stable and profitable ventures, not on capital-intensive and uncertain innovation activities. This may be due the fact, that resources and liabilities associated with negative experience may cause deficiencies in the ability to invest in innovative products or practices. Despite the cognitive benefits of past negative entrepreneurial experiences, serial entrepreneurs may be less inclined to take the risk of innovation.

Compared to novice entrepreneurs, the cognitive schemas of serial entrepreneurs that have developed through experience tend to be richer and lead to the success of new ventures. As a result, serial entrepreneurs can run and develop their entrepreneurial ventures more effectively, which may result in better business performance and innovativeness.

Westhead *et al.* (2005) indicate that serial entrepreneurs are much more likely than novices to use new ways of managing teams of co-workers, and are more likely to develop new methods of quality control as well as research and development. A study by Wright *et al.* (1997) found that serial entrepreneurs, who take on more ventures because they have no better alternative, show less desire to grow and develop their businesses.

The researchers also identified a second group of serial entrepreneurs focused on rapid growth and development of their ventures. Past experiences can shape how current challenges are formulated (Keith *et al.*, 2016).

This discussion suggested the following hypotheses:

H1: There is a relationship between the nature of prior entrepreneurial experience (failure or success) and the innovativeness of current business activity.
H2: There is a relationship between the nature of prior entrepreneurial experience (failure or success) and the development orientation of current business activity.

3. Research methodology

Data:

The survey was conducted in October and November 2019 using the CATI technique among owners/co-owners of micro and small enterprises operating in Poland. In the conducted research procedure, it was assumed that a representative sample would be obtained so that it would be possible to generalise the research results to the entire general population from which it was taken.

Assuming that the estimation error is 5%, the significance level is 0.005, and the size of the population, i.e., the number of economic entities meeting the condition of belonging to the group of domestic micro and small entities (employing up to 49 people) operating in various economic fields, is 4,268,606[2], the minimum size of the sample is 385.

In the study, stratified random selection was used, whereby the strata were distinguished according to two criteria: the size of the enterprise (the number of employees broken down into micro-enterprises employing 0-9 people and small enterprises employing 10-49 people) and the voivodeship where the enterprise was based.

The distribution of the sample was developed on the basis of the data available on the website of the Central Statistical Office (current as of December 31, 2018) regarding the proportional distribution of the number of micro and small enterprises in individual voivodeships, taking into account the size of employment. The sampling frame was the REGON National Economy Register, considered to be a complete sampling frame for enterprises operating in Poland.

The sample size was set at 400 enterprises and it was proportionally divided into individual strata. Due to the large disproportions in the number of micro and small enterprises in Poland, an overrepresentation of small enterprises was assumed – otherwise, analyses according to the size of the enterprise would not be possible with the assumed sample size.

In the study, the level of statistical significance (alpha) for testing statistical hypotheses was set at $p < 0.05$. Pearson's Chi-square coefficient and Fisher's exact test were used to test the research hypotheses.

Independent variables:

In the presented study, entrepreneurial experience is an independent variable. Serial entrepreneurs were divided into those with positive (SUCCESS) and negative (FAILURE) experience in their previous business ventures. Failure was considered to have occurred if the respondent indicated that the termination of the previous

[2] *As of the end of 2018, Local Data Bank – www.stat.gov.pl.*

activity had been caused by bankruptcy, liquidation due to incurred losses or the company's performance below the level assumed by the entrepreneur (Ucbasaran *et al.*, 2010; Sarasvathy *et al*., 2011). This is a broad definition that comprehensively describes failure from an entrepreneurial perspective and entrepreneurial expectations. Success was defined as liquidations caused by the emergence of a better business opportunity or an opportunity to sell the company or its shares.

Dependent variables:
To operationalise innovativeness, the questions of the innovation types based on the typology of Oslo Manual (OECD, 2005) were used. Respondents were asked to assess the degree of innovation implementation in the following forms: (i) product or service, (ii) production process, (iii) work organisation, (iv) marketing. The research was conducted in manufacturing and service enterprises, and product innovations concern goods and services. The degree of introducing innovations was assessed on a four-level scale: no attempt was made to introduce innovations, attempts were made without success, innovation introduced at the company level, and innovation introduced at the market level.

Another area of analysis was the assessment of development priorities of serial entrepreneurs, in their current business activity and over the subsequent three years (2019-2021). The evaluation was made on a scale from 1 to 5, where 1 means that the entrepreneur does not take business development into account and 5 means that business development is the main goal of entrepreneurial activity.

4. Results and Discussion

The surveyed serial entrepreneurs operated mainly in services (39%) and trade (33%), less often they were manufacturing companies (28%). Almost 80% of the surveyed enterprises operated in the market for over 5 years. The stabilisation phase was declared by 53.3% of the respondents, 27% of the companies were in the decline phase and 19.3% of the companies were in the phase of dynamic growth.

Thus, most of the analysed enterprises were companies with an established position in the market. The spatial structure of the market in which the surveyed enterprises operated was dominated by the domestic market (39.8%), followed by the regional market (38.3%), and the local market (11.3%), while the international market had the smallest share (10.3%).

Among the reasons for the liquidation of the first entrepreneurial venture, business failure (he FAILURE variable) occurs in 59.5% of cases. 40.5% of liquidations were caused by the emergence of a better business opportunity or an opportunity to sell the company or its shares (the SUCCESS variable).

The results of the calculations (Table 1) show that in the case of two of the five analysed types of innovation, i.e. product and marketing innovations, the

relationships are statistically significant, i.e. the nature of prior entrepreneurial experience (SUCCESS or FAILURE) affects the innovativeness of companies in these areas. Entrepreneurs with positive experience showed a greater ability to successfully introduce product innovations (46.91%, including 40.12% at the company level and 6.79% at the market level) compared to entrepreneurs with negative entrepreneurial experience (39.92% – company-level innovations).

Table 1. *Influence of prior entrepreneurial experience (SUCCESS or FAILURE) on the innovativeness of companies*

Innovations variable	FAILURE				SUCCESS				Chi-square statistic	Asymptotic Significance (2-sided)	Fisher's Exact Test	Significance
	Not tried to introduce %	Failure to introduce %	Company level %	Market level %	Not tried to introduce %	Failure to introduce %	Company level %	Market level %				
Product/service	55.04	5.04	39.92	0.00	51.85	1.23	40.12	6.79	20.336[a]	.000	21.25	.00
Production process	80.25	5.88	13.87	0.00	78.40	9.88	9.88	1.85	7.752	.051		
Work organisation	77.31	14.7	7.98	0.00	80.25	8.64	11.11	0.00	4.019	.134		
Marketing	70.17	21.43	8.40	0.00	69.75	12.96	17.28	0.00	10.175	.006		

Source: *Own study.*

Moreover, attempts to introduce innovations ended in failure to a lesser extent among entrepreneurs with positive (1.23%) than with negative experience (5.04%). In the case of marketing innovations, entrepreneurs with positive experience introduced innovations at the company level (17.28%) more often than entrepreneurs with negative experience (8.4%).

Here, too, the failure to introduce innovations was smaller in the group of entrepreneurs with positive (12.96%) than negative experience (21.43%). Thus, the H1 hypothesis was partially confirmed in the area of introducing new product and marketing innovations. The calculations presented in Table 2 show that the relationships are statistically significant, i.e. there is a relationship between positive or negative entrepreneurial experience and the development orientation of the enterprise.

The conducted research indicates that serial entrepreneurs with positive experience are strongly and very strongly oriented towards business development (37.4% and 27.1% respectively) to a much greater extent than entrepreneurs with negative experience (36.7% and 12.7% respectively). A similar relationship occurs in the case of opinions concerning business development over the subsequent three years (Table 3). Thus, the H2 hypothesis was confirmed.

The study presented in the paper was aimed at verifying whether the results of prior entrepreneurial experience (positive or negative) determine innovativeness in subsequent business ventures and affect the development orientation of serial entrepreneurs.

Table 2. *The effect of prior entrepreneurial experience on development orientation*

			Asymptotic	Monte Carlo sig. (2-sided)			Monte Carlo sig. (1-sided)		
					99% Confidence Interval			99% przedział ufności	
	Value	df	Significance (2-sided)	Significance	Lower Bound	Upper Bound	Significance	Lower Bound	Upper Bound
Pearson Chi-square	20.031[a]	4	.000	.000[b]	.000	.000			
Likelihood Ratio	20.767	4	.000	.000[b]	.000	.000			
Fisher's Exact Test	19.434			.000[b]	.000	.001			
Linear-by-Linear Association	11.115[c]	1	.001	.001[b]	.000	.002	.000[b]	.000	.001
N of Valid Cases	366								

a. 20,0% cells (2) have expected countless than 5. The minimum expected count is .78.

b. Based on10000 sampled tables with starting seed 92208573.

c. The standardized statistic 3.334.

Source: *Own study.*

Table 3. *The effect of prior entrepreneurial experience on development orientation (2019-2021)*

				Monte Carlo sig. (2-sided)			Monte Carlo sig. (1-sided)		
					99% Confidence Interval			99% Confidence Interval	
	Value	df	Asymptotic Significance (2-sided)	Significance	Lower Bound	Upper Bound	Significance	Lower Bound	Upper Bound
Pearson Chi-square	20.604[a]	4	.000	.000[b]	.000	.001			
Likelihood Ratio	21.307	4	.000	.000[b]	.000	.001			
Fisher's Exact Test	20.107			.000[b]	.000	.001			
Linear-by-Linear Association	8.500[c]	1	.004	.004[b]	.002	.005	.002[b]	.001	.003
N of Valid Cases	384								

a. 20,0% cells (2) have expected countless than 5. The minimum expected count is .81.

b. Based on10000 sampled tables with starting seed 92208573.

c. The standardized statistic 2.915.

Source: *Own study.*

The nature of entrepreneurial experience was not significantly related to innovativeness in the area of production process and work organisation. In the case of product and marketing innovations, this dependency can be seen, as prior positive experience resulted in greater innovativeness in subsequent business ventures. The results indicate the ambiguity of the impact of prior entrepreneurial experience on innovativeness and differ from the results of other authors' studies.

The study conducted by Vaillant and Lafuente (2019) indicates that both positive and negative experience fosters innovativeness among serial entrepreneurs. Westhead and Wright (2017) show no link between past failure and the innovativeness of exploited opportunities.

This may mean that despite the development of a cognitive schema which is the result of previous experience and which helps in future business activity, failure, as a traumatic event that generates negative emotions, can interfere with learning. In addition, innovativeness is not only related to the person of the entrepreneur but also depends on other factors, both internal and external (Jakimowicz and Rzeczkowski, 2019, Roszko-Wójtowicz and Białek, 2019).

Serial entrepreneurs with positive experience tend to be more development-oriented, both in the course of their current business activity and over the three subsequent years, than entrepreneurs who have experienced failure. Such results indicate, as suggested by Shepherd (2003), that the demotivating consequences of entrepreneurs' failure neutralise the potential cognitive benefits of such past experience, and also affect the perception of their ability to take on challenges in the future (Bandura, 1997).

Also in this case other factors should be taken into account, for example the motives for starting a new business (push and pull factors) or entrepreneurial and managerial skills (Weber and Tarba 2014).

5. Conclusions

The results of the research presented in the paper show how the nature of prior entrepreneurial experience affects future decisions of serial entrepreneurs. The study contributes to the academic debate on whether entrepreneurial experience and the learning process better explain the behaviour of serial entrepreneurs.

Previous studies focused, among others, on the effects of prior experience of serial entrepreneurs on identifying and exploiting opportunities (Westhead and Wright, 2017; Ucbasaran*et et al.*, 2009) or reentry decisions (Amaral *et al*., 2009; Ucbasaran *et al.*, 2006, Hsu *et al*., 2017). These studies show that past failure or success also affect other aspects, such as entrepreneurs' development orientation or innovativeness in subsequent business ventures.

In the case of development orientation and certain types of innovation, positive prior experience has an impact on future success. The benefits of learning from past experience can be eclipsed by the loss of entrepreneurial ambitions demonstrated by serial entrepreneurs who have suffered failures. Nevertheless, prior entrepreneurial experience, even seen as failure, offers learning opportunities.

For practitioners, the research results suggest that it is important to take advantage of benefits of prior experience. Entrepreneurs with prior negative experience should recognise that failure in business does not amount to personal failure and must not become an obstacle to identifying business opportunities. This opens up a field for policy, in terms of promoting public acceptance of failure as well as in terms of education activities and offering targeted support and advice to this group of entrepreneurs.

The conducted study has some limitations that create opportunities for further research. Entrepreneurial experience covered in the study (success or failure) was not analysed in depth. Clarifying the quantity and quality of accumulated experience (e.g., the length of involvement in previous companies, the number of previous companies, the industry and scale of business activity) may allow us to increase knowledge about the relationship between prior entrepreneurial experience and the behaviour of serial entrepreneurs.

Furthermore, the results of the study relate to only one country, and therefore caution should be exercised when interpreting and generalising the results, given, for example, the cultural specificity of attitudes towards entrepreneurial failure.

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