AMERICAN JOURNALS
Open Access, Peer Reviewed Journals

American Journal of Business Management, Economics and Banking
ISSN (E): 2832-8078 Volume 39, August - 2025

METHODOLOGICAL APPROACHES TO ASSESSMENT OF ENTREPRENEURIAL ABILITY

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ABSTRACT

Assessing entrepreneurial ability is fundamental for understanding and predicting success in business ventures. This paper explores methodological approaches to assessing entrepreneurial ability, with a particular focus on utilizing surveys as a tool for self-assessment. A survey consisting of 20 questions was administered to a sample of aspiring entrepreneurs, aiming to capture various dimensions of entrepreneurial skills, traits, and behaviors. Based on the survey results, a comprehensive assessment of individuals' perceived abilities in business endeavors was calculated. The paper discusses the design and implementation of the survey instrument, including the selection of questions and the rationale behind their inclusion. It also examines the process of data collection and analysis, highlighting key findings and insights derived from the survey responses. Furthermore, the paper discusses the strengths and limitations of using self-assessment surveys in evaluating entrepreneurial ability, including considerations related to validity, reliability, and potential biases. By leveraging survey data, this study contributes to the ongoing discourse on methodological approaches to entrepreneurial assessment, providing valuable insights into the self-perceived competencies of aspiring entrepreneurs. The findings offer implications for entrepreneurship education, training, and talent development initiatives aimed at fostering the growth and success of future business leaders.

KEYWORDS

Entrepreneurial ability, assessment, methodological approach, entrepreneurship

Introduction

Entrepreneurship, often hailed as the engine of economic growth and innovation, has garnered significant attention from scholars, policymakers, and practitioners alike. At the heart of entrepreneurial endeavors lies the entrepreneurial ability—the set of skills, traits, and behaviors that enable individuals to identify, pursue, and capitalize on opportunities in the marketplace (Oosterbeek et.al 2009). Understanding and assessing entrepreneurial ability are crucial endeavors, as they hold the key to unlocking insights into the factors driving entrepreneurial success and failure. Assessing entrepreneurial ability is a complex and multifaceted task, requiring the integration of various

methodological approaches to capture the nuances of entrepreneurial behavior (Pittaway and Edwards 2012). From psychometric assessments and behavioral observation to case studies and simulation exercises, researchers and practitioners employ diverse tools and techniques to evaluate individuals' entrepreneurial aptitude. Among these approaches, self-assessment surveys emerge as a valuable method for gauging individuals' perceptions of their own entrepreneurial capabilities (Souitaris et.al 2007).

In this paper, we delve into methodological approaches to assessing entrepreneurial ability, with a particular emphasis on the utilization of surveys for self-assessment purposes (Jones and Iredale 2010). The central aim is to explore the design, implementation, and implications of a self-assessment survey administered to a sample of aspiring entrepreneurs. By examining individuals' self-perceived abilities in various aspects of business endeavor, we seek to shed light on the complexities of entrepreneurial skill development and self-awareness (Reynolds et.al 2005).

The paper is structured as follows: first, we provide an overview of the theoretical foundations underpinning entrepreneurial ability and the importance of its assessment in entrepreneurial research and practice. Next, we discuss methodological considerations in entrepreneurial assessment, highlighting the strengths and limitations of different approaches. We then introduce the design and implementation of the self-assessment survey, detailing the selection of survey questions and the rationale behind their inclusion. Subsequently, we present the findings derived from the survey data analysis, offering insights into individuals' self-perceived entrepreneurial abilities. Finally, we discuss the implications of the findings for entrepreneurship education, training, and talent development initiatives.

METHODOLOGY

We used experimental studies to involve manipulating variables to observe their effects on entrepreneurial behavior or performance and conduct experiments to examine the impact of different types of feedback or incentives on individuals' decision-making in entrepreneurial contexts. Network analysis was used as a technique in order to study the social networks of entrepreneurs and their impact on business success. By analyzing the structure and dynamics of entrepreneurial networks, key influencers, information flow patterns, and resource exchange mechanisms have been identified. Survey was designed and used to collect important data for analyzing and grouping also making recommendations.

RESULTS AND DISCUSSION

Assessing entrepreneurial competency presents a fundamental challenge, given the absence of sufficiently precise and practical methodologies for measuring its quality indicators from a scholarly perspective. Therefore, developing the methodology for assessing entrepreneurial competency occupies a central position. In order to develop the methodology for assessing entrepreneurial competency, the following five approaches were studied by economists (Fig 1)

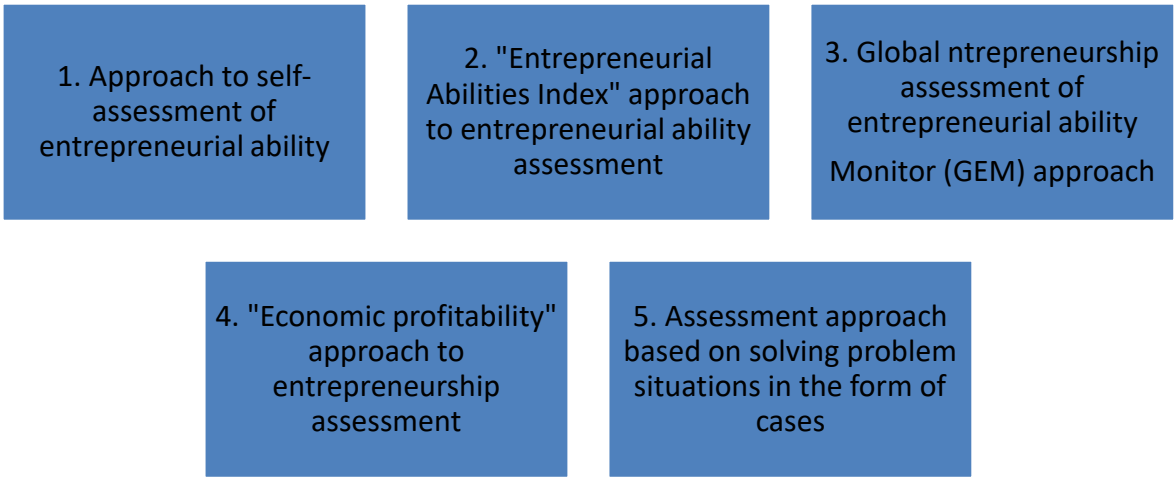

Fig 1 Methodology of assessment of entrepreneurial ability approaches

1. Approach to self-assessment of entrepreneurial ability. Self-assessment of entrepreneurial competence is crucial for individuals engaging in small business and private entrepreneurship to possess a certain level of entrepreneurial knowledge. Diagnosing an individual's entrepreneurial competence before embarking on a new venture can be instrumental. Based on diagnostic results, clear recommendations can be provided for the enhancement of their entrepreneurial capabilities (Johannisson 2010).

Self-assessment of entrepreneurial competence can be conducted through two main avenues - offline and online testing methods. The diagnostic methodology for assessing individuals' entrepreneurial competencies comprises four stages:

1. Utilizing test questions for self-assessment of entrepreneurial competence.
2. Expression of respondents' personal attitudes towards the test questions assessing entrepreneurial competence.
3. Calculation of the total score obtained from the completed questionnaire.
4. Determination of the level of entrepreneurial competence development based on the aggregation of scores.

The diagnostic assessment of individuals' entrepreneurial competencies is conducted through providing responses to the following 20 questions. The test, titled "Entrepreneurial Aptitude," prepared by T. Matveeva, consists of the following clear questions aimed at determining entrepreneurial capability. These questions are about taking risks, international communication, motivation, experience, investments and others.

Each question in this diagnostic assessment is answered with either "yes" or "no." Each positive response earns 1 point. The total sum of points corresponds to the entrepreneurial competence level of the individuals based on the following assessment scale:

- 17-21 points: Entrepreneurial competence at the "developed" level.
- 13-16 points: Entrepreneurial competence at the "proficient" level.
- 0-12 points: Entrepreneurial competence at the "weak" level.

Table 1 information indicates that among 250 eligible youth surveyed, 26% possess all necessary qualities to become entrepreneurs, and after completing their higher education, they may start their own businesses. However, for the majority, 70% of them, reaching the level of competence required

for success in entrepreneurship is not that straightforward. Nevertheless, if they engage in developing their entrepreneurial skills, becoming successful entrepreneurs becomes feasible. It's noteworthy that the remaining 10 individuals (4%) expressed no doubt in their ability to become successful entrepreneurs (Morselli 2019).

Table 1 Self-assessment of entrepreneurial abilities of young people results

№	State of entrepreneurial ability (according to points accumulated as a result of "yes" or "no" answers)	Qualitative levels of entrepreneurial ability of respondents	The number of respondents specific to the qualitative level of entrepreneurial ability	Their share in the total participation, in %
1	0-12 points	Weak	10	4
2	13-16 points	Competent	175	70
3	17-21 points	Developed	65	26
	Total	-	250	100

The disadvantages of this method, in our opinion, are as follows:
1. Test results may not be clear enough due to disregarding the "maybe" option between "yes" and "no" responses to the questions (Moberg 2014).
2. Utilizing opportunities from the entrepreneurship infrastructure in the test questions was overlooked. For instance, when asked, "Do you have the ability to attract investments from friends and acquaintances for your business venture?" without considering options like "or have you sought loans from banks and utilized government subsidies?", the test could have been more comprehensive.
3. Subjective factors may not accurately reflect the real state of entrepreneurial competence because each respondent provides their own individual responses to the questions without a mechanism for quality control.
4. While the test may allow for a general diagnostic assessment of individuals' entrepreneurial abilities in the context of starting a specific business or initiating their own work, it may not provide the opportunity to determine the level of their "entrepreneurial skill."

2. "Entrepreneurship ability index" approach. Entrepreneurial competency assessment from a quality perspective was conducted by the Central Economic and Mathematical Institute (CEMI) of the Russian Academy of Sciences through examination. S.V. Terebova and P.S. Pleshakov proposed the "Entrepreneurial Competencies Index" for evaluating the entrepreneurial competency of individuals (Neck 2011). This index suggests calculating the integral index, which considers the importance of each characteristic by assigning weights based on the significance of qualities exhibited by eligible youth in a 70-point system (0 points - not important at all; 4 points - extremely important).
Each question was assessed on a Likert scale with a 4-point system as follows:
- Extremely important (4 points).
- Very important (3 points).
- Moderately important (2 points).
- Not important at all (1 point).
In the monitoring results, the numerical ratings of the components of work potential were obtained in the form of "from zero to one", indicating the actual scores on the scale. The "Entrepreneurial

Competencies Index" calculated using this method reflects the real assessment of entrepreneurial competency levels, as demonstrated by the example of the Khorezm region of Uzbekistan (Table 2).

Table 2 The quality characteristics of labor competency in the Khorezm region of Uzbekistan

Quality	Index value in 1997	Index value in 2008	Rating level	Trend line
1. Communication ability	0,733	0,747	3	parallel to the time axis
2. Physical health	0,682	0,729	4	increasing
3. Mental health	0,699	0,756	2	increasing
4. Smart potential	0,630	0,621	7	falling
5. Moral level	0,775	0,769	1	falling
6. The need for success	0,612	0,660	6	increasing
7. Creative potential	0,593	0,571	8	falling
8. Cultural level	0,609	0,684	5	increasing

According to the monitoring data in Table 2, it is evident that during the years 1997-2008, there was a consistent trend towards a stable state of mental, social, and emotional well-being among the population, reflected by the highest values of labor quality indicators. The lowest value was attributed to the productivity competency index. Alongside this, there is a tendency for an increase in physical and mental health, civic engagement, and the need for success. The downward trend is rational and productive, particularly pertaining to the population's mental well-being (O'connor 2013).

3. Global Entrepreneurship Monitor approach (GEM). The Global Entrepreneurship Monitor (GEM) is a scientific research project aimed at providing information on the state of entrepreneurship activity and the macroeconomic (national level) conditions for promoting entrepreneurship development. The GEM project was initiated in 1997 by leading scholars from the United Kingdom, the United States, Finland, and Ireland. Institutionally, the project is supported by two major institutions in the field of entrepreneurship research - Babson College in the USA and London Business School in the United Kingdom. In 1999, the first annual scientific report was published by the participants of the project, with 10 countries involved; in 2000, it increased to 20 countries, and by 2007, 42 countries participated. Currently, GEM is considered the largest research project in the field of entrepreneurship in terms of the number of countries covered. The main goal of this project is to conduct a comparative analysis of the levels of entrepreneurship activity among countries. This involves assessing the "entrepreneurial activity," defined in the project as "the creation and management of new businesses," within the conceptual model of GEM, which is described with the following key indicators:

-potential entrepreneurs - individuals who are willing and capable of starting and managing a business, utilizing their opportunities, knowledge, and experience to organize business activities.

-early-stage entrepreneurs, including:

- Nascent entrepreneurs - individuals who have taken active steps toward starting a business during the past year, have full ownership in their businesses, but have not yet paid salaries or other types of remuneration for three months or more.

- Owners of new business - individuals who own and manage a newly created business and have been operating for more than three months but less than 42 months and have received income.
-successful entrepreneur or successful business owner-manager - an entrepreneur or manager of a business that has been actively operating for more than 42 months and has shown a significant level of income over time.

4. "Economic profitability" approach. Uzbek scientist, professor N.Q.Murodova believes that it is appropriate to determine the quality of the activities of small business entities, their state and level of economic profitability by quantitative measurement. This refers to the "economic benefit of enterprises" the ability to satisfy various needs at the expense of the income that the enterprise receives in return for the realization of its production and entrepreneurial potential is understood. It is recommended to calculate the level of entrepreneurial activity using the following formula:

EA=AI-(FC/AI-VC)*100% (1)

EA-level of entrepreneurial activity of the enterprise;
AI-annual income of the enterprise;
FC-fixed costs of the enterprise;
VC-variable costs of the enterprise.
Through this methodology, as a result of determining the level of economic profitability of small business activities, their activity is evaluated. In this case, the scientist divides the income of business enterprises according to the following economic profitability:
• economically helpless activity (state of poverty);
• profitability at the level of interest of the owner of the enterprise, i.e. mature economic activity (private profitability);
• profitability in the interests of the enterprise owner and hired workers,
i.e. economically developed activity (collective benefit);
• social benefit, i.e. prospective activity (social benefit);
• non-profit making, i.e. carried out by means of illegal entrepreneurship.
In accordance with the cases of economic usefulness classified above, the quality levels of business entities and the specific quality mark representing them are also recommended.

Table 3 Levels of profitability and quality of small business activity

Rate of profitability of small business activity percentage)	Economic profitability of small business activity cases	Quality levels of small business activity:	Quality marks of enterprises
0-25	Unstable lust	Economically weak business activity	-
26-50	Self-interest	Economically mature activity	Bronze
51-75	Collective benefit	Economically developed activity	Silver
76-100	Social benefit	A promising activity	Gold

As can be seen from Table 3, there are specific classifications of each achieved quality level of the performance of small business entities, which are evaluated by the relevant criteria. "Economic usefulness" of entrepreneurship assessment positive aspects of the approach are to determine the level of business rating of business enterprises and to divide them into different groups, and accordingly to create an opportunity to develop a system of specific measures (Kuziboev et.al 2024).

5. Assessment approach based on solving problem situations in the form of cases. Russian scientist E.K. Klimov developed an evaluation method based on solving problem situations in the form of a case for the purpose of researching entrepreneurial activity. E.K. Klimov recommends evaluating the indicator "Psychological readiness for entrepreneurial activity" using the following 7 criteria:
- entrepreneurial motives;
- business goals;
- initiative;
- strategic thinking;
- resistance to stress;
- entrepreneurial intention;
- business resources.

It is believed that it is appropriate to determine the above-mentioned criteria for determining the readiness for entrepreneurship by means of a survey based on the "Situational Questionnaire". This questionnaire is based on information about 19 problem situations and 4 respondents. Problem situations consist of business problem questions and four possible solutions. The problem situation has the following form. "An entrepreneur wants to invest in the purchase of an enterprise. What factors do you think he should take into account to evaluate the profitability of the enterprise?"
Answer options:
a) the profit of the last year;
b) the average annual profit of the last five years;
c) determined based on the amount of profit of previous years
the average annual forecast profit for the next five years;
g) the average annual forecast profit over the next five years, determined on the basis of the confidence that the buyer's management skills will contribute to a sharp increase in profit.

CONCLUSION

In conclusion, this paper has explored methodological approaches to assessing entrepreneurial ability, with a particular emphasis on the utilization of self-assessment surveys. Entrepreneurial ability, characterized by a combination of skills, traits, and behaviors, plays a pivotal role in shaping individuals' success in business endeavors. The assessment of entrepreneurial ability is a multifaceted task, requiring the integration of diverse methodologies to capture the complexities of entrepreneurial behavior. Through the implementation of a self-assessment survey consisting of 20 questions, this study has provided valuable insights into individuals' self-perceived entrepreneurial abilities. The survey data analysis revealed patterns and trends in how aspiring entrepreneurs perceive their strengths and weaknesses across various dimensions of entrepreneurial endeavor. By examining factors such as risk-taking propensity, creativity, resilience, and leadership skills, the survey shed light on the diverse skill set required for entrepreneurial success.

The findings of this study have important implications for entrepreneurship education, training, and talent development initiatives. By understanding their own strengths and weaknesses as perceived through self-assessment, aspiring entrepreneurs can tailor their learning and development efforts to enhance their entrepreneurial capabilities. Furthermore, educators and practitioners can use the insights derived from self-assessment surveys to design targeted interventions aimed at fostering the growth and success of future business leaders.

In conclusion, methodological approaches to assessing entrepreneurial ability, including self-assessment surveys, contribute to our understanding of the factors driving entrepreneurial success and failure. By leveraging diverse methodologies, researchers and practitioners can gain comprehensive insights into the complex dynamics of entrepreneurship and inform strategies for supporting aspiring entrepreneurs on their journey towards business success.

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