Recognizing the Dunning–Kruger Effect in the Early Stages of the Entrepreneurial Process

Lea Ulčar, Miha Marič
University of Maribor, Faculty of Organizational Sciences, Kranj, Slovenia
ulcarlea98@gmail.com, miha.maric@um.si

The chapter discusses the phenomenon of the Dunning-Kruger effect among the participants of the PONI LUR entrepreneurial training, which is conducted by RDA LUR in the Ljubljana Urban Region. The findings show that mentors often perceive an overestimation of their own entrepreneurial skills in participants, which can have a significant impact on the development of business ideas and business decision-making. Part of the research also included an in-depth interview with the program's internal mentor, who confirmed the presence of the Dunning-Kruger effect in the participants and described the existing approaches to address this challenge. Based on the analysed findings, proposals for improvements were formulated, including structured training of mentors, the introduction of reflective tools and the development of additional support after the training.

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1 Introduction

Entrepreneurship, as a developmental pathway for the individual, goes beyond personal satisfaction and achievement. It exerts a profound influence on a nation's economic strength and stability, primarily through innovation and the creation of new employment opportunities. It simultaneously integrates knowledge, motivational, and psychological factors that shape the entrepreneurial trajectory, positioning the entrepreneur as the central agent of entrepreneurial activity. In the contemporary entrepreneurial environment, where economic objectives constantly intersect with personal development, the psychological dimensions of decision-making are gaining increasing importance. Among these, the Dunning–Kruger effect stands out as a cognitive bias in which individuals with limited knowledge or experience tend to overestimate their own abilities.

In Slovenia, a significant role in promoting entrepreneurship and developing entrepreneurial competencies is played by the PONI project, implemented within the framework of regional development agencies. This paper focuses on the PONI LUR project, conducted by RRA LUR, and examines the presence of the Dunning–Kruger effect among its participants. The aim is to determine the extent to which this effect occurs, how it is identified by the project implementers, and how the issue is addressed. The paper further presents opportunities for the enhancement of the project that would contribute to fostering a more realistic self-perception among participants, while maintaining their engagement, motivation, and innovative entrepreneurial orientation.

2 Entrepreneurship

Before delving into the selected topic, it is essential to first define several fundamental concepts related to it. Because of its interdisciplinary nature, entrepreneurship has been defined in numerous ways that reflect its complexity. However, a lack of understanding of entrepreneurial activity, both among experts and among entrepreneurs themselves, can lead to an underestimation of its demands and to unrealistic expectations. This often results in poorly considered decisions within entrepreneurial processes.

2.1 Definition of Entrepreneurship

The Global Entrepreneurship Monitor (GEM), the largest and longest-running global study of entrepreneurship, defines entrepreneurship as any attempt by an individual, a group of individuals, or an existing company to create a new enterprise or to realize a newly emerging idea or activity (GEM, 2025). Based on this definition, Močnik and Širec (2022) describe entrepreneurship as a concept that includes the identification, evaluation, and development of opportunities, where the development of entrepreneurial opportunities is primarily associated with creating new economic or social value.

Šuštar (2011) supports this definition and adds that entrepreneurship must also consider the distribution of benefits among individuals, groups, organizations, and society. Rus, Močnik, and Crnogaj (2023) emphasize the importance of a dynamic entrepreneurial system within a country, as it brings substantial economic benefits in the form of innovation, job creation, and productivity growth. Rebernik, Tominc, Crnogaj, Širec, Bradač Hojnik, and Rus (2015) also describe entrepreneurship as the continuous search for, creation of, and use of opportunities to meet market needs, which significantly contributes to economic well-being.

When speaking of entrepreneurship, we primarily refer to the entrepreneurial process, which begins with individuals who possess certain capabilities and believe that they can realize their business ideas (Rebernik et al., 2015). Močnik and Širec (2022) add that the entrepreneurial process begins when people act and pursue specific opportunities. As Rebernik et al. (2015) note, only a fraction of those who express entrepreneurial interest progress to the stage of implementing their business idea.

2.1.1 The Entrepreneur

To better understand the entrepreneurial system, it is necessary to analyze the roles within it. Rebernik, Širec, Bradač Hojnik, Crnogaj, Rus, and Tominc (2021) identify the individual, their motives, tendencies, and actions as the central factor of entrepreneurial activity. The entire entrepreneurial experience is grounded in the individual's culture, as well as in the social and economic environment. Širec, Tominc, Bradač Hojnik, Rus, and Crnogaj (2023) also emphasize the importance of

entrepreneurial abilities as a combination of personal, character, and learning capacities that form a multilayered cultural and social context.

Rebernik et al. (2021) further state that entrepreneurial intentions are influenced by both personal traits and the perception of one's own abilities and competencies, as well as by the individual's perception of the environment in which the entrepreneurial idea is developed or implemented. Širec et al. (2023) add that attention to entrepreneurial opportunities is strongly shaped by entrepreneurial experience, including networking and indirect experience such as participation in family businesses.

2.2 Phases of the Entrepreneurial Process

Entrepreneurship is therefore a process in which new business activities and enterprises emerge, where the main elements are the entrepreneur, resources, and business opportunities that entrepreneurial individuals must recognize and take advantage of within a given environment. At this point, it is important to understand that the number of individuals who move from the initial stages of the entrepreneurial process, which include confidence in their entrepreneurial abilities, knowledge, and the perception of entrepreneurial opportunities, to the following stages, which are based on actual activities aimed at exploiting business opportunities, decreases at each stage (Rebernik, Tominc, Crnogaj, Širec, Bradač Hojnik, and Rus, 2016).

Rebernik et al. (2016), based on entrepreneurial activities as studied by GEM, summarized the key phases of the entrepreneurial process. Regular monitoring of these phases plays a significant role in shaping entrepreneurship policies. By observing the number of individuals who transition between entrepreneurial phases and identifying critical points between them, entrepreneurship policies and measures can be designed more comprehensively to adequately support each phase of the entrepreneurial process according to the needs of entrepreneurs.

Rebernik et al. (2016) define four key phases of the entrepreneurial process. The first phase, the phase of potential entrepreneurs, includes individuals who believe that they have the necessary knowledge and entrepreneurial skills to realize a business venture. In this phase, individuals recognize entrepreneurial opportunities, take on

risk, and are aware of the possibility of failure. The second phase, the phase of nascent entrepreneurs, refers to individuals who have started carrying out activities to establish a company or have established one less than three months ago. The third phase, the phase of new entrepreneurs, includes entrepreneurs whose companies have been operating for more than three months and are already paying wages but have not yet exceeded three and a half years of activity. The fourth phase, the phase of established entrepreneurs, is the final defined phase and includes entrepreneurs who have been developing their company for more than three and a half years.

To make the entrepreneurial process easier to understand, GEM (2025) introduced the TEA index (Total Early-Stage Entrepreneurial Activity), which shows entrepreneurial activity in the early stage of development. This index represents one of the key indicators examined by GEM. It refers to the phase of potential entrepreneurs and the phase of nascent entrepreneurs, who have either recognized entrepreneurial opportunities or have already begun activities leading to the establishment of a company.

2.3 The Importance of Entrepreneurship for Economic Development

It is important to recognize that the emergence of entrepreneurship extends beyond individual satisfaction and success, as it has a strong impact on a country's economic strength and stability, primarily through innovation and the creation of new jobs (Močnik and Širec, 2022). These two dimensions are closely interconnected. Innovation represents the process of creating something new, which forms the essence of the entrepreneurial process. For competitiveness in a constantly changing market, small enterprises in particular must ensure continuous innovation. This process significantly contributes to job creation, as new products and services generate new employment opportunities.

The role of entrepreneurship in economic development involves more than merely increasing the gross domestic product (GDP). It contributes to job creation, economic growth, and higher productivity, supports the continuous process of transformation within society and the economy, increases regional income, and simultaneously forms part of a broader regional structure (Šuštar, 2011).

3 Supportive Environment for Entrepreneurship Development

3.1 Definition of the Concept

Researchers and experts have long agreed that the entrepreneurial ecosystem plays a vital role in business growth. As already mentioned, this growth has positive effects on job creation, contributes to state revenues, and generates broader social benefits for the wider region. The entrepreneurial ecosystem can be defined as a network of interdependent actors and factors that enable productive entrepreneurship within a specific area. It is essential for the development of entrepreneurial ideas and potential enterprises, which is why the role of supportive entrepreneurial institutions is of vital importance (Rebernik et al., 2021).

The supportive environment emerged precisely from the recognition of the importance of entrepreneurship. According to Rebernik et al. (2015), the success of an entrepreneur should not depend solely on the individual but also on the state, which should, through appropriate entrepreneurial policy, establish a positive entrepreneurial ecosystem and thereby create the fundamental framework for successful business operations. The supportive environment is regulated by the Law on the Supportive Environment for Entrepreneurship Development (ZPOP-1), which came into force in 2007. Due to evident shortcomings, amendments were later introduced through the Law on Amendments and Supplements to the Law on the Supportive Environment for Entrepreneurship (ZPOP-1D) in 2017.

The objective of ZPOP-1D (2017) is to establish an effective supportive environment at the local, regional, and national levels, to raise awareness of the importance of entrepreneurship for economic development, and to promote the realization of the entrepreneurial potential of citizens. It is intended for potential entrepreneurs and existing enterprises in all phases of the entrepreneurial process, within which individuals can access comprehensive support services and more easily connect with research institutions, educational organizations, and the business sector.

3.2 The Role of the Supportive Environment in the Development of Entrepreneurship in Slovenia

In the framework of the global GEM research, Rebernik et al. (2021) classify Slovenia as a high-income economy with a stable economic system, while also recognizing its well-developed infrastructure and relatively well-organized supportive environment. Rus et al. (2023) observe that although the Slovenian entrepreneurial ecosystem is developing rapidly and offers numerous opportunities for enterprises in the initial stages of development and growth, there are still obstacles and weaknesses that hinder further progress. These include limited access to financing, a shortage of qualified labor, and, most notably, difficulties in attracting the right talent.

According to Rus et al. (2023), the key factors for a successful entrepreneurial path in Slovenia are a well-developed entrepreneurial culture, a strong network of incubators, accelerators, and other support institutions. They also highlight the wide range of entrepreneurship education programs and the extensive network of mentors and investors available to entrepreneurs in all stages of development. Bergman (2025) agrees with these views but expresses concern about the way entrepreneurial activities are implemented, arguing that fragmented, one-time, or disconnected forms of support will not bring the essential progress needed to improve the current situation.

For the future, Rus et al. (2023) suggest that Slovenia should enhance its entrepreneurial ecosystem primarily through the development of innovative sources of financing, the establishment of support programs for companies in the growth phase, and the promotion of new technologies. However, they emphasize that this system must be designed in a more holistic, systematic, and interconnected way. The crucial element should be the connection between the entrepreneurial ecosystem and access to financial resources, government policies, educational institutions, cultural attitudes, and social networks (Ermawati, 2023).

3.3 The Role of Entrepreneurship Policy in the Development of Entrepreneurship in Slovenia

Entrepreneurship as a driving force of economic growth, employment, innovation, and productivity has been recognized not only by analysts and economic theorists but also by national policymakers. Crnogaj and Rebernik (2013) emphasize that entrepreneurship has become central to many political initiatives due to its positive impact on the economy and society. As already mentioned, the positive contributions of entrepreneurship include the creation of new jobs, the reduction of unemployment, and the enhancement of economic growth and development at the national level. Consequently, developed economies are increasingly moving toward an entrepreneurial economy model that relies not only on knowledge but also on entrepreneurial initiative as an important complementary factor of progress.

It is important to understand that entrepreneurship, as an interdisciplinary concept, cannot be based on a single key assumption that would ensure a company's success. For this reason, GEM (2023) presented a conceptual framework of fundamental conditions that combine various aspects and dimensions of environmental factors. These include financial support (availability and accessibility), government policies (support and regulation), government programs, entrepreneurship education (primary, secondary, and post-secondary), research and development transfer, business and professional infrastructure, internal market dynamics and openness, physical infrastructure, and cultural and social norms.

Therefore, it must be recognized that the development of successful entrepreneurship is influenced not only by entrepreneurial capacities and opportunities but also by government policies and programs that are essential for ensuring a stable and supportive environment for entrepreneurs (Širec et al., 2023). In economic systems that acknowledge the crucial role of entrepreneurship in national and global development, the government plays a central role. Through appropriate policies, governmental institutions not only facilitate the establishment of new enterprises but also promote the growth of existing and established ones.

Širec and Rebernik (2013) define entrepreneurship policy as a coherent and proactive political approach that encompasses all aspects of society, not merely economic policy. It should focus on the entrepreneurial individual and the promotion of

entrepreneurship as the main driver of economic development in all phases of the entrepreneurial process. Širec et al. (2023) expand this definition by describing effective government policies and programs as those that identify and respond to the needs of companies across different stages of their life cycle, from the initial phases to mature enterprises, while also supporting innovation and technological development.

In the implementation of government policies, two main aspects can be identified as essential for supporting the development of small and medium-sized enterprises (SMEs). The first concerns the level of institutional support provided by the government to SMEs, and the second relates to the efficiency of the regulatory framework that significantly affects their operations. SMEs represent 99% of all enterprises in Slovenia, making their performance crucial for the overall economy (Ministry of the Economy, Tourism, and Sport, 2025).

A key condition for entrepreneurial development throughout all stages of a company's life cycle is access to appropriate financial resources. Since companies often face difficulties in obtaining the necessary funds, one of the fundamental tasks of the supportive environment is to provide both financial and non-financial assistance. The latter includes targeted information, training, and mentorship. Financial forms of assistance are available to entrepreneurs in Slovenia through various measures implemented by ministries, public funds, public agencies, and other institutions in the form of repayable and non-repayable resources (SPOT, 2023).

3.3.1 Obtaining Financial Resources in Slovenia

According to SPOT (2023), repayable forms of financial assistance include loans, guarantees, and recapitalization funds in the form of venture capital, with the latter being primarily intended for business expansion and internationalization. Non-repayable forms of assistance, on the other hand, mainly include subsidies for the establishment of new innovative companies and incentives for the self-employed.

Key providers of financial support, as identified by SPOT (2023), include the Slovene Enterprise Fund, the Ministry of Agriculture, Economy, and Food, the Employment Service of the Republic of Slovenia, the Slovenian Regional

Development Fund, SID Bank, Eko Fund, the Ministry of Economic Development and Technology, SPIRIT Slovenia, the Ministry of Labour, Family, Social Affairs and Equal Opportunities, the Ministry of Education, Science, and Sport, Business Angels of Slovenia, EU Funds, and the Centre for International Cooperation and Development.

A lack of financial resources represents one of the main structural barriers entrepreneurs face at different stages of business development. When personal funds are insufficient, entrepreneurs can access external sources of financing through various institutions operating at the national or regional level. However, the dispersion of these sources and the lack of institutional coordination often hinder efficient access to funding. In the context of a small and concentrated business environment such as Slovenia's, it is reasonable to question the effectiveness of such fragmentation among institutions. Although several providers offer support mechanisms for entrepreneurship, they are often poorly connected, resulting in overlapping competencies, reduced transparency, and limited accessibility to various types of financial incentives managed by individual institutions.

Among them, the Slovene Enterprise Fund stands out as the main manager of financial support for entrepreneurs. It provides start-up incentives for young companies in the first stage of development, seed capital, loans intended for companies in the second stage of development to facilitate market entry, venture capital typically aimed at global market penetration, and microcredits that co-finance smaller investments, working capital, or liquidity needs (SPOT, 2023). In the context of researching the supportive environment within Regional Development Agencies (RRA), it is also important to note the role of the Ministry of Economic Development and Technology, which offers financial incentives for research, development, and investment, as well as EU Funds, which provide resources under the cohesion policy (SPOT, 2023).

4 Types of Supportive Environments for Entrepreneurship Development

The national SPOT system provides a comprehensive framework of state support services for business entities. In the continuation of this research, the primary focus will be on how the national support system itself is structured. ZPOP-1D (2017)

identifies the key implementing bodies of the project as the Ministry of the Economy, Tourism and Sport (MGTŠ), the Ministry of Public Administration (MJU), and the Public Agency for the Promotion of Investment, Entrepreneurship, and Internationalization (SPIRIT).

The project implementers operate under the unified SPOT brand, in cooperation with chambers of commerce, development agencies, entrepreneurship centers, technology parks, and incubators, which together constitute the core supportive environment for entrepreneurship development in Slovenia (SPIRIT, 2025a). ZPOP-1D (2017) also identifies representative chambers as important institutions within the supportive environment, including the Chamber of Craft and Small Business of Slovenia and its network of regional or local chambers.

Considering the previously identified risks and weaknesses of entrepreneurial ecosystems, ZPOP-1D (2017) is primarily based on establishing a supportive environment whose general objectives include the creation of an effective support system at the local, regional, and national levels, raising awareness of the importance of entrepreneurship for economic development, realizing the entrepreneurial potential of citizens, increasing opportunities for business creation, encouraging growth, generating new jobs, and accelerating the use of entrepreneurial and innovation potential. Another key goal is to establish an environment for potential and existing entrepreneurs at all stages of their development, while promoting cooperation among research and educational organizations and the business sector for the purpose of development (ZPOP-1D, 2017).

As already described above, the supportive environment for entrepreneurship development is divided into several segments, depending on the type of support individuals require at different stages of the entrepreneurial process. Systemic support is provided by the project implementers themselves and public institutions, which, through various programs, ensure national and regional assistance for entrepreneurs, including information, consulting, and help with business establishment (SPOT, 2024).

In the following section, the paper will further analyze the supportive environments for entrepreneurship development based on the type of assistance they provide to entrepreneurs at various stages of their growth.

4.1 Key Institutions of the Supportive Environment for Entrepreneurship Development

Among the main public institutions responsible for entrepreneurship development in Slovenia, in line with the objectives defined in ZPOP-1 (2007), is the Ministry of the Economy, Tourism and Sport (MGTŠ). Within its Directorate for Industry, Entrepreneurship, and Internationalization, the Ministry designs national policies for the development of entrepreneurship and the economy and implements measures to facilitate the integration of Slovenian companies into international markets, thereby increasing economic investment in the Republic of Slovenia (Ministry of the Economy, Tourism and Sport, 2025).

When discussing the key institutions of the supportive environment, it is essential to mention the Slovenian Business Point (SPOT), which provides a comprehensive system of state support and free services for business entities. Under this unified brand, institutions are brought together to provide assistance, information, and advisory services to various types of business entities (SPOT, 2024).

Of particular importance for entrepreneurship development is the Public Agency of the Republic of Slovenia for the Promotion of Investment, Entrepreneurship, and Internationalization (SPIRIT). The agency supports the development of programs and products that assist potential entrepreneurs, newly established enterprises, and mature companies in their growth, in the creation of added value, and in strengthening international competitiveness (SPIRIT, 2020).

The Slovene Enterprise Fund (SPS) operates as a specialized developmental and financial institution aimed at promoting the growth and development of entrepreneurship in Slovenia. It provides favorable financial resources for start-ups, high-growth, innovative, and other micro, small, and medium-sized enterprises (SMEs). In addition to financial instruments, SPS also offers content-based programs for acquiring business and development competencies, as well as entrepreneurial networking opportunities in collaboration with other professional partners (Slovene Enterprise Fund, 2025).

4.2 Entities of the Innovative Environment for Entrepreneurship Development

In defining the entities of the innovative environment (SIO), reference is made to the Rules on Maintaining the Register of Innovative Environment Entities, which were introduced based on ZPOP-1 in 2008 but were repealed in 2017. The Rules contained definitions of the key terms related to the innovative environment and established the conditions that entities had to meet in order to be entered into the register (Rules, 2008). Since the Rules were repealed in 2017, the extended definitions presented here are based on descriptions found on national portals of the project's implementing institutions.

According to the Rules (2008), three types of SIO were recognized, but based on SPIRIT (2025), four main entities are considered essential in the process of promoting innovation and entrepreneurship among different target groups.

4.2.1 Business Incubator

The Rules (2008) define a business incubator as an institution that provides facilities at a designated location to enable the efficient creation and development of new enterprises. A business incubator must provide a structured business environment with the required infrastructure and a wide range of administrative and intellectual services for innovative companies.

4.2.2 University Incubator

The Rules (2008) define a university incubator as an institution connected to a university or other higher education institution that supports the development of entrepreneurial initiatives primarily among pupils, students, and professors. A university incubator must provide support to innovative technological companies that, independently or in collaboration with a university or other higher education institution, develop entrepreneurial initiatives originating from pre-incubation activities. By offering intellectual services and technology transfer offices, university incubators facilitate the transfer of knowledge and investment to the market even before the formal establishment of companies.

4.2.3 Technology Parks

A technology park is an institution that brings together research, development, and business activities of new innovative technological companies and R&D departments of existing companies within a spatially concentrated area. A technology park provides a structured business environment with a broad range of supportive, administrative, and intellectual services for enterprises (Rules, 2008). The main goal of technology parks (TP) is to stimulate the creation and growth of technological companies and to promote the transfer of knowledge from research to industry through cooperation with various stakeholders such as incubators, accelerators, universities, and chambers (Technology Park Ljubljana, 2025). The mission of a technology park can thus be described as creating a supportive ecosystem that enables the development of entrepreneurship, innovation, and internationalization for high-technology companies.

4.2.4 Start-up Accelerators

Start-up or business accelerators are a relatively recent phenomenon through which early-stage companies with strong growth potential receive systematic assistance in overcoming obstacles to achieving expansion (Pustovrh, 2019). Blakely (2021) adds that accelerators are intended for companies that already have a solid foundation for growth but require guidance or resources to scale faster. In this context, resources primarily refer to mentoring, professional support, a collaborative working environment, and access to influential businesses or potential investors.

Accelerators often acquire ownership stakes in the companies they support in exchange for providing the necessary financial or material seed investment. Blakely (2021) emphasizes that start-up accelerators are most often private organizations that obtain financial resources from both public and private sources.

4.3 List of Innovative Environment Entities in Slovenia

In the previous subsections, Slovenian innovative environment entities (SIO) were defined. Based on the derived definitions, Table 1, prepared with the help of Start:Up Slovenia (2025), provides an overview of existing SIOs, including business incubators, university incubators, start-up accelerators, and technology parks.

Table 1: List of Innovative Environment Entities in Slovenia

	List of Technology Parks in the Republic of Slovenia	General Slovenian Name
1.	Tehnološki park Ljubljana, d. o. o.	Tehnološki park Ljubljana
2.	Tehno park Celje, javni zavod za spodbujanje znanoszi, tehnologije in inovativnosti	Tehno park Celje
3.	Primorski tehnološki park, d. o. o.	Primorski tehnološki park
4.	Razvojni center za informacijske in komunikacijske tehnologije Kranj d.o.o.	RCIKT Kranj
5.	Štajerski tehnološki park d. o. o.	Štajerski tehnološki park
6.	Pomurski tehnološki park, Podjetje za pospeševanje podjetništva v Pomurju d. o. o.	Pomurski tehnološki park
	List of University Incubators in the Republic of Slovenia	
1.	Ljubljanski univerzitetni inkubator, d. o. o.	Ljubljanski univerzitetni inkubator (LUI)
2.	Inštitut za raziskovanje podjetništva Tovarna podjemov Maribor	Tovarna podjemov Maribor
	List of Business Incubators in the Republic of Slovenia	
1.	BSC, poslovno podporni center, d.o.o. Kranj	Kovačnica – podjetniški inkubator Kranj
2.	Inkubator savinjske regije, d. o. o.	Inkubator Savinjske regije
3.	Inkubator, d. o. o., ekonomske, organizacijske in tehnološke storitve, Sežana	Inkubator Sežana
4.	MPI Vrelec d. o. o., Rogaška Slatina	Mrežni podjetniški inkubator Vrelec
5.	Javni zavod Podjetniški inkubator Kočevje	Podjetniški inkubator Kočevje
6.	Razvojni center Novo mesto d. o. o.	Podjetniški inkubator Podbreznik
7.	Razvojno informacijski center Bela krajina	Podjetniški inkubator Bela krajina
8.	Regionalni center za razvoj Zasavje d. o. o.	Zasavski podjetniški inkubator
9.	Regionalna razvojna agencija za Koroško regijo, d. o. o.	Mrežni podjetniški inkubator Koroška
10.	SAŠA Inkubator, družba za podjetniško in poslovno svetovanje, d. o. o.	SAŠA inkubator
11.	Podjetniški inkubator Perspektiva	Podjetniški inkubator Perspektiva
12.	ERUDIO HUB, inovativno poslovno okolje, d. o. o.	Erudio:hub
13.	Inkubator GEA College, podjetniško in poslovno svetovanje, d. o. o.	Inkubator GEA College
14.	Center za podjetništvo in turizem Krško	Podjetniški inkubator Krško
	List of Accelerators in the Republic of Slovenia	
1.	ABC Accelerator, razvoj startupov in mladih podjetij, d. o. o.	ABC Accelerator
2.	Katapult, družba za spodbujanje podjetništva, d. o. o.	Katapult
3.	Reveris, d.o.o.	Startup pospeševalnik Reveris

4.3 Other Support Mechanisms for Entrepreneurship Development

Other supportive mechanisms also play a vital role in entrepreneurship development, providing assistance to entrepreneurs at various stages of their growth. These mechanisms include support for the creation and development of business ideas through financial or mentoring assistance, as well as networking and knowledge exchange among entrepreneurs and other professionals. This category can also include various entrepreneurial associations.

4.3.1 Other Associations of Slovenian Entrepreneurs

Supportive environments also include organizations that promote entrepreneurship in Slovenia. These are entrepreneurial associations whose main purpose is to connect entrepreneurs to facilitate networking, exchange of knowledge, mutual business support, and collective representation of entrepreneurial interests.

The Slovenian Business Club (SBC) is recognized as the first association of Slovenian entrepreneurs. It is one of the most well-known organizations whose mission is to unite business owners and successors of company founders in Slovenia. SBC promotes entrepreneurship through various club activities, networking events, and membership gatherings (Slovenian Business Club, 2022).

The American Chamber of Commerce in Slovenia (AmCham Slovenia) serves as a connecting platform between business, politics, and society, striving to improve the business environment in Slovenia. It brings together Slovenian and international small and medium-sized enterprises, fostering business networking and knowledge exchange to enhance competitiveness and innovation (AmCham Slovenia, 2025). The organization operates under four main pillars: events and networking, advocacy, AmCham Young, and international cooperation.

Another notable example is the Association of Slovenian Women Entrepreneurs, which focuses on connecting innovative women in business, society, and the international community. The association aims to foster collaboration, networking, and experience exchange through educational programs and events (Association of Slovenian Women Entrepreneurs, 2025).

4.4 Regional Development Agencies

Regional development agencies, although not formally classified among the entities of the innovative environment, represent an important part of the support infrastructure for promoting entrepreneurship. Their operation is based on the principles of sustainable and integrated regional development, taking on the role of an intermediary between state institutions, local communities, the economy, and other stakeholders within the innovation ecosystem.

To understand the role of regional development agencies, it is first necessary to define regional development policy. According to the Ministry of Cohesion and Regional Development (2023), regional development policy represents a way of promoting sustainable development in the broadest sense by realizing development potentials and removing developmental barriers in Slovenian regions. The goal of regional development policy is to preserve resources and opportunities for the development of future generations.

The general objectives of regional policy until 2030 are primarily directed toward strengthening the development capacities of regions, based on their own development potentials and perceived global opportunities. The policy, as defined by the Ministry of Cohesion and Regional Development (2024), is based on four key orientations: (1) improving the quality of life in regions through balanced economic, environmental, and social development guided by the principles of sustainability; (2) catching up with European regions in terms of development; (3) reducing regional disparities; (4) realizing development potentials and utilizing global opportunities through cooperation and networking at the international interregional level.

In each of the twelve development regions, regional development agencies have been established to perform tasks and missions under the Act on the Promotion of Balanced Regional Development (Ministry of Cohesion and Regional Development, 2023). These agencies are responsible for preparing, coordinating, monitoring, and evaluating regional development programs and regional projects. For the further analysis in this paper, the role of regional agencies within the regional development network is particularly important, as they conduct various state development tasks, including the promotion and development of entrepreneurship and a culture of innovation (Rules on Regional Development Agencies, 2013).

Within the framework of national development tasks carried out in the public interest at the regional level, the Ministry of Cohesion and Regional Development (2024) identifies the so-called regional pillar for entrepreneurship promotion. This serves as an instrument of regional policy that implements the first three general objectives of regional policy and complements instruments for promoting entrepreneurship and competitiveness at the national level.

4.4.1 List of Regional Development Agencies in Slovenia

Table 2 presents the list of regional development agencies in the Republic of Slovenia. The list is based on the register of regional development agencies for the 2021–2027 programming period, as prepared by the Ministry of the Economy, Tourism, and Sport (MGTŠ).

Table 2: List of Regional Development Agencies in the Republic of Slovenia

	Development Region	Official Name	General Name
1.	Pomurska regija	Razvojni center Murska Sobota	Razvojni center Murska Sobota
2.	Koroška regija	Regionalna razvojna agencija za Koroško regijo d.o.o.	RRA Koroška
3.	Savinjska regija	Razvojna agencija savinjske regije d.o.o.	RRA Svinjska
4.	Zasavska regija	Regionalna razvojna agencija Zasavje	RRA Zasavje
5.	Posavska regija	Regionalna razvojna agencija Posavje	RRA Posavje
6.	Jugovzhodna Slovenija	Razvojni center Novo mesto, Svetovanje in razvoj, d.o.o.	Razvojni center Novo mesto
7.	Gorenjska regija	BSC, poslovno podporni center, d.o.o., Kranj	BSC Kranj
8.	Goriška regija	Posoški razvojni center	Posoški razvojni center
9.	Primorsko-notranjska regija	Regionalna razvojna agencija Zeleni kras, d.o.o.	RRA Zeleni kras
10.	Podravska regija	Regionalna razvojna agencija za Podravje - Maribor	RRA Podravje - Maribor
11.	Obalno-kraška regija	Regionalni razvojni center Koper	Regionalni razvojni center Koper
12.	Osrednjeslovenska regija	Regionalna razvojna agencija Ljubljanske urbane regije	RRA LUR

4.4.2 Project Podjetno nad izzive (PONI)

The program Podjetno nad izzive (translated as Entrepreneurially Overcoming Challenges), hereinafter referred to as PONI, is considered one of the most important current entrepreneurial programs or training initiatives providing comprehensive support for the development of business ideas and the establishment of new enterprises. The project is co-financed by the Republic of Slovenia and the European Union through the European Regional Development Fund (ERDF) and forms part of an integrated project implemented throughout Slovenia in cooperation with Regional Development Agencies, under the Regional Pillar for Entrepreneurship Promotion as one of the instruments of regional policy (Ministry of Cohesion and Regional Development, 2024).

The main objective of the project is the creation of new enterprises by individuals with entrepreneurial ideas in the early stages of development, supported through entrepreneurial training with internal and external mentors. To ensure a smoother and more comprehensive development of business ideas, the project provides structured support activities over a four-month period, during which participants are guaranteed employment and access to a supportive entrepreneurial environment with physical infrastructure based on the co-working principle (RRA LUR, 2025).

5 Cognitive Biases in Entrepreneurship with an Emphasis on the Dunning–Kruger Effect

It can be said that people interpret ambiguous events differently depending on the positive or negative information and everyday experiences that surround them. Perceptual tendencies are often linked to susceptibility to emotional distress, where an identical situation may be perceived as positive by one person and negative by another. This subjective experience contributes to emotional reactions or disturbances that can also be observed in the business world, significantly influencing managerial and entrepreneurial decision-making (Hertel and Mathews, 2011).

In both daily and business life, individuals constantly make decisions—either consciously or unconsciously. Often, they rely on simple, unverified rules of thumb known as mental shortcuts. This occurs due to time constraints, a lack of

information, or overload from excessive data. Entrepreneurs are particularly exposed to this, as they operate in a dynamic environment full of challenges and opportunities, where decisions are frequently made irrationally and contrary to logical reasoning. Such decisions can lead to suboptimal outcomes in areas such as finance, human resources, and time management (Coutinho, Thomas, Alsuwaidi, and Couchman, 2021).

In the entrepreneurial context, cognitive biases can be described as mental simplifications that help connect information, recognize opportunities, and cope with obstacles within entrepreneurial processes. It is important to understand, however, that while cognitive biases can play a positive role in the initial stages of business formation, it remains insufficiently researched whether this also holds true for the long-term survival of enterprises (Gudmundsson and Lechner, 2013).

5.1 The Dunning Kruger Effect

Charles Darwin wrote in The Descent of Man that ignorance more frequently begets confidence than does knowledge. This observation forms the basis of the issue under discussion. The Dunning Kruger effect is a type of cognitive bias in which individuals believe they are more intelligent and capable than they actually are. In essence, the combination of poor self-awareness and limited cognitive ability leads to the overestimation of one's own competence (Cherry, 2024).

This cognitive bias, where individuals who lack expertise in a given field overrate their abilities, is known as the Dunning Kruger effect (Christopher, Padmakumari, and Herbert, 2021). Coutinho et al. (2021) confirm that people frequently overestimate their skills, knowledge, and performance levels, which results in the application of suboptimal strategies that hinder learning and long-term success. Overestimation also prevents individuals from recognizing and addressing gaps in knowledge and skills, which are essential for self-improvement.

In the field of entrepreneurship, Gudmundsson and Lechner (2013) point out that entrepreneurs are often perceived as overly confident individuals. Excessive self-confidence, while sometimes associated with ambition and success, can also lead to failure, which carries a high cost for the entrepreneur.

5.2 The Interconnection Between Cognitive Biases and the Supportive Environment

As already mentioned, entrepreneurship can be understood as a process of creating something new, different, and valuable (Ruzzier et al., 2008). At its center stands the entrepreneur, who through behavior, intuition, vision, hard work, a strong desire for success, and capital pushes the boundaries of progress. Only the combination of these characteristics can generate added value for a novelty introduced to the market (Vidic et al., 2008).

Entrepreneurship thus serves as a driving force of national progress and development, influencing individuals through financial and personal satisfaction, job creation, and overall economic growth (Rebernik et al., 2021). These features of entrepreneurship have led to the search for mechanisms to enhance entrepreneurial activity, which in turn has resulted in the establishment of a supportive entrepreneurial ecosystem.

This supportive environment is legally regulated by ZPOP-1D (2017), whose key objectives include creating an effective support system at the local, regional, and national levels, raising awareness of the importance of entrepreneurship, and realizing the entrepreneurial potential of the country. The act itself is broad in scope, describing entrepreneurship from the perspective of the state, while the implementers adapt and refine it based on the needs identified in the market.

Support institutions, through their engagement with entrepreneurs, gain insight into weaknesses, risks, and opportunities that entrepreneurs face in different stages of development. The activities and methods of support they provide should therefore be aligned with these findings.

The likelihood of achieving the defined entrepreneurial value consists of two main components: overcoming ignorance and reducing doubt (Makar, 2020). Entrepreneurial education is one of the most key factors in developing skills, attitudes, and behavior. To make more confident decisions, entrepreneurs need to recognize opportunities around them and understand how cognitive strategies influence decision-making outcomes.

Makar (2020) emphasizes the importance of cognitive flexibility within the entrepreneurial process. It enables entrepreneurs to understand information and perspectives in several ways, solve problems, and adapt to changing priorities and requirements, which is essential in a constantly evolving environment.

It should be recognized that despite the risks entrepreneurs face at all stages of business development, potential entrepreneurs and non-entrepreneurs are the most vulnerable. Mental shortcuts that allow experienced entrepreneurs to make quick decisions can make the process more difficult for beginners rather than easier. Consequently, established entrepreneurs are generally less susceptible to bias than those in the early or developmental stages (Makar, 2020).

This highlights the importance of developing effective supportive environments that help entrepreneurs at the beginning of their journey. The focus should not only be on financial resources and networking but also on comprehensive entrepreneurial education that provides a solid foundation before business idea implementation.

Here the role of support institutions becomes particularly important, especially comprehensive entrepreneurial programs that equip potential entrepreneurs with all the necessary components for development. The key elements are knowledge acquisition and continuous mentorship, which help entrepreneurs assess their own abilities, gain a realistic understanding of their knowledge, and identify areas that require improvement, thereby reducing the risk of cognitive simplifications that can lead to poor decisions.

5.2.1 The Risks of Excessive Rationalization in Entrepreneurship

At this point, it can be confirmed that the entrepreneurial support environment represents one of the key mechanisms for promoting the development of entrepreneurship in Slovenia. The essential question that arises is the extent to which an entrepreneur should actually utilize the available support resources. On one hand, there is financial support, which is almost indispensable for entrepreneurs in an ever-changing and competitive global market since underutilization of financial resources can increase the risk of stagnation. On the other hand, entrepreneurs have access to various forms of mentoring, educational programs, and training that cover key areas of entrepreneurial activity. In this context, it is also important to highlight the active

role of entrepreneurs themselves, as their engagement in acquiring knowledge is essential for the successful operation of a business. Crnogaj and Rebernik (2013) emphasize that training is one of the fundamental conditions for effective business functioning.

However, when discussing the reduction of cognitive biases, the question increasingly arises as to whether excessive learning and the continuous pursuit of rational thinking might pose a potential threat to entrepreneurial development. Processes such as self-regulation and self-reflection are indeed key factors in helping entrepreneurs understand and adapt to conditions in the global market (Bastian and Zucchella, 2022). Yet, their excessive use can lead to decreased decisiveness and limited innovation. Bastian and Zucchella (2022) underline the importance of understanding the balance between reflection and action, as excessive analysis may hinder entrepreneurial progress.

Similarly, Xo, Zhao, and Hou (2023) point out that cognitive flexibility and a deeper understanding of information undoubtedly enhance adaptability to changing circumstances, but they also warn that over-analysis can negatively affect the speed and efficiency of decision-making, which are crucial for entrepreneurial success in dynamic environments. Marx and Turner (2022) add that regular analysis of one's thought processes is beneficial for better understanding of cognitive mechanisms, but excessive emphasis on such reflection can suppress spontaneity, innovation, and willingness to take risks, which are the fundamental characteristics of entrepreneurial activity.

In the rapidly changing world of entrepreneurship, balance, agility, and decisiveness remain invaluable attributes.

6 Research

6.1 Purpose of the Research

The purpose of the research is to examine the occurrence of the Dunning-Kruger effect among participants of the PONI project and to assess how the entrepreneurial support environment, with an emphasis on the RRA LUR, influences the reduction of cognitive bias. Cognitive bias particularly affects individuals at the beginning of

their entrepreneurial journey, therefore the focus of this research is on the PONI LUR project environment, as the project itself is based on the idea of establishing new companies through comprehensive entrepreneurial training.

The research was conducted from the perspective of stakeholders within the supporting institution RRA LUR, who are in daily contact with emerging entrepreneurs. The aim was to determine how support institutions can enhance their role in providing a realistic insight into individuals' knowledge and capabilities. The final goal is to develop guidelines for improving project implementation and to provide recommendations for more effective support for entrepreneurs in developing competencies, thereby reducing the presence of cognitive bias.

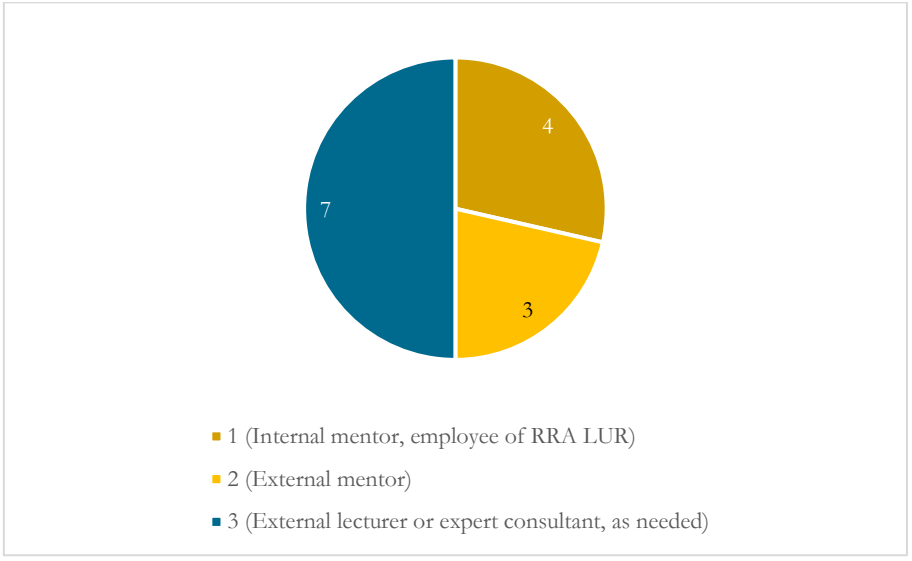
6.2 Research Procedure

Due to the highly interdisciplinary nature of the topic, the empirical part of the research employed a mixed-method approach, combining both quantitative and qualitative methods. In the first phase, data were collected using a structured questionnaire, which served as a foundation for further analysis. Based on the analyzed survey results, targeted questions were developed and later used in the second phase of data collection, carried out through a semi-structured interview with the internal mentor of PONI LUR at the Regional Development Agency of the Ljubljana Urban Region.

Using descriptive methods and comparative analysis, supported by inferential reasoning that allows generalization from the sample to the broader population, the research aimed to determine whether potential entrepreneurs participating in the PONI LUR project enter the entrepreneurial process with an appropriate assessment of their knowledge and competencies, or whether signs of the Dunning-Kruger effect appear in the early stages of business formation. Based on the collected responses, the study sought to identify areas of entrepreneurial activity where cognitive biases, particularly the Dunning-Kruger effect, are most evident. Furthermore, the research aimed to determine to what extent the support environment within the PONI project functions to mitigate these biases and their influence on entrepreneurial decision-making.

The central objective of the research is to establish whether the Dunning-Kruger effect is present among participants of the PONI LUR project, to what extent it is perceived by the project implementers, how they respond to it, and how competent they are in recognizing and managing cognitive biases. Based on the findings, concrete guidelines will be proposed for effectively addressing the Dunning-Kruger effect, both within the PONI LUR project and more broadly across the entrepreneurial support environment. Attention will also be given to the assumption of how to effectively manage this phenomenon without suppressing entrepreneurial mindset and initiative.

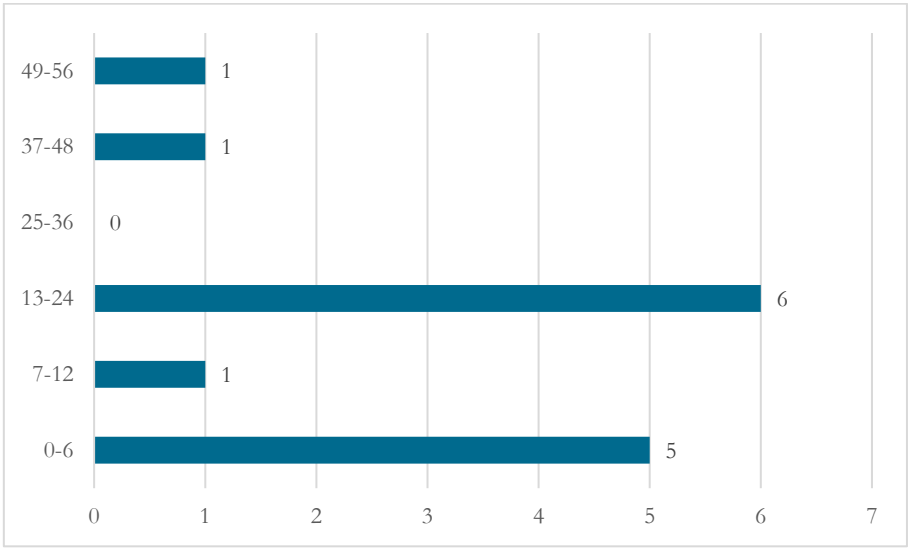
6.3 Results of the Quantitative Part of the Research



Graph 1: Role in the PONI LUR Project
Source: Author's own

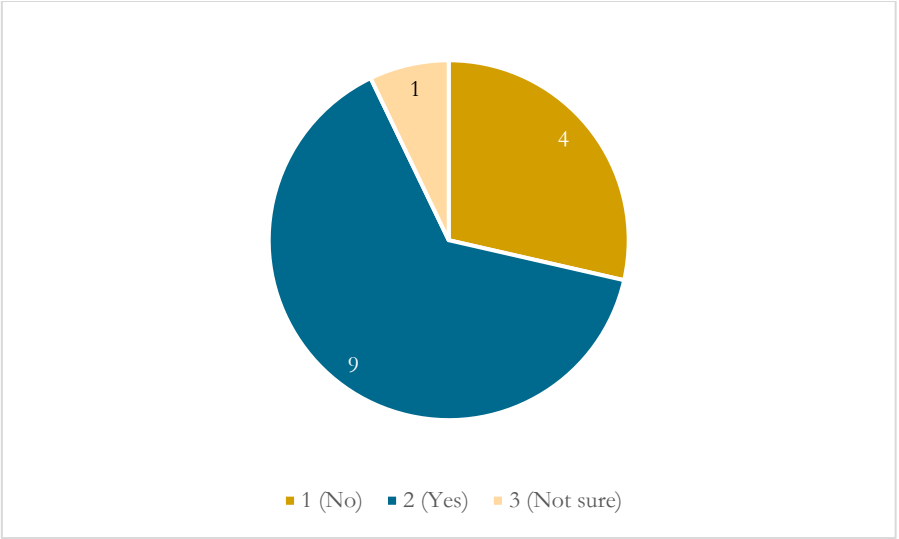
Graph 1 presents the roles of the implementers involved in the PONI LUR project. Three main groups of implementers are included in the analysis: internal mentors, external mentors who regularly collaborate with participants through lectures and mentoring sessions, and external lecturers or expert consultants who participate in the project on a contractual basis, depending on content-related needs.

The largest share of respondents, 7 (50%) of all participants, identified themselves as external lecturers or, when needed, expert consultants. This is followed by internal mentors with 4 responses (29%). The smallest group consists of external mentors, 3 (21%), which corresponds to the smaller number of such implementers engaged in the program.



Graph 2: Participation in the PONI LUR Project (in months)
Source: Author's own

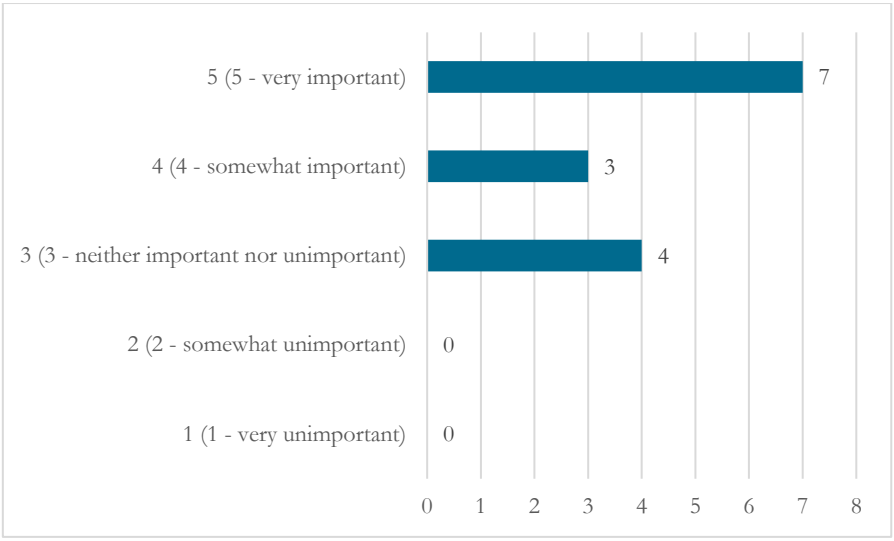
Graph 2 shows the duration of implementers' participation in the PONI LUR project. Participation was recorded in months and later divided into six time categories. Most implementers, 6 (43%), have been involved in the project between 13 and 24 months, corresponding to one to two years of active work with participants. This is followed by 5 implementers (36%) who have participated for up to 6 months. One implementer (7%) reported participation in each of the other time categories — up to one year, between 3–4 years, and more than 4 years. The results indicate that most participants are active in the project on a medium-term basis, with an average participation time of 16.7 months, or approximately a year and a half.



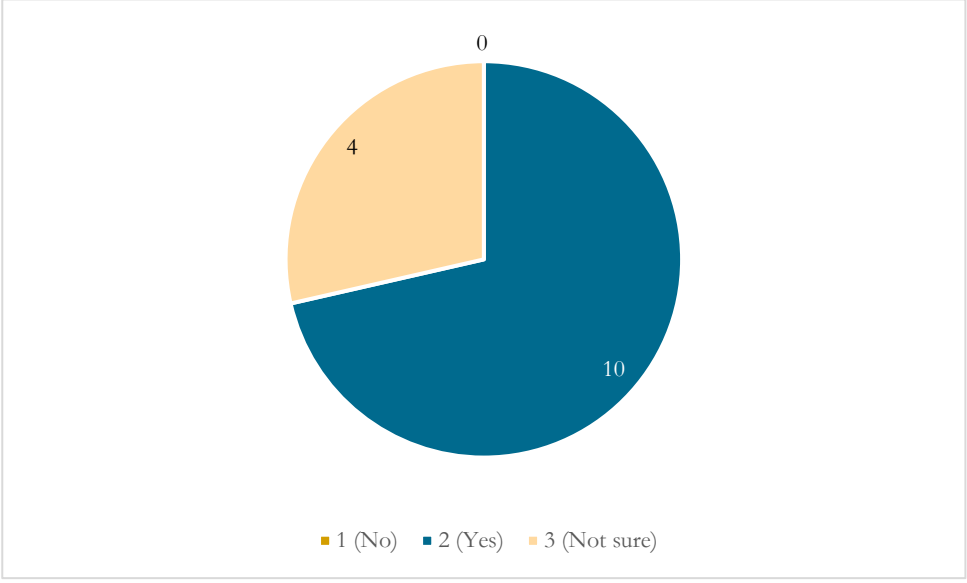
Graph 3: Awareness of the Dunning-Kruger Effect among Implementers
Source: Author's own

Graph 3 illustrates the level of awareness of the Dunning-Kruger effect among project implementers. The majority, 9 implementers (64%), stated that they had already heard of the Dunning-Kruger effect. Four implementers (29%) were not familiar with the concept, while one implementer (7%) was uncertain about their level of understanding. The results show that most participants possess at least a basic awareness of this phenomenon.

Graph 4 presents how important implementers consider understanding the Dunning-Kruger effect when supporting project participants. A total of 14 implementers responded. Most of them, 7 (50%), rated understanding as very important; 3 (21%) rated it as somewhat important; and 4 (29%) chose the mid-value, indicating that they consider it neither important nor unimportant. The mean score is 4.2, with a standard deviation of 0.9, which reflects a relatively high level of agreement among implementers regarding the importance of this understanding in the mentoring process.



Graph 4: Importance of Understanding the Effect When Supporting Participants
Source: Author's own



Graph 5: Opinions on the Impact of the Dunning-Kruger Effect on Participants' Decisions
Source: Author's own

Graph 5 shows the opinions of implementers on the influence of the Dunning-Kruger effect on participants' decision-making within the PONI LUR project. Out of 14 respondents, 10 (71%) believe that the effect influences participants' decisions, while 4 (29%) stated that they were uncertain. The standard deviation of 0.5 indicates a relatively high level of agreement among implementers regarding the effect's impact on participants' decision-making.

Table 3: Frequency of Observing Behavior Typical of the Dunning-Kruger Effect

How often do you agree with the following observations (1 - never, 5 - always)			
		How often do you observe that participants overestimate their abilities?	How often do participants show high confidence despite a lack of experience or knowledge?
n	Valid	5	5
	Missing	1	1
Mean		2,6	2,6
Median		3	2
Mode		0[a]	0
Std. Deviation		2,074	2,793
Minimum		0	0
Maximum		5	6
Sum		13	13
a. Multiple modes exist. The smallest value is shown			

Source: Author's own

Table 3 shows how frequently the mentors (13 respondents) observe behaviors characteristic of the Dunning–Kruger effect among participants. Regarding the first statement, which refers to the overestimation of one's own abilities, most mentors, 5 (38%), answered that this occurs often. This is followed by 4 responses (31%) indicating occasional occurrence of such behavior and 3 responses (23%) indicating it happens rarely. Only one mentor (8%) selected "always," while none indicated that it never occurs.

For the second statement, which concerns how often participants display high self-confidence despite lacking knowledge, 6 mentors (46%) responded that this happens often, 5 mentors (38%) occasionally, and 2 mentors (15%) rarely. Again, no one selected "never" or "always."

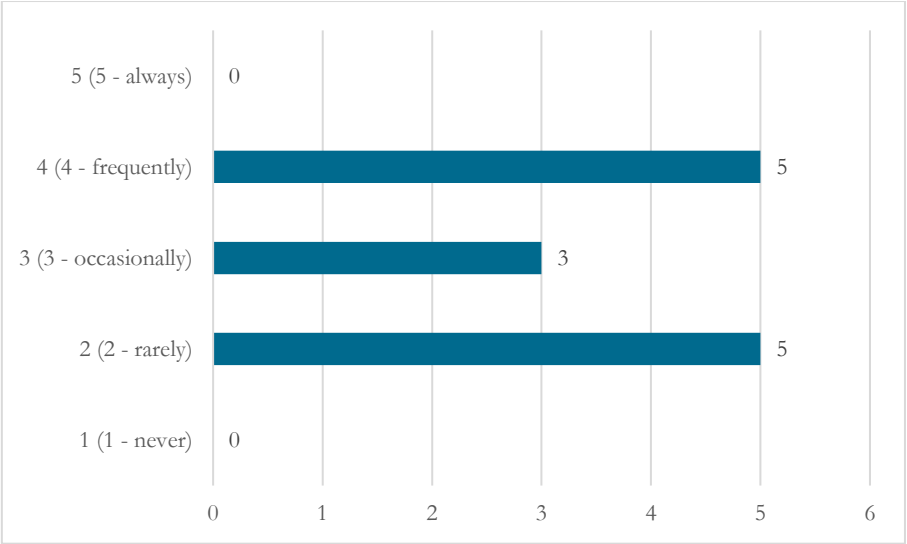
The results indicate that most mentors frequently observe displays of confidence not supported by actual knowledge and that overestimation is a relatively common behavior within the PONI LUR project.

Table 4: Perception of the Main Reasons for Overestimating Entrepreneurial Abilities

The main reason for overestimating entrepreneurial abilities is:						
		previously acquired personal experiences	feedback received from friends, family, and acquaintances	opinions of others who are not experts in the field	lack of knowledge or objective data possessed by participants	lack of self-awareness of one's own knowledge
n	Valid	5	5	5	5	5
	Missing	15	15	15	15	15
Mean		2,6	2,6	2,6	2,6	2,6
Median		2	2	3	2	0
Mode		0[a]	0[a]	3	0	0
Std. Deviation		2,702	2,702	2,302	3,286	4,775
Minimum		0	0	0	0	0
Maximum		7	7	6	8	11
Sum		13	13	13	13	13
a. Multiple modes exist. The smallest value is shown						

Source: Author

Table 4 shows which factors the mentors identify as the main reasons for overestimating entrepreneurial abilities among participants. The mentors least agree with the statement that previously acquired personal experiences are the main reason for overestimating one's own abilities. This statement has the lowest average score of 3.4. Slightly higher scores were given to feedback received from participants' close contacts, with an average of 3.9. This is followed by the statement linking overestimation to opinions of others who are not experts in the field (average 3.8). The mentors agree that the two most important reasons for overestimating abilities are the lack of knowledge or other objective data, with an average value of 4.5, and the lack of self-awareness of one's own knowledge, which has an average score of 4.8 and a standard deviation of 0.38, indicating a high level of agreement among mentors.

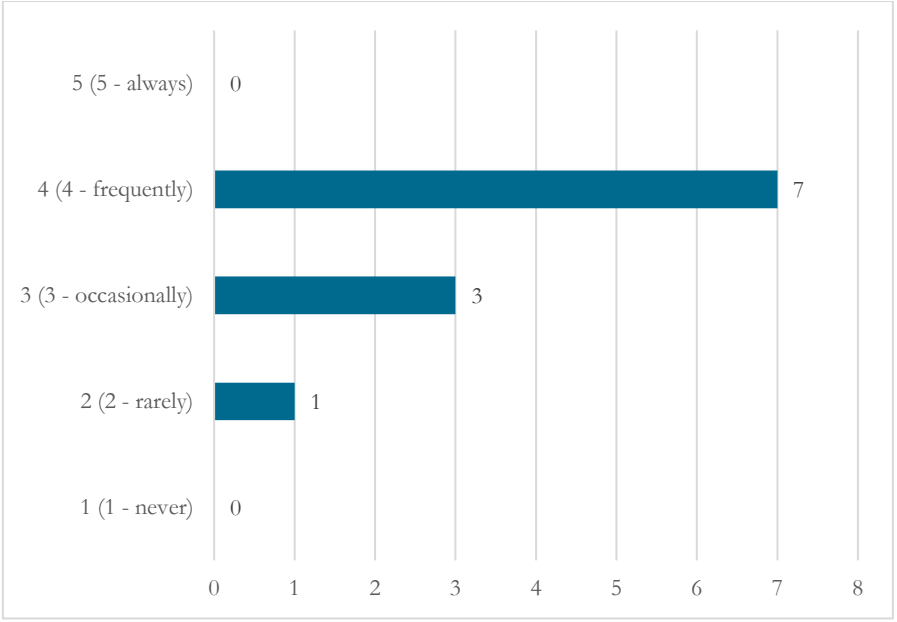


Graph 6: Frequency of Rejecting Feedback Among Participants
Source: Author

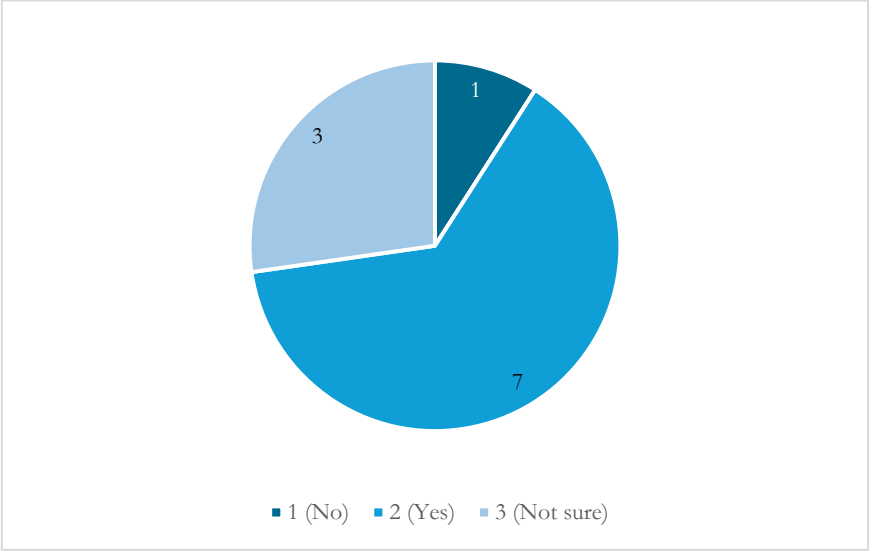
Graph 6 illustrates how often participants reject feedback that contradicts their beliefs. The total number of responses is 13. Most respondents, 5 (36%), assessed that this behavior occurs frequently, while the same number, 5 (36%), believe it occurs rarely. Three mentors (21%) evaluated participants' rejection of feedback as occasional.

The average score is 3.0, with a standard deviation of 0.9, indicating a moderate dispersion of opinions. The results suggest that rejecting feedback is a fairly common behavior, though not an overwhelmingly dominant one.

Graph 7 shows how often mentors believe that the Dunning–Kruger effect influences the quality of participants' business decisions. Eleven mentors responded to this question. Most mentors, 7 (64%), believe the effect often influences decision quality, while 3 mentors (27%) think it occurs occasionally. One mentor (9%) believes it happens rarely. The average score is 3.5, indicating a general agreement that the effect impacts the quality of participants' business decision-making.

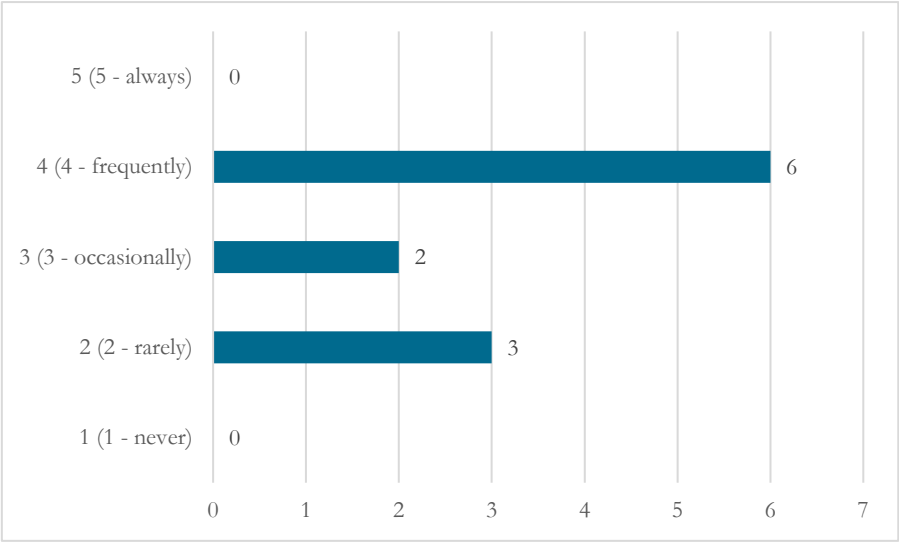


Graph 7: Assessment of the Dunning- Kruger Effect's Impact on the Quality of Business Decisions (Source: Author)



Graph 8: Opinions on the Dunning–Kruger Effect's Influence on Risky Decision-Making
Source: Author

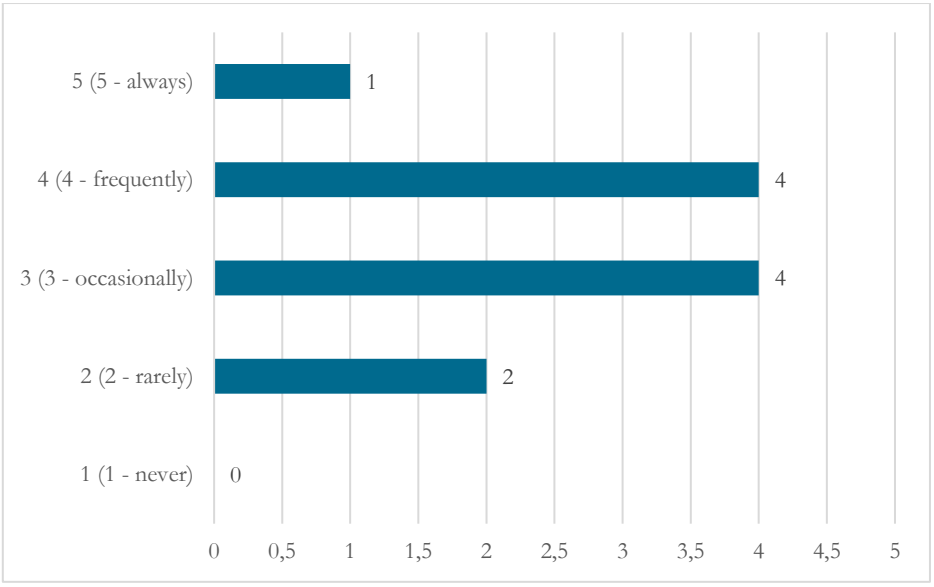
Graph 8 presents mentors' opinions on whether the Dunning–Kruger effect leads participants to make risky decisions. Seven mentors (64%) believe the effect influences risky decision-making, 3 mentors (27%) are unsure, and 1 mentor (9%) sees no connection between the effect and risky decisions.



Graph 9: Assessment of the Dunning–Kruger Effect's Influence on Excessively Risky Decisions
Source: Author

Graph 9 shows how often mentors believe that the Dunning–Kruger effect leads participants to make excessively risky decisions. A total of 11 mentors responded. Six mentors (55%) believe this happens often, three (27%) believe it happens rarely, and two mentors (18%) believe it occurs only occasionally.

Graph 10 illustrates how often participants, according to mentors, underestimate the complexity of their entrepreneurial tasks. Most mentors, 4 (36%), believe this occurs occasionally or frequently, followed by 2 mentors (18%) who think it happens rarely, and 1 mentor (9%) who states it always occurs. The average score of 3.4 indicates a frequent perception of participants' tendency to underestimate the complexity of their entrepreneurial tasks.



Graph 10: Frequency of Underestimating the Complexity of Entrepreneurial Tasks
Source: Author

Table 5: Methods of Identifying the Dunning–Kruger Effect Among Participants

The Dunning–Kruger effect among participants is identified:					
		participants are identified: by asking questions that challenge their beliefs	through the analysis of their business decisions	during individual consultations	during the implementation of practical entrepreneurial exercises
n	Valid	5	5	5	5
	Missing	10	10	10	10
Mean		2,2	2,2	2,2	2,2
Median		2	2	1	1
Mode		0[a]	0[a]	1	0
Std. Deviation		1,924	2,864	2,775	2,683
Minimum		0	0	0	0
Maximum		5	7	7	6
Sum		11	11	11	11
a. Multiple modes exist. The smallest value is shown					

Source: Author

Table 5 shows the extent to which mentors agree with the statements on how they identify the Dunning–Kruger effect among participants. Eleven mentors responded to the questions. The highest average score of 4.5 was recorded for the statement

that the effect is most easily recognized during practical entrepreneurial exercises, where 55% of mentors completely agreed and an additional 36% partially agreed. This is followed by recognition during individual consultations, with an average of 4.3, and by asking questions that challenge participants' beliefs, with an average of 4.1. The lowest, yet still high, rating was recorded for the analysis of business decisions, with an average score of 3.8.

Table 6: Participants' Responses When Confronted with Their Own Limitations

How often do participants:			
		accept help when shown that they overestimate their abilities?	ask for feedback or opinions on their decisions?
n	Valid	5	5
	Missing	0	0
Mean		2,2	2,2
Median		2	2
Mode		1[a]	1[a]
Std. Deviation		1,643	1,643
Minimum		1	1
Maximum		5	5
Sum		11	11
a. Multiple modes exist. The smallest value is shown			

Source: Author

Table 6 shows how often participants, according to mentors, accept help or seek feedback when confronted with their own limitations. Eleven mentors responded to both statements, with the average value for each being 3.3. Regarding the statement on how often participants accept help when it becomes apparent that they overestimate their abilities, 5 mentors (45%) answered "occasionally," followed by 18% who selected "often" and 18% "always." The same pattern appears in the question of whether participants ask for feedback, where most responses indicate a moderate frequency of participants confronting their limitations.

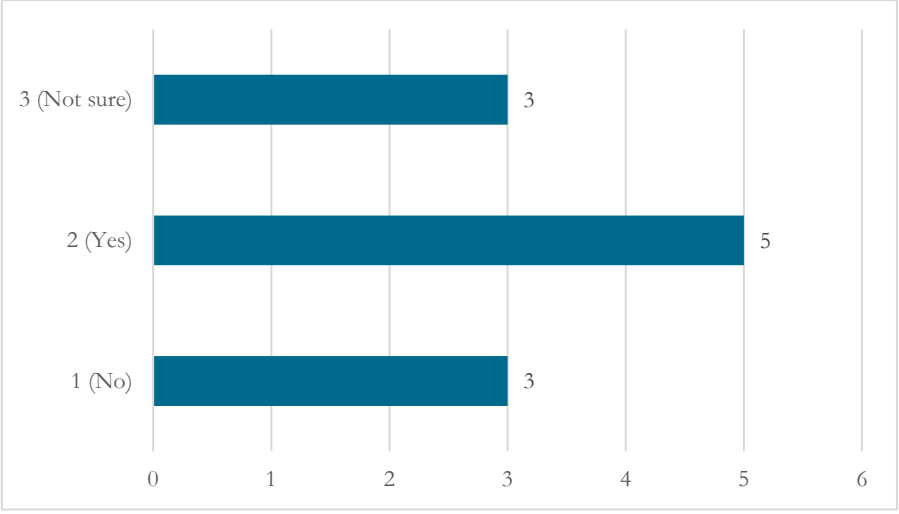
Table 7 shows the extent to which mentors apply various strategies to reduce the Dunning–Kruger effect among participants. Eleven mentors responded to the questions. The highest average score (4.5) was recorded for the statement encouraging objective self-assessment of one's abilities. This is followed by two strategies, active seeking of feedback by participants and emphasizing the importance of long-term learning, both with an average score of 4.3. The lowest,

though still relatively high, average score (3.8) was recorded for constant guidance in decision-making. The results therefore indicate that the most common strategies include encouraging self-reflection and continuous learning, while direct guidance in decision-making is less prevalent.

Table 7: Strategies for Reducing the Dunning–Kruger Effect Among Participants

To reduce the Dunning–Kruger effect among participants, we use the strategy of:					
		active seeking of feedback by participants	encouraging objective self-assessment of one's abilities	emphasizing the importance of long-term learning	constant guidance toward decision-making
n	Valid	5	5	5	5
	Missing	0	0	0	0
Mean		2,2	2,2	2,2	2,2
Median		1	1	1	2
Mode		0	0	0[a]	0
Std. Deviation		2,683	2,95	2,588	2,28
Minimum		0	0	0	0
Maximum		6	7	5	5
Sum		11	11	11	11
a. Multiple modes exist. The smallest value is shown					

(Source: Author)



Graph 11: Inclusion of Topics Such as the Dunning–Kruger Effect in Educational Content
Source: Author

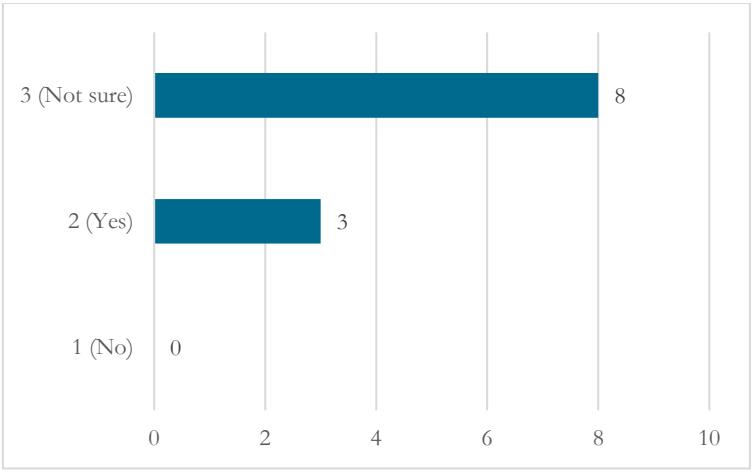
Graph 11 illustrates whether mentors include the topic of the Dunning–Kruger effect in the educational content for PONI LUR participants. Eleven mentors responded to the question. Five mentors (45%) believe they include the topic in the educational materials, three mentors (27%) disagree, and the remaining three mentors (27%) are unsure. The average score is 2.0, with a standard deviation of 0.8, indicating a low level of systematic inclusion of the topic. The results show that although awareness of the effect exists, it is not consistently reflected in the structure of the educational content.

Table 8: Main Challenges When Working with Participants Influenced by the Dunning–Kruger Effect

The most significant challenge when working with participants influenced by the Dunning–Kruger effect is:					
		their resistance to feedback	their excessive self-confidence	their lack of willingness to change	recognition of reality
n	Valid	5	5	5	5
	Missing	0	0	0	0
Mean		2,2	2,2	2,2	2,2
Median		1	2	1	3
Mode		0[a]	0[a]	0[a]	0[a]
Std. Deviation		2,588	2,864	2,588	2,168
Minimum		0	0	0	0
Maximum		5	7	5	5
Sum		11	11	11	11
a. Multiple modes exist. The smallest value is shown					

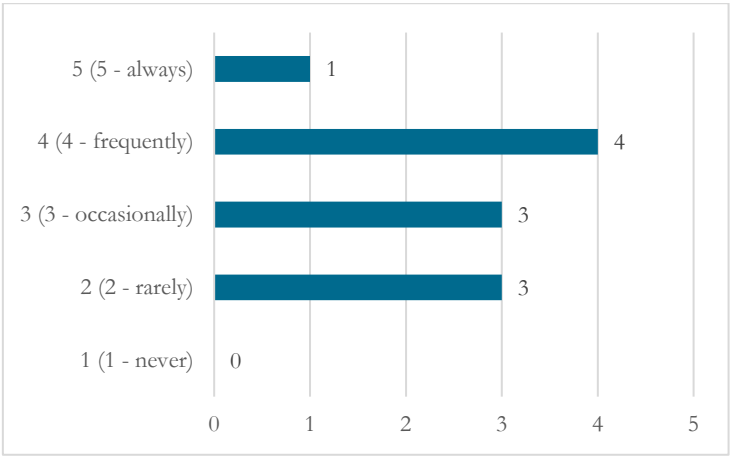
Source: Author

Table 8 shows which challenges mentors identify when working with participants who display the presence of the Dunning–Kruger effect. Eleven mentors responded to the statements. The highest average score was recorded for the statement concerning excessive self-confidence, with 7 mentors (64%) expressing complete agreement. This is followed by resistance to feedback, with an average of 4.4, while the lowest-rated challenge was recognition of reality, with an average score of 4.0. The results indicate that mentors most frequently recognize high self-confidence, resistance to feedback, and low willingness to change as the main challenges when working with participants affected by the Dunning–Kruger effect.



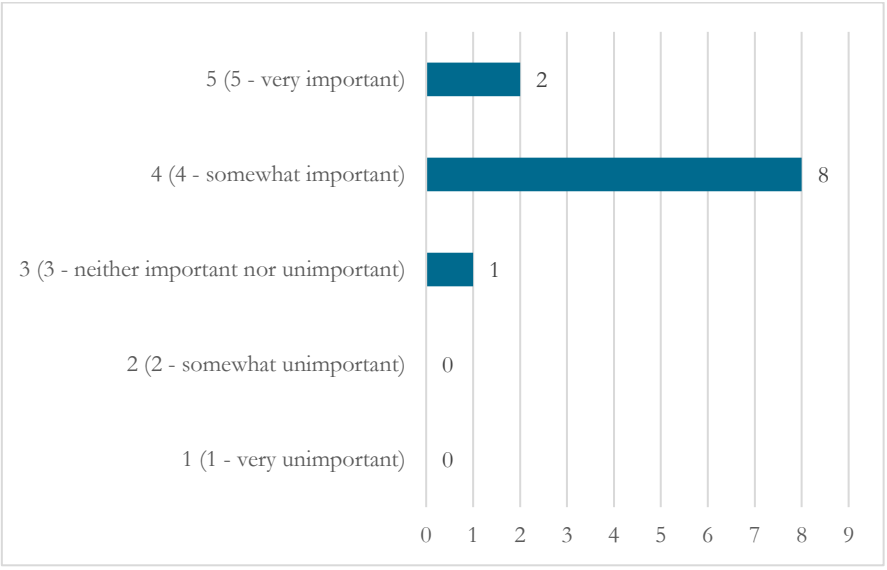
Graph 12: Opinions on the Negative Impact of the Dunning–Kruger Effect on Long-Term Business Results
Source: Author

Graph 12 presents mentors' opinions on whether participants who overestimate their abilities due to the Dunning–Kruger effect achieve poorer long-term business results. Eleven mentors responded to the question. Eight mentors (73%) were unsure about the negative impact, while three mentors (27%) believed that overestimation leads to worse long-term outcomes. None of the respondents stated that the effect has no impact.



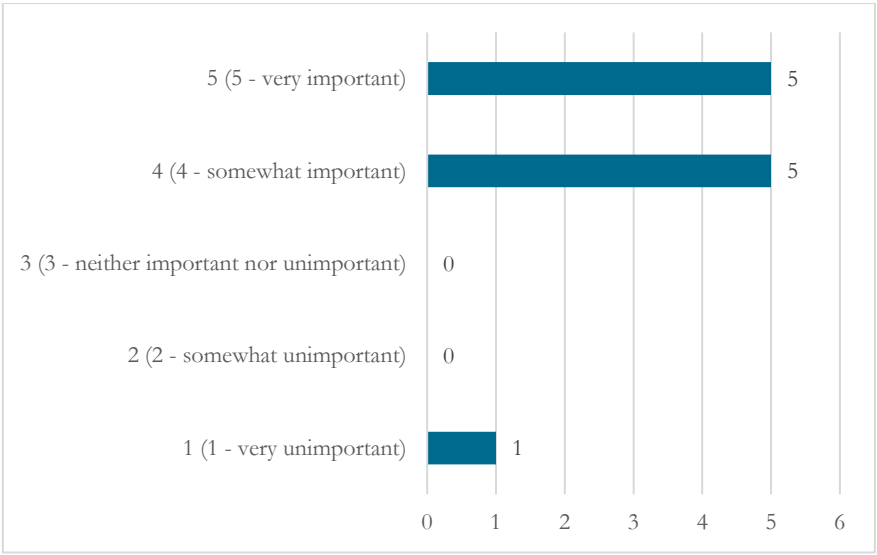
Graph 13: Frequency of Underestimating One's Own Strengths
Source: Author

Graph 13 illustrates how often mentors observe participants underestimating their own strengths that could help them achieve success. Eleven mentors responded to the question. Four mentors (36%) stated that this happens often, while three mentors (27%) believe it occurs occasionally and another three (27%) rarely. Only one mentor (9%) indicated that it happens always. The average score is 3.3, with a standard deviation of 1.0, indicating moderate agreement. The results show that mentors often notice participants underestimating their positive qualities, which may affect their entrepreneurial self-confidence.



Graph 14: The Role of Awareness of the Dunning-Kruger Effect in Long-Term Success
Source: Author

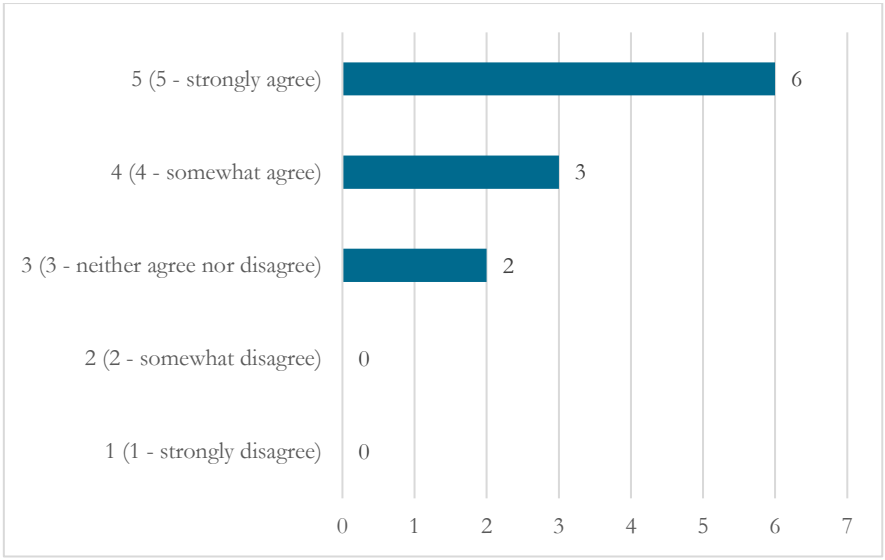
Graph 14 shows the extent to which mentors agree that understanding the Dunning-Kruger effect is crucial for the long-term success of entrepreneurs. Eleven mentors responded to the question. The majority, 8 mentors (73%), partially agree with the statement, 2 mentors (18%) fully agree, and 1 mentor (9%) selected the neutral option, indicating neither agreement nor disagreement. None of the respondents partially or completely disagreed. The average rating is 4.1, with a standard deviation of 0.5, indicating a high level of consensus among mentors regarding the importance of understanding the effect for entrepreneurial success.



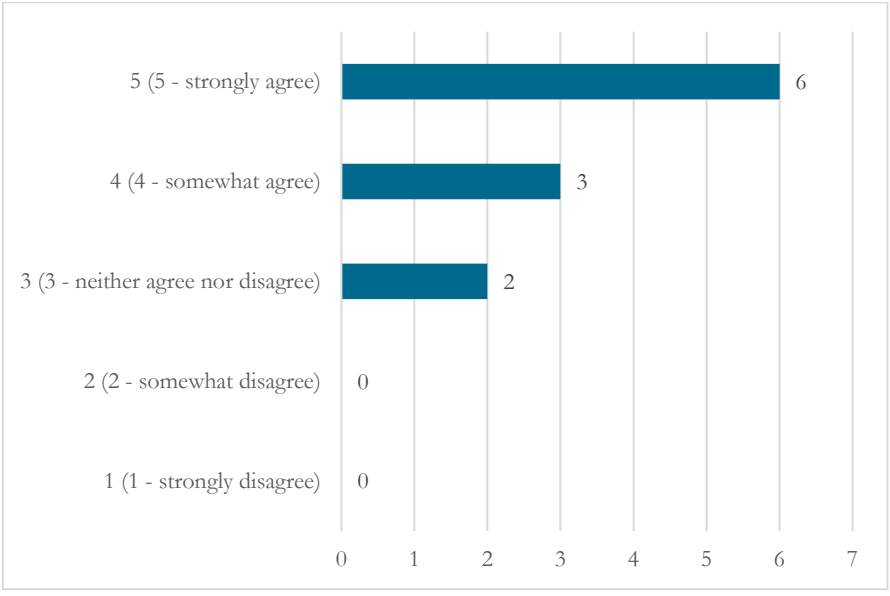
Graph 15: Assessment of the Need to Include the Dunning-Kruger Topic in the PONI LUR Project
Source: Author

Graph 15 illustrates how mentors assess the need for greater inclusion of topics such as the Dunning-Kruger effect in the PONI LUR project. A total of 11 mentors responded. Five mentors (45%) rated the topic as important, and another five mentors (45%) as partially important, while one mentor (9%) considered the topic not important. The average score is 4.2, with a standard deviation of 1.2, which, despite minor dispersion, indicates a prevailing belief that the inclusion of content on cognitive biases is meaningful and necessary within the program.

Graph 16 shows the extent to which mentors agree with the statement that a higher level of awareness of the Dunning-Kruger effect among mentors and advisors would positively influence its management among participants in the PONI LUR project. A total of 11 mentors responded. Six mentors (55%) completely agreed with the statement, three (27%) partially agreed, and two (18%) selected a neutral rating, indicating they neither agreed nor disagreed. None of the respondents disagreed. The average score is 4.4, with a standard deviation of 0.8, indicating a prevailing belief that greater mentor awareness could significantly contribute to reducing the effect's impact among participants.

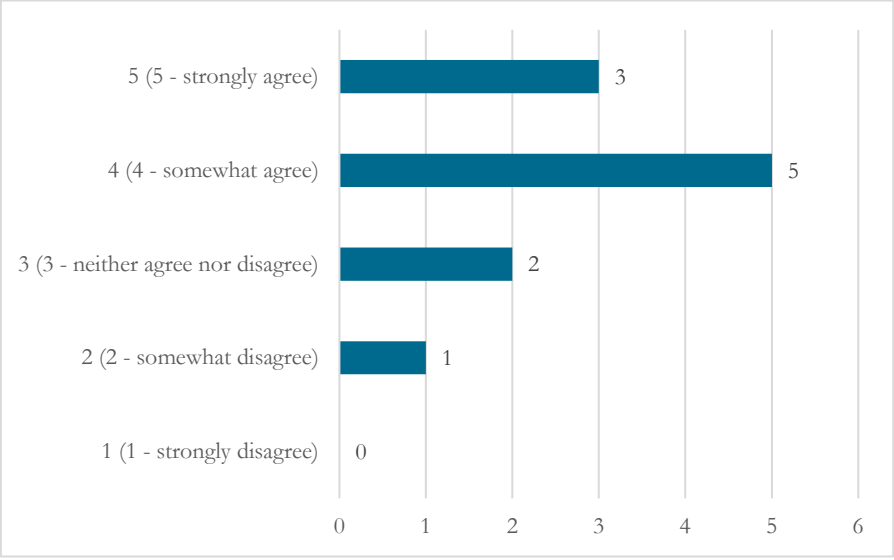


Graph 16: Opinion on the Impact of Mentors' Awareness on Managing the Dunning-Kruger Effect
Source: Author



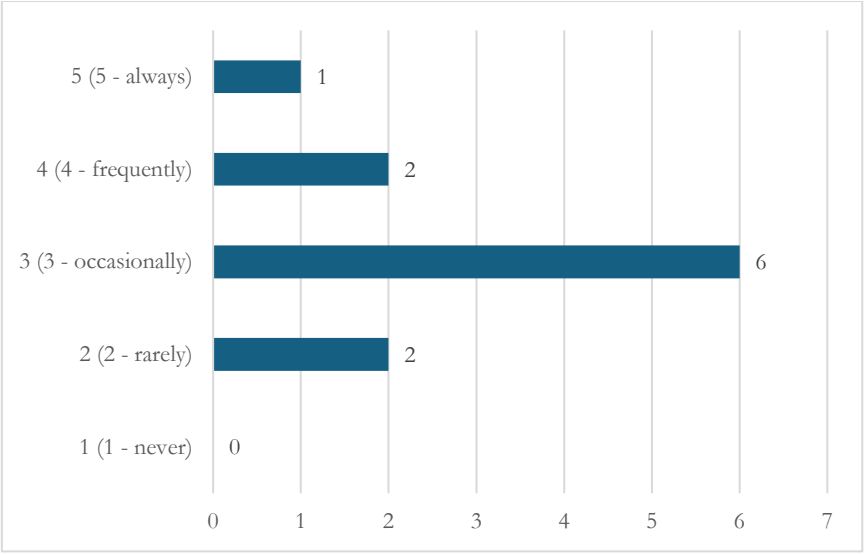
Graph 17: The Role of Professional Competence in Managing Cognitive Effects among Participants
Source: Author

Graph 17 shows the extent to which mentors agree with the statement that improved professional competence of mentors and advisors in the field of cognitive biases would positively influence the management of the Dunning-Kruger effect within the PONI LUR project. A total of 11 mentors responded. Six mentors (55%) completely agreed with the statement, three (27%) partially agreed, and two (18%) selected a neutral rating of 3. No respondents disagreed. The average score is 4.4, indicating a strong consensus among mentors that additional professional training would significantly contribute to more effective work with participants.



Graph 18: Opinion on the Impact of Analytical Tools on Managing the Dunning-Kruger Effect
Source: Author

Graph 18 illustrates the extent to which mentors agree with the statement that integrating analytical tools to support objective decision-making would contribute to managing the Dunning-Kruger effect. A total of 11 mentors responded. Five mentors (45%) rated the statement with a score of 4, three (27%) with a score of 5, two (18%) with a neutral score of 3, and one mentor (9%) rated it 2. No one selected the lowest rating (1). The average score is 3.9, with a standard deviation of 0.9, indicating that the use of analytical tools is generally perceived as a valuable approach that could enhance participants' decision-making and reduce the influence of cognitive biases.



Graph 19: Opinion on the Potential Positive Effects of Overestimating One's Knowledge
Source: Author

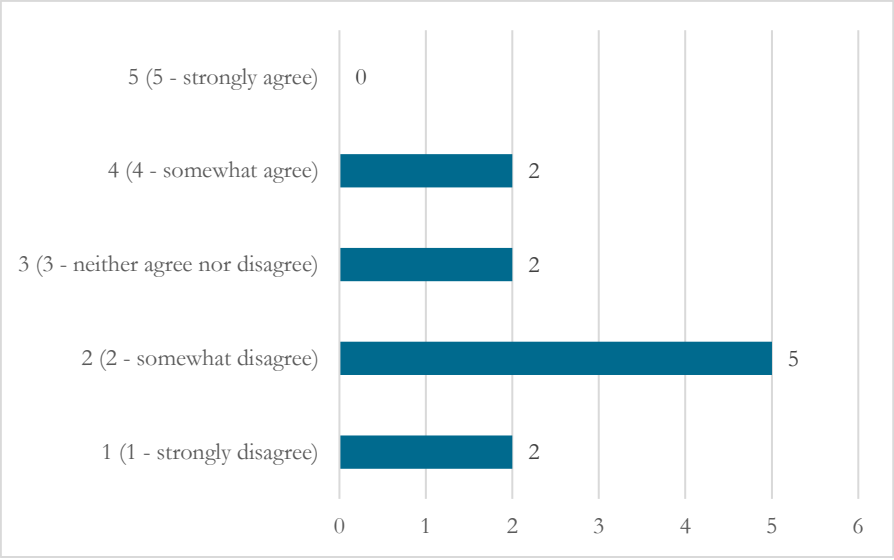
Graph 19 presents the mentors' opinions on whether overestimating one's own knowledge can sometimes lead to positive outcomes among participants. A total of 11 mentors responded. Six mentors (55%) believe this can occur occasionally, while two (18%) think it happens rarely and another two (18%) often. Only one mentor (9%) stated that positive outcomes always occur as a result of overestimation. The average score is 3.2, with a standard deviation of 0.9, suggesting that mentors recognize the possibility of positive effects from overconfidence, though not as a general or dominant pattern.

Table 9 shows how the mentors perceive the potential positive consequences of the Dunning-Kruger effect among participants. They most strongly agree with the statement that the effect encourages a quick start of entrepreneurial projects without excessive doubt, reflected in the high average score of 4.3, followed by increased self-confidence that fosters innovation with an average of 4.1. Slightly lower, with an average of 3.9, is the perceived impact on courage to take risks, while the lowest rated, with an average of 2.9, is the willingness to explore new areas, where opinions were the most dispersed.

Table 9: Positive Consequences of the Dunning-Kruger Effect among Participants

Positive benefit arising from the Dunning-Kruger effect among participants					
		increased self-confidence that encourages entrepreneurial innovation	a quick start of an entrepreneurial project without excessive doubt	a high level of courage to take risks and seize new opportunities	increased willingness to explore new areas
n	Valid	5	5	5	5
	Missing	0	0	0	0
Mean		2,2	2,2	2,2	2,2
Median		1	1	2	2
Mode		0	0[a]	4	1
Std. Deviation		3,347	2,588	1,789	1,304
Minimum		0	0	0	1
Maximum		8	5	4	4
Sum		11	11	11	11
a. Multiple modes exist. The smallest value is shown					

Source: Author



Graph 20: The correlation between participants' overestimation of abilities and their persistence

Source: Author

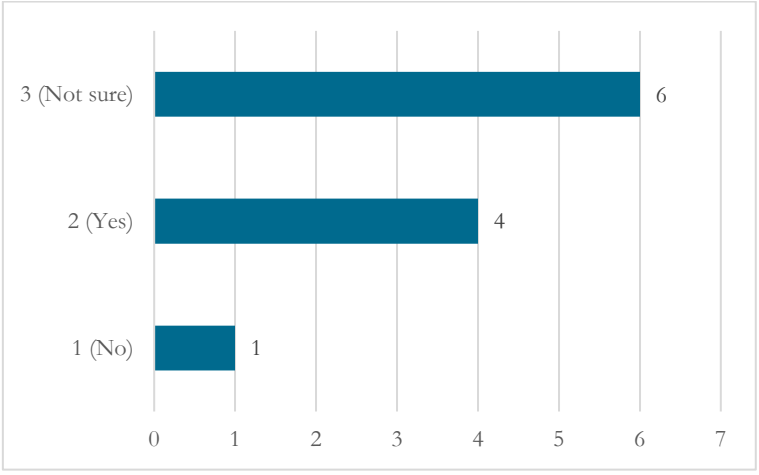
Graph 20 illustrates the extent to which mentors agree with the statement that participants who overestimate their abilities demonstrate greater persistence in overcoming obstacles. Five mentors (45%) somewhat disagree with the statement,

two (18%) completely disagree, and an equal number selected the neutral option, indicating they neither agree nor disagree. None of the respondents agreed with the statement. With an average score of 2.4 and a standard deviation of 1.0, the results indicate that mentors generally do not believe that overestimation contributes to participants' persistence.

Table 10: Positive effects of self-confidence in the entrepreneurial context

Overestimation of one's knowledge has a positive impact on the participant when:			
		they do not have an excessive fear of failure	they do not underestimate their own abilities, allowing them to act with greater entrepreneurial ambition
n	Valid	5	5
	Missing	0	0
Mean		2	2,2
Median		3	3
Mode		3	0[a]
Std. Deviation		1,414	2,168
Minimum		0	0
Maximum		3	5
Sum		10	11
a. Multiple modes exist. The smallest value is shown			

Source: Author



Graph 21: Opinion on the influence of the Dunning–Kruger effect on creativity at the beginning of the entrepreneurial journey
Source: Author

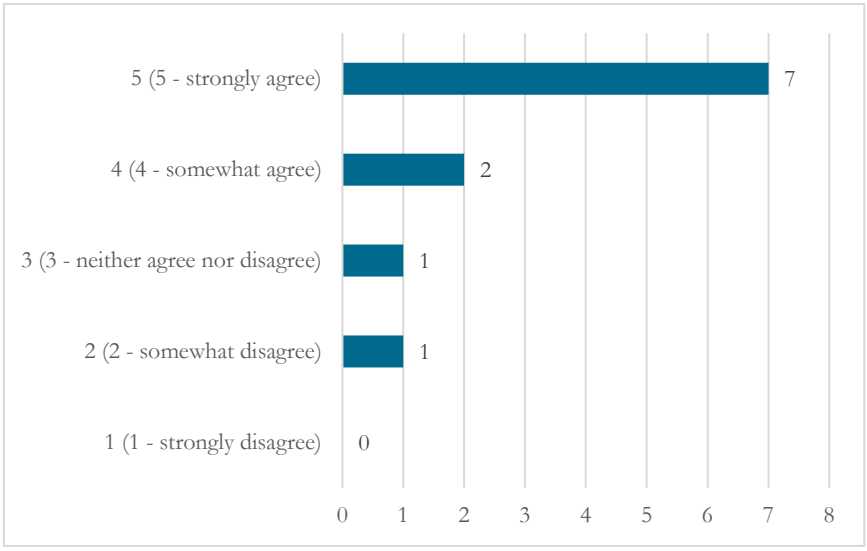
Table 10 illustrates the extent to which mentors agree that overestimating one's own knowledge can have a positive impact on participants. For the statement "they do not have an excessive fear of failure," the average score is 3.6, with most responses ranging between 3 and 5, indicating that most respondents at least partially agree. For the statement "they do not underestimate their own abilities, allowing them to act with greater entrepreneurial ambition," the average score is 4.0, suggesting stronger agreement. Overall, the results show that mentors moderately to strongly agree that overestimation, in certain circumstances, can contribute to greater entrepreneurial self-confidence and ambition.

Graph 21 shows whether the mentors believe that the Dunning–Kruger effect among participants at the start of their entrepreneurial process can stimulate creativity. Out of 11 respondents, 6 mentors (55%) expressed uncertainty, 4 mentors (36%) believe that the effect encourages creativity, and 1 mentor (9%) disagrees with this statement. The results indicate that opinions are divided, but a notable portion of mentors recognize that a moderate level of overconfidence associated with the Dunning–Kruger effect may initially stimulate creative thinking and experimentation in early-stage entrepreneurs.

Table 11: Perception of the influence of the Dunning–Kruger effect in the entrepreneurial world

The Dunning–Kruger effect:					
		has a more negative connotation in the entrepreneurial world	positively influences participants by encouraging decisiveness and quick action	positively influences participants by increasing the likelihood of taking risks	positively influences participants by strengthening confidence in their own abilities, thereby fostering innovation
n	Valid	5	5	5	5
	Missing	0	0	0	0
Mean		2,2	2,2	2,2	2,2
Median		1	0	2	1
Mode		0	0	1	1
Std. Deviation		2,683	3,033	1,304	2,775
Minimum		0	0	1	0
Maximum		6	6	4	7
Sum		11	11	11	11

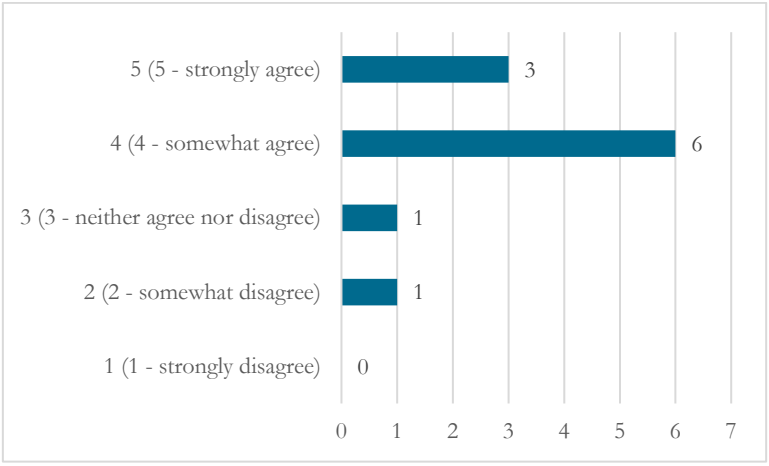
Table 11 shows how the facilitators perceive the impact of the Dunning–Kruger effect in the entrepreneurial world. All 11 respondents evaluated four statements. The highest average score of 3.5 was recorded for the statement that the effect encourages decisiveness and the ability to act quickly, with 5 respondents (45%) agreeing. This is followed by the statement on confidence in one's abilities and the promotion of innovation, with an average score of 3.4. The statement that the effect has a more negative connotation in entrepreneurship also shows an average score of 3.5, indicating a mixed perception. The lowest average score, 2.9, was given to the statement that the effect increases the likelihood of taking risks, where opinions were the most diverse. The results indicate that the facilitators recognize both positive and negative aspects of the effect, with positive influences such as decisiveness and self-confidence standing out somewhat more prominently.



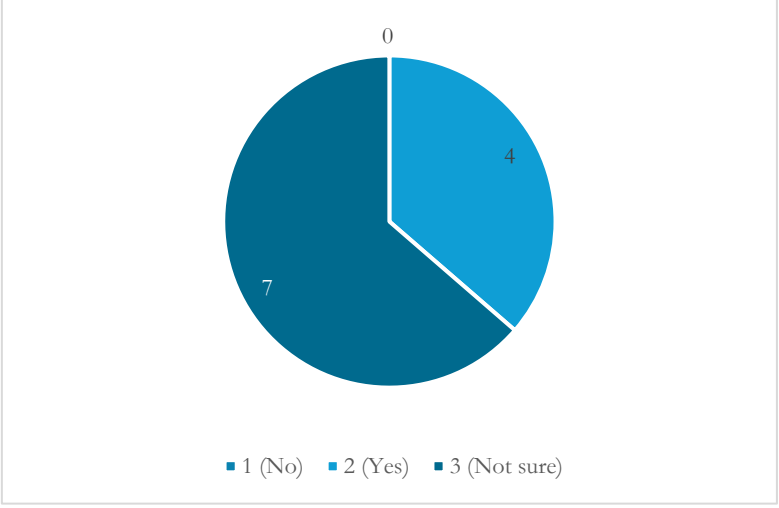
Graph 22: Importance of Regularly Addressing the Dunning–Kruger Effect
Source: Author

Graph 22 illustrates the extent to which facilitators agree that it is important to regularly emphasize the management of the Dunning Kruger effect when working with participants, in order to promote realistic self-assessment. A total of 11 facilitators responded. Seven (64%) fully agreed with the statement, two (18%) partly agreed, and two (18%) selected lower ratings, indicating partial disagreement. The average score was 4.4, which, regardless of the standard deviation, indicates strong

overall agreement among facilitators that regularly addressing this effect is essential for developing a realistic self-image among participants.



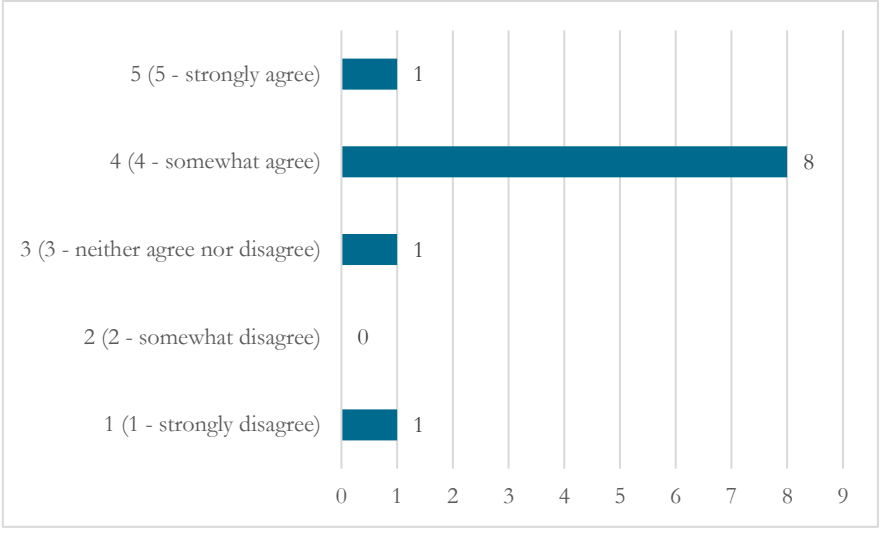
Graph 23: Agreement Scale Regarding the Positive Impact of Excessive Self-Confidence Despite Risk
Source: Author



Graph 24: Opinion on the Impact of Early Awareness of the Dunning-Kruger Effect on Participant Success
Source: Author

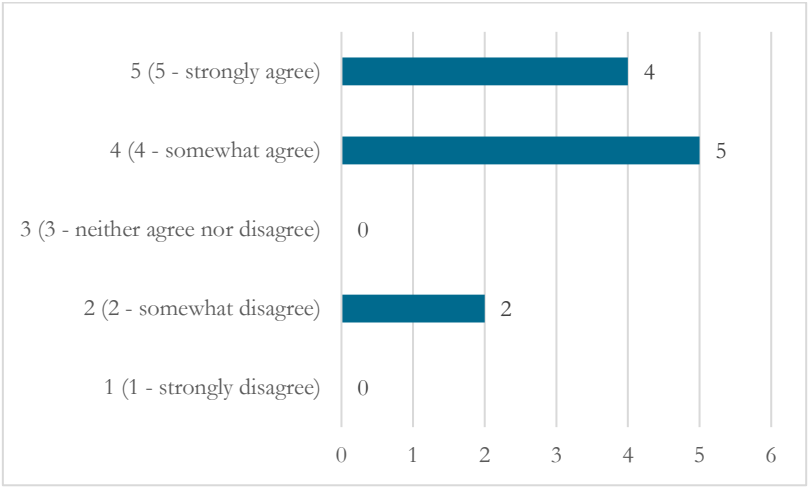
Graph 23 illustrates the extent to which facilitators agree with the statement that excessive self-confidence can lead participants to discover new and interesting opportunities despite higher risks. A total of 11 facilitators responded. Six facilitators (55%) partly agreed with the statement, three (27%) fully agreed, and two (18%) selected lower ratings (scores 2 and 3). The average score was 4.0, with a standard deviation of 0.9, indicating a generally favorable attitude among facilitators that self-confidence, even when accompanied by higher risk, can stimulate entrepreneurial activity.

Graph 24 presents the facilitators' opinions on whether participants would have a higher chance of success if they were informed about the Dunning-Kruger effect early on and knew how to manage its influence. A total of 11 facilitators responded. Four facilitators (36%) believe that such awareness would contribute to greater success, while seven (64%) stated that they are uncertain. None explicitly disagreed with the statement. The average score and standard deviation indicate caution and reservation among facilitators when assessing the direct impact of early awareness on entrepreneurial success.



Graph 25: Agreement on the Importance of Training Participants to Recognize Cognitive Biases
Source: Author

Graph 25 illustrates the extent to which facilitators agree that participants in the program should be trained to recognize and manage cognitive biases, including the Dunning-Kruger effect, with the aim of improving their entrepreneurial abilities. Eleven facilitators responded to the question. Eight facilitators (73%) partially agreed with the statement, one (9%) completely agreed, while two (18%) gave lower ratings, where one neither agreed nor disagreed, and the other disagreed. The average score is 3.7, indicating a considerable consensus that such training is important, although not entirely embraced.

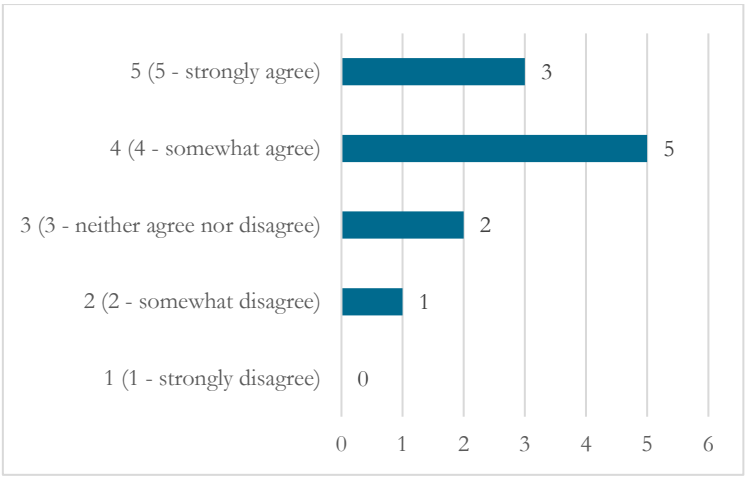


Graph 26: Agreement with the Statement on the Relationship Between Emphasizing Limitations and Participant Innovativeness
Source: Author

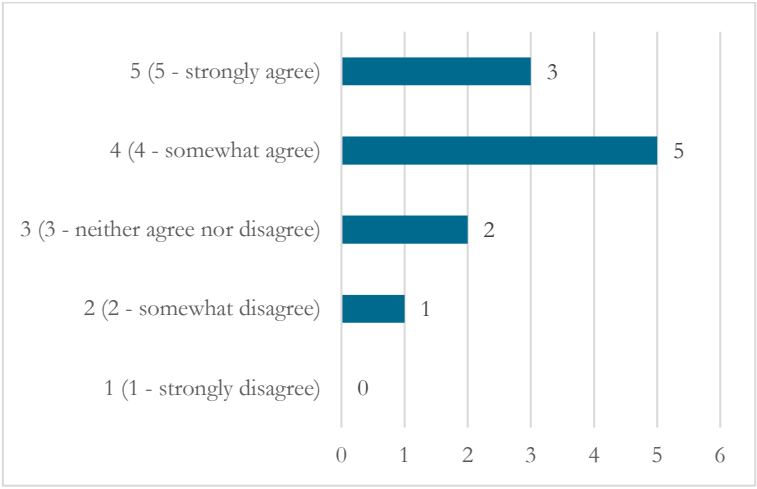
Graph 26 shows the extent to which facilitators agree with the statement that excessive focus on participants' limitations can reduce their potential to generate innovative ideas. Eleven facilitators responded to the question. Five (36%) partially agreed with the statement, four (29%) fully agreed, while two (18%) expressed lower levels of agreement. None explicitly disagreed. The average score is 4.0, with a standard deviation of 1.1, indicating partial support for the view that overemphasizing limitations can hinder participants' creative potential.

Graph 27 shows the extent to which facilitators agree with the statement that excessive analysis of one's own abilities can prevent participants from making bold decisions. Eleven facilitators responded to the question. Three (27%) completely

agreed, four (36%) partially agreed, two (18%) neither agreed nor disagreed, and one (9%) partially disagreed. The average score is 3.9, with a standard deviation of 0.9. The results indicate partial agreement that excessive self-reflection can hinder participants' decisiveness.

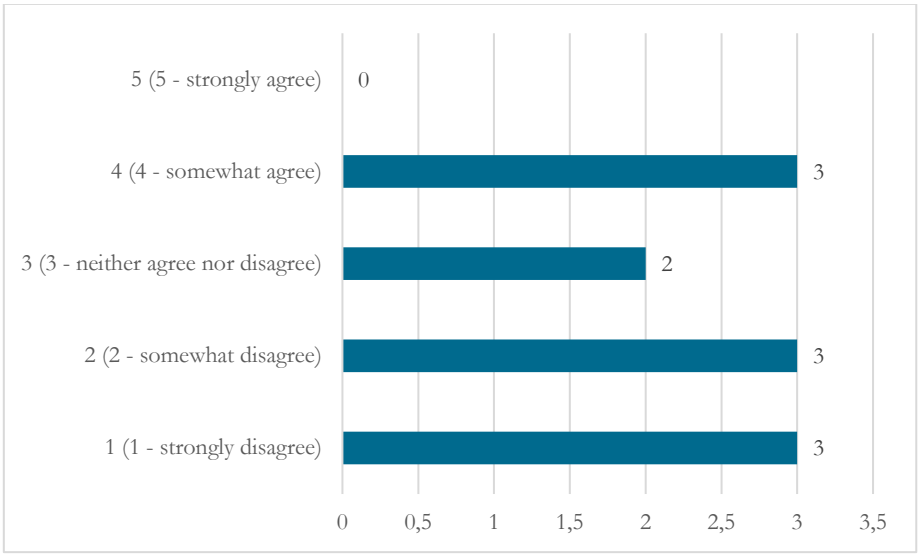


Graph 27: Agreement with the Statement on the Inhibiting Effect of Excessive Self-Analysis on Bold Decision-Making
Source: Author



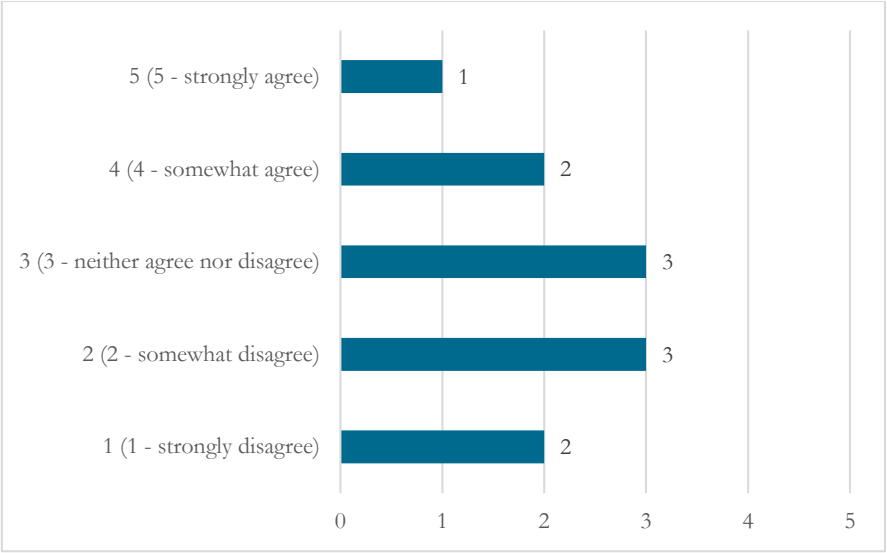
Graph 28: Agreement with the Statement on the Inhibiting Effect of Focusing on Weaknesses on Innovation
Source: Author

Graph 28 shows the extent to which facilitators agree with the statement that focusing on weaknesses can hinder creativity and innovation. Eleven facilitators responded to the question. Five (45%) partially agreed, three (27%) completely agreed, two (18%) chose a neutral response, and one (9%) partially disagreed. The average score is 3.9, with a standard deviation of 0.9. The results indicate that most facilitators agree that a negative focus on weaknesses can limit participants' innovative thinking.



Graph 29: Agreement with the Statement on the Impact of Mentoring Guidance on Reducing Participants' Independence
Source: Author

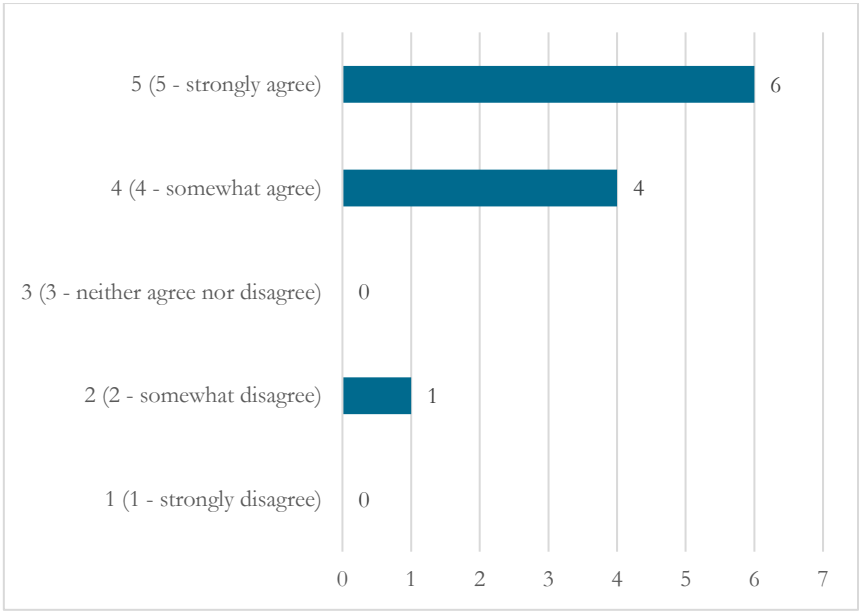
Graph 29 shows the extent to which facilitators agree with the statement that mentoring guidance can reduce participants' independence. Eleven facilitators responded to the question. Three facilitators (27%) disagreed, three (27%) partially disagreed, two (18%) chose a neutral response, and three (27%) partially agreed. No one completely agreed with the statement. The average score is 2.5, with a standard deviation of 1.2, indicating diverse opinions and a cautious attitude toward the connection between mentoring and participant independence.



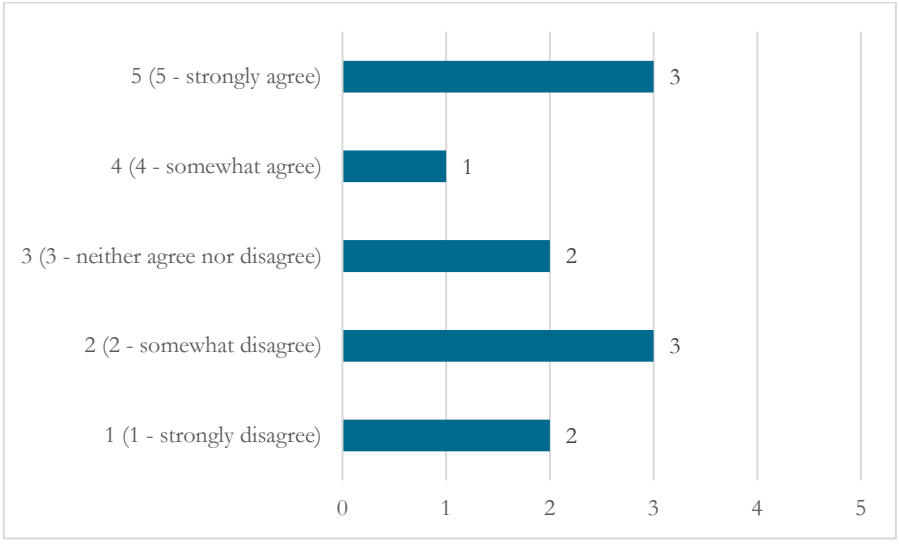
Graph 30: Agreement with the Statement on the Impact of Excessive Mentoring Support on Participants' Sense of Self-Worth
Source: Author

Graph 30 shows the extent to which facilitators agree with the statement that excessive mentoring support can reduce participants' sense of self-worth. Eleven facilitators responded to the question. Two facilitators (18%) disagreed with the statement, three (27%) partially disagreed, three (27%) chose a neutral response, two (18%) partially agreed, and one (9%) completely agreed. The average score is 2.7, with a standard deviation of 1.3, indicating dispersed opinions. Facilitators are quite divided regarding the impact of excessive mentoring on participants' sense of self-worth.

Graph 31 shows the extent to which facilitators agree with the statement that mistakes made by participants can be more instructive than warnings. Eleven facilitators responded to the question. Six facilitators (55%) completely agreed with the statement, four (36%) partially agreed, and one facilitator (9%) partially disagreed. None selected the lowest or neutral ratings. The average score is 4.4, with a standard deviation of 0.9, indicating strong agreement that learning from mistakes is a key element in the development of participants' entrepreneurial competencies.

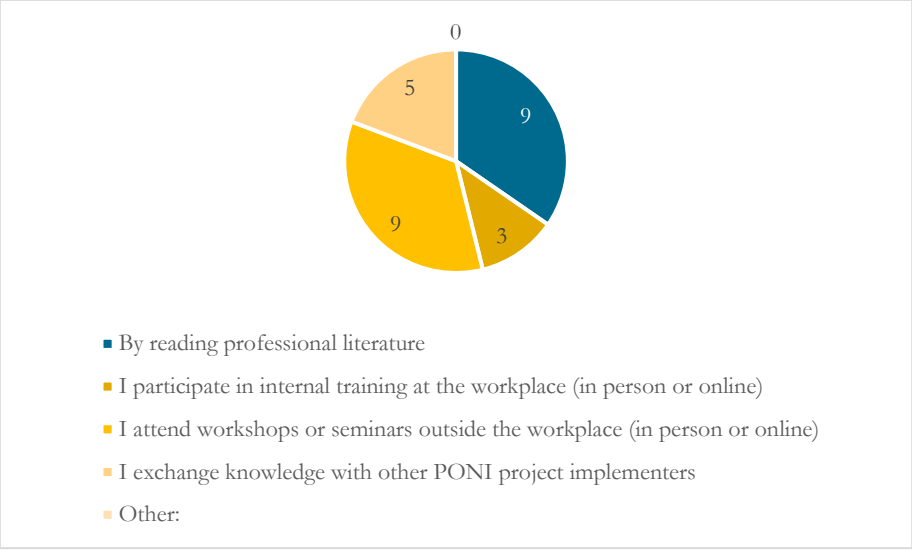


Graph 31: Agreement with the Statement that Mistakes Are a More Instructive Tool for Participants than Warnings
Source: Author



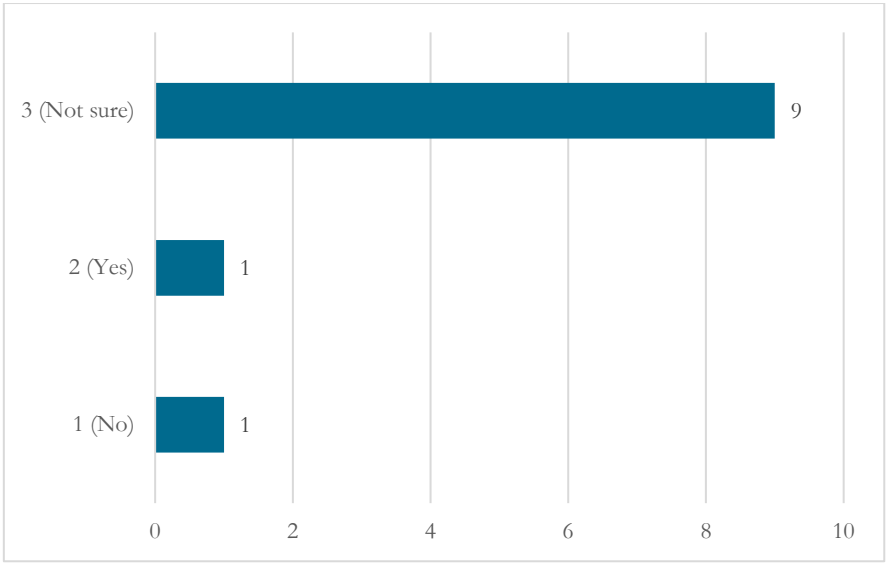
Graph 32: Agreement with the Statement about the Relationship Between Too Many Opinions and the Decrease of Participants' Self-Confidence
Source: Author

Graph 32 shows the extent to which facilitators agree with the statement that too many external opinions can reduce participants' self-confidence. Eleven facilitators responded to the question. Three facilitators (27%) completely agreed with the statement, one (9%) partially agreed, two (18%) selected the neutral option, three (27%) partially disagreed, and two (18%) disagreed. The average score is 3.0, with a standard deviation of 1.5, indicating a divided set of opinions among facilitators and a lack of consensus on the impact of external opinions on participants' confidence.



Graph 33: Methods of Enhancing Facilitators' Knowledge of Psychological Factors
Source: Author

Graph 33 illustrates the methods facilitators use to enhance their knowledge of psychological factors. Multiple responses were possible, with 11 facilitators participating. The majority, 9 out of 11 (82%), stated that they expand their knowledge by reading professional literature. This is followed by participation in workshops or seminars outside of the workplace, chosen by 5 facilitators (45%). Another 5 facilitators (36%) indicated that they exchange knowledge with other PONI project facilitators, while 3 facilitators (27%) reported improving their knowledge through internal training at work. The results show that facilitators most often seek to enhance their knowledge independently through professional sources and education, while participation within the PONI community serves as an important but less frequently utilized learning channel.



Graph 34: Facilitators' Opinions on the Use of Guidelines for Realistic Self-Assessment in Entrepreneurial Idea Development
Source: Author

Graph 34 illustrates whether facilitators follow specific guidelines and procedures to help participants conduct realistic self-assessment. A total of 11 facilitators responded. One facilitator (9%) stated that they follow such guidelines, one (9%) stated that they do not, while the majority, nine facilitators (82%), were unsure about the statement. The average score is 2.7, indicating a relatively low level of conscious use of structured approaches.

In the follow-up question (Q45), respondents who answered affirmatively were asked to specify which guidelines they apply. One facilitator mentioned using the *Guidelines of Truth and Insight into Thinking Competencies* in connection with incremental results. These findings suggest that the use of formalized guidelines is rare and most often remains at the level of individual practice or personal mentoring approach.

6.4 Results of the Qualitative Research

An in-depth interview was conducted with Dejan Marinčič, Advisor to the Director for Entrepreneurship and Innovation and an internal mentor at the Regional Development Agency of the Ljubljana Urban Region (RRA LUR), as part of the

PONI LUR project. His responsibilities include providing advisory support, monitoring participants' progress, and guiding them in developing their business ideas. With his extensive knowledge of the entrepreneurial ecosystem and direct work with program participants, he provides valuable insight into the practical implementation of program content and the perception of entrepreneurial challenges in practice.

How often do you notice that participants show excessive confidence in their knowledge or business ideas? What usually alerts you to this?

Interviewee: »It happens quite often that participants in the PONI LUR program display signs of overconfidence in their knowledge or business ideas, especially in the early stages of the program and particularly among those with less experience. In entrepreneurship, where individuals embark on new paths, the Dunning-Kruger effect becomes even more apparent.

Mentors are usually alerted to excessive confidence by unrealistic assessments of the market or competition, underestimation of the resources and time required for idea development (for example, attempting to develop a complex platform quickly with minimal resources), a strong resistance to constructive criticism or alternative perspectives on the business idea, and a general lack of awareness of their own knowledge gaps, which aligns with the Dunning-Kruger effect. The structured nature of the PONI LUR program, which includes the preparation of a business plan and the development of a minimum viable product (MVP), enables mentors to identify these signs when participants confront their ideas with real-world demands. For example, a participant might confidently claim that their idea has no competition or present a financial plan based on unrealistically optimistic assumptions about revenues and costs without considering actual market conditions or the necessary investments for launching the business.«

Does the overestimation of participants' abilities affect their decisions and consequently their progress in the project? How does this manifest?

Interviewee: »Overestimating one's own abilities undoubtedly affects participants' decisions and can slow down their progress. This may manifest in the wrong choice of market entry strategy, inadequate planning of time and financial resources, which

leads to delays in key project milestones such as the development of the MVP. It can also result in resistance to learning and accepting new knowledge that the PONI LUR program offers, as the participant believes they already know everything.

Consequently, this often manifests as slow progress or even stagnation of the project despite the effort invested. When reality diverges significantly from expectations, it can lead to frustration, demotivation, and avoidance of more demanding tasks. In extreme cases, persistence in unrealistic views can even lead to conflicts with mentors. The Dunning-Kruger effect further complicates the situation, as less competent individuals also struggle to accurately recognize their own knowledge gaps.«

How do you, as a mentor, respond when you recognize that a participant is overestimating their abilities? Do you use any specific approaches or questions?

Interviewee: »When a mentor recognizes that a participant is overestimating their abilities, it is crucial to respond empathetically and supportively, with the goal of encouraging growth rather than direct confrontation. The mentor should first actively listen to understand the participant's perspective, and then, instead of offering direct criticism, use questions that encourage self-reflection. Effective approaches include the Socratic method (asking guided questions such as "On what data did you base this assessment?"), evidence-based discussion (encouraging the participant to support claims with data from field research, which is part of the PONI LUR program), and scenario planning ("What if your key assumption does not hold?").

The aim of these approaches is to develop the participant's metacognitive abilities – the capacity to realistically assess their own knowledge and skills. The mentor should act as an external "metacognitive regulator," guiding the participant to independently recognize possible inconsistencies between their beliefs and reality. For example, instead of saying, "Your customer acquisition plan is unrealistic," the mentor might ask, "What concrete steps have you planned to reach such a large number of customers in the first quarter, and what are the expected costs of these activities?"«

How do participants usually react to constructive feedback that challenges their beliefs?

Interviewee: »Participants' reactions to constructive feedback that challenges their beliefs vary greatly. Some may become defensive, deny the problem, or look for excuses, especially when the Dunning-Kruger effect is present. Others are more open, ask follow-up questions, and are willing to reflect on the feedback. These are often individuals with a higher level of self-reflection or those who fit the profile of a "courageous, proactive, and curious" mentee.

Some participants may initially feel demotivated but later use the information constructively, while others may appear to accept the feedback without making any real changes. The key lies in the way the mentor delivers the feedback – with support, respect, and a focus on the idea rather than the person – and in establishing a "safe space" within the mentoring relationship, where the participant feels heard and supported. For example, if a participant insists on pursuing an idea that the mentor believes is not market-viable, it is important for the mentor to express concern through questions about the target market, competition, and testing, rather than rejecting the idea directly.«

How can entrepreneurial motivation be maintained while also addressing cognitive biases such as the Dunning-Kruger effect? In your opinion, where is the right balance between support and realism? Do you believe that excessive self-confidence helps potential entrepreneurs in realizing their business ideas?

Interviewee: »Maintaining motivation while addressing cognitive biases requires emphasizing the learning process, where challenges and mistakes are viewed as opportunities for growth. It is important to celebrate small wins and normalize obstacles, for example, by sharing stories of other entrepreneurs. The right balance between support and realism lies in transparent yet empathetic communication, where the mentor honestly points out risks while encouraging solution-finding and adaptation.

A certain degree of self-confidence is essential, but excessive confidence, typical of the Dunning-Kruger effect, is harmful in the long run, as it hinders learning, adaptation, and seeking help. The ideal approach is called realistic optimism, meaning belief in one's abilities while remaining aware of challenges. The structured PONI LUR process, with its clear milestones (developing the business model, preparing the business plan, and creating the minimum viable product), gradually confronts participants with reality and allows mentors to introduce realistic evaluations step by step without destroying motivation.«

What could the PONI LUR project improve to help participants better understand their own abilities without suppressing their creativity?

Interviewee: »PONI LUR could further enhance its support in developing a more realistic self-understanding among participants by including modules on cognitive biases within the existing training framework. The introduction of structured self-reflection exercises after key program milestones would help participants regularly assess their progress and identify gaps in their knowledge, which has been proven to improve the accuracy of self-assessment. The project could also formalize peer-to-peer feedback sessions, where participants, under the guidance of a mentor, exchange experiences and constructive criticism.

To maintain creativity, it is important to separate the idea generation phase from the evaluation phase and to promote methodologies such as Design Thinking, which channels creativity into solving real problems. Additional mentor training on delivering "difficult" feedback and emphasizing a culture of "learning from mistakes," especially during the testing of the minimum viable product (MVP), would also contribute to improved self-reflection without suppressing innovation. These measures would complement individual mentoring and systematically strengthen the metacognitive skills of participants.«

Do you believe it would be beneficial for participants to join other entities within the entrepreneurial support environment after completing the PONI LUR project? Which forms of networking would be most helpful for them

(e.g., co-working spaces, incubators, accelerators, other communities, etc.)?

Interviewee: »It is certainly extremely beneficial for participants, after completing the PONI LUR project, to actively engage with other entities within the entrepreneurial support ecosystem. However, the entrepreneurial journey is a long-term process full of challenges, where continued support and networking are essential for the growth and sustainability of a business. After finishing the program, entrepreneurs face the realities of the market, the need for funding, team expansion, and further development of their product or service, which makes ongoing support crucial.

The most useful forms of networking depend on the stage of development and the specific needs of their business. Co-working spaces are excellent for staying connected with the entrepreneurial community, sharing experiences, and reducing initial office rental costs. Business incubators, such as the Ljubljana University Incubator (LUI) or other specialized incubators, provide structured early-stage support, including continued mentorship, access to resources, and networking opportunities. For companies with higher growth potential and ambitions for rapid expansion, accelerators (for example, those operating under the Slovene Enterprise Fund or privately) are suitable, as they offer intensive programs, investment opportunities, and access to international markets. Other entrepreneurial communities and professional associations are also important, as they enable networking, knowledge exchange, and the search for potential partners or clients.«

How do you assess the competence of mentors and facilitators in the PONI LUR project regarding psychology, behavioral patterns, and cognitive biases among participants? Where do you see potential gaps and opportunities for improvement?

Interviewee: »Many experienced mentors develop strong intuition through practice for recognizing certain behavioral patterns or excessive self-confidence, but this is not necessarily supported by formal psychological education. Although mentors encourage participants, not all are systematically trained to identify and address psychological challenges such as stress, burnout, or the impact of cognitive biases (for example, optimism bias or the planning fallacy) on decision-making.

I see opportunities for improvement primarily in additional mentor training focused on entrepreneurial psychology, identifying cognitive biases, and techniques for constructive confrontation and feedback delivery in a way that does not suppress motivation. The inclusion of modules or workshops on the psychological aspects of entrepreneurship, both for mentors and participants, could contribute to better self-understanding among participants and more effective mentoring work. The program could also occasionally include supervision sessions for mentors or collaboration with psychologists specialized in entrepreneurship, which could raise the quality of support in this sensitive area.«

7 Proposals for Improvement / Solution Analysis

Based on a review of the professional literature and an analysis of the current operation of the PONI LUR project under the Regional Development Agency of the Ljubljana Urban Region (RRA LUR), we identified key areas where upgrading the content or approach could improve the recognition and management of the Dunning–Kruger effect among project participants. The importance of this issue is highlighted by Christopher et al. (2023), who describe the effect as a cognitive bias in which individuals with limited knowledge often overestimate their own abilities. In the entrepreneurial context, this can lead to poor business decisions (Gudmundsson and Lechner, 2013).

Findings indicate that project facilitators are already noticing such cases of overestimation, but there is still significant room for improvement. With more systematic approaches, the project could further strengthen participants' understanding of entrepreneurial risks, which is particularly important in the early stages of the entrepreneurial process (Rus et al., 2023). In line with the recommendations of the latest practical guidelines, we therefore propose several concrete improvement measures that would enhance participants' understanding of entrepreneurial risk in the initial phase of business development (GEM, 2025).

As opportunities for enhancement, we propose the integration of experiential learning with mentors from practice, through which, according to Bastian and Zucchella (2022), participants could easily assess their entrepreneurial skills and compare their own judgments with objective feedback from mentors. Mentors could use real-life examples to confront participants with the realities of entrepreneurship.

We also suggest introducing short self-assessment questionnaires on entrepreneurial competencies, which would allow mentors to gain a better insight into participants' understanding and progress at different stages of the project (Yu et al., 2023).

One of the most significant improvements would be additional mentor training in recognizing cognitive biases. According to Gudmundsson and Lechner (2013), such training would help mentors detect the Dunning–Kruger effect early, which is essential for providing high-quality and effective mentoring support. However, it must be noted that implementing such regular training could require additional financial resources that might not have been originally included in the project's budget.

The proposed improvements do not require a complete overhaul of the project's structure but offer a logical and feasible upgrade to the existing content. In this way, the PONI LUR project can maintain its original mission and vision by preserving participants' entrepreneurial drive while simultaneously strengthening their self-awareness, which is crucial for long-term success in the entrepreneurial world (Močnik and Širec, 2022).

8 Discussion

Understanding entrepreneurship as a complex process that goes beyond the economic dimension and includes institutional, cultural, and psychological aspects provides a solid foundation for discussing the role of support mechanisms and cognitive factors such as the Dunning Kruger effect. According to GEM (2025) and Širec et al. (2023), entrepreneurship, precisely because of its multidimensional nature, requires an adequate support environment, professional mentoring, and the development of entrepreneurial competencies.

In Slovenia, the entrepreneurial ecosystem and its support environment are structured as a diverse network of interconnected public and private institutions, professional organizations, and development programs at the local, regional, and national levels. Together, they provide infrastructural, advisory, and developmental support to individuals at various stages of their entrepreneurial journey (Matko, 2020). It is crucial to recognize that a modern support environment must, in addition to technical and financial support, also include a psychological dimension, fostering

self-awareness, self-reflection, and critical thinking as key components of entrepreneurial development.

One of the most relevant initiatives in this context is the national entrepreneurial training program PONI, designed to support individuals in developing their own business ideas and entering entrepreneurship. The program is implemented across several Slovenian regions in cooperation with regional development agencies, aiming to create an effective and safe environment for aspiring entrepreneurs (Ministry of Cohesion and Regional Development, 2023). The project emphasizes practical training, personal and business growth, and mentoring, with the goal of preparing a business plan and a minimum viable product (RRA LUR, 2025).

The presence of the Dunning Kruger effect was confirmed by findings showing that most mentors and trainers, both internal and external, observe excessive self-confidence among participants, which is often not aligned with their actual level of knowledge. Facilitators address this challenge through both individual and group approaches, which highlights the need for systematic support and standardized mentoring strategies when guiding entrepreneurs in the early stages of their journey (Yu et al., 2023). When asked how they address these challenges, respondents reported using mainly personal approaches, asking reflective questions, presenting best practices, and gradually confronting participants with the realities of entrepreneurship. At the same time, caution is needed in mentoring to avoid excessive guidance that could suppress creativity or entrepreneurial drive (Bastian and Zucchella, 2022).

A key discussion point concerns how to design guiding mechanisms that reduce cognitive biases without diminishing participants' motivation. Here, relatively simple interventions such as structured questionnaires, reflective practices, and peer exchanges with experienced entrepreneurs (Yu et al., 2023) can be introduced without major changes to project activities. Such measures could help participants see the realities of entrepreneurship while maintaining hope and resilience in the face of risk and uncertainty in a dynamic and competitive market.

Another important opportunity lies in digital tools for progress monitoring and self-evaluation. However, the research indicates that both facilitators and participants often lack the necessary competencies to use these tools effectively. This points to a

need for developing digital literacy and training in modern self-assessment methods (Blažič, 2022). As the leading institution, RRA LUR could strengthen the realism of participants' self-perception through strategic upgrades, integrating psychological aspects into mentoring, using reflective tools, providing additional mentor training, and deepening collaboration with the entrepreneurial ecosystem (Rus et al., 2023). Such measures would ultimately contribute to higher success rates of entrepreneurial ventures.

For the post-program phase, the development of a follow-up support system is recommended. This would enable continued mentoring, counseling, and access to entrepreneurial networks, helping participants maintain contact with the support environment and continue learning and reflecting on real-world challenges. Such prolonged engagement could provide sustained support and prevent early demotivation or irrational decision-making during initial business hurdles (Rebernik et al., 2021).

It is also important to highlight the role of other key actors within Slovenia's entrepreneurial support ecosystem, such as technology parks, incubators, accelerators, business angel networks, professional associations, and public agencies. These institutions can offer ongoing advisory services, investor connections, incubation programs, and access to knowledge and infrastructure, all of which enhance the competencies and long-term success of emerging entrepreneurs (SPIRIT, 2025; Start:Up Slovenia, 2025).

The interconnection between support structures, mentorship, and competency development forms the foundation of effective entrepreneurial education. When complemented with self-reflection and awareness of cognitive biases, the PONI LUR program can evolve into a model of effective entrepreneurial support that combines knowledge, psychological stability, and operational competence, creating strong foundations for business growth and fostering individuals who can realistically evaluate their skills while actively engaging in the entrepreneurial environment.

9 Conclusion

Addressing challenges such as the Dunning Kruger effect requires more than technical expertise. It demands a deep understanding of psychological processes, the development of entrepreneurial competencies, and integration into a supportive environment that not only informs but also empowers individuals. In this regard, the PONI LUR program is recognized as an important mechanism for entrepreneurial empowerment.

This research has shown that program facilitators already intuitively recognize the overestimation of abilities among participants and respond to it through individual approaches. However, achieving systematic progress requires further enhancement through structured mentor training, the inclusion of reflective tools, the promotion of digital literacy, and the establishment of a follow-up support program after completion of training.

Strengthening a realistic self-image while maintaining motivation and creativity requires a careful balance by mentors and facilitators, who must be adequately trained to address cognitive biases among participants in the early stages of their entrepreneurial journey. In this context, programs such as PONI LUR represent a valuable example and a model of entrepreneurial development at the national level. Entrepreneurial empowerment is not merely a goal, but a process that must be supported by the entire entrepreneurial ecosystem, from institutions to mentors and ultimately the individuals themselves.

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About the authors

Lea Ulčar is completing her master's degree in Organization and Management of Human Resources and Educational Systems at the Faculty of Organizational Sciences, University of Maribor. Her research interests include the areas of entrepreneurship, project management, leadership, and organization. She gains practical experience by working on various projects, and has upgraded her knowledge by participating in Erasmus+ training for project management and the AmCham Young Professionals program.

Miha Marič, Ph.D., is a researcher in the field of leadership, management, and organizational sciences. He holds a Ph.D. from the Faculty of Economics, University of Ljubljana. He is currently employed as an associate professor at the University of Maribor's Faculty of Organizational Sciences. His research interests are power, leadership, organizational behavior, human resource management, organization, and management. He is the author of numerous original scientific articles, professional articles, papers at scientific conferences, scientific monographs, and was an editor and reviewer. He also participates in research projects and consulting work.

Survey Questionnaire

Spoštovani,
v okviru projekta Problemsko učenje študentov v delovno okolje izvajamo raziskavo, usmerjeno v raziskovanje možnosti za izboljševanje podjetniške izkušnje s pomočjo podpornega okolja v Ljubljanski urbani regiji.

Anketni vprašalnik temelji na preučevanju kognitivnih pristranskosti, kjer smo se osredotočili predvsem na prisotnost učinka Dunning-Kruger pri potencialnih podjetnikih v okviru projekta PONI LUR.

Anketa je anonimna, zbrani podatki pa bodo uporabljeni izključno v raziskovalne namene.

Vaši odgovori bodo pomembno prispevali k boljšemu razumevanju pojava in razvoju učinkovitejših pristopov k podpori podjetnikom.

Hvala za vaš čas in sodelovanje!

Q1 - Vaša vloga v projektu PONI LUR
◌ Notranji mentor
◌ Zunanji mentor
◌ Zaposleni na RRA LUR (sodelujoč kot svetovalec ali predavatelj)
◌ Zunanji predavatelj (po potrebi tudi ekspertni svetovalec)
◌ Ekspertni svetovalec
◌ Drugo:

Q2 - Koliko mesecev sodelujete na projektu PONI LUR?
_____

Q3 - Ali ste že slišali za učinek Dunning-Kruger?
◌ Ne
◌ Da
◌ Nisem prepričan/a

Q4 - Kako pomembno se vam zdi razumevanje tega učinka pri podpori udeležencem v projektu PONI LUR? (1 - nepomembno, 5 - pomembno)

- ○ 1 - nepomembno
- ○ 2 - delno nepomembno
- ○ 3 - niti pomembno, niti nepomembno
- ○ 4 - delno pomembno
- ○ 5 - pomembno

Q5 - Ali menite, da učinek Dunning-Kruger vpliva na odločitve udeležencev v projektu PONI LUR?

- ○ Ne
- ○ Da
- ○ Nisem prepričan/a

Q6 - Kako pogosto se strinjate z naslednjimi opažanji? (1 - nikoli, 5 - vedno)

	1 - nikoli	2 - redko	3 - občasno	4 - pogosto	5 - vedno
Kako pogosto opažate, da udeleženci precenjujejo svoje sposobnosti?	○	○	○	○	○
Kako pogosto udeleženci kažejo visoko samozavest kljub pomanjkanju izkušenj ali znanja?	○	○	○	○	○

Q7 - V kolikšni meri se strinjate z naslednjimi trditvami? (1 - ne strinjam se, 5 - strinjam se) Glavni razlog za precenjevanje podjetniških sposobnosti so:

	1 - ne strinjam se	2 - delno se ne strinjam	3 - niti se strinjam, niti se ne strinjam	4 - delno se strinjam	5 - strinjam se
že pridobljene osebne izkušnje	○	○	○	○	○
pridobljene povratne informacije, ki jih dobijo od prijateljev, družine, znancev	○	○	○	○	○
mnenja drugih, ki niso strokovnjaki na področju	○	○	○	○	○
pomanjkanje znanja ali objektivnih podatkov, ki jih imajo udeleženci	○	○	○	○	○
pomanjkanje samozavedanja o lastnem znanju	○	○	○	○	○

Q8 - Kako pogosto udeleženci zavračajo pridobljene povratne informacije, ki so v nasprotju z njihovimi prepričanji? (1 - nikoli, 5 - vedno)

○ 1 - nikoli
○ 2 - redko
○ 3 - občasno
○ 4 - pogosto
○ 5 - vedno

Q9 - Kako pogosto menite, da učinek Dunning-Kruger vpliva na kakovost poslovnih odločitev udeležencev? (1 - nikoli, 5 - vedno)

○ 1 - nikoli
○ 2 - redko
○ 3 - občasno
○ 4 - pogosto
○ 5 - vedno

Q10 - Ali menite, da učinek Dunning-Kruger pri udeležencih vodi v sprejemanje tveganih odločitev?

◌ Ne
◌ Da
◌ Nisem prepričan/a

Q11 - Kako pogosto menite, da učinek Dunning-Kruger pri udeležencih vodi v sprejemanje preveč tveganih odločitev? (1 - nikoli, 5 - vedno)

◌ 1 - nikoli
◌ 2 - redko
◌ 3 - občasno
◌ 4 - pogosto
◌ 5 - vedno

Q12 - Kako pogosto udeleženci podcenjujejo kompleksnost svojih podjetniških nalog? (1 - nikoli, 5 - vedno)

◌ 1 - nikoli
◌ 2 - redko
◌ 3 - občasno
◌ 4 - pogosto
◌ 5 - vedno

Q13 - V kolikšni meri se strinjate z naslednjimi trditvami? (1 - ne strinjam se, 5 - strinjam se) Učinek Dunning-Kruger pri udeležencih prepoznamo:

	1 - ne strinjam se	2 - delno se ne strinjam	3 - niti se strinjam, niti se ne strinjam	4 - delno se strinjam	5 - strinjam se
s postavljanjem vprašanj, ki izzivajo njihova prepričanja	◌	◌	◌	◌	◌
z analizo njihovih poslovnih odločitev	◌	◌	◌	◌	◌
v okviru individualnih posvetov	◌	◌	◌	◌	◌

	1 - ne strinjam se	2 - delno se ne strinjam	3 - niti se strinjam, niti se ne strinjam	4 - delno se strinjam	5 - strinjam se
pri izvedbi praktičnih podjetniških vaj	○	○	○	○	○

Q14 - Kako pogosto se strinjate z naslednjimi opažanji? (1 - nikoli, 5 - vedno) Kako pogosto udeleženci:

	1 - nikoli	2 - redko	3 - občasno	4 - pogosto	5 - vedno
sprejmejo pomoč, ko jim pokažete, da precenjujejo svoje sposobnosti?	○	○	○	○	○
prosijo za povratne informacije ali mnenja o svojih odločitvah?	○	○	○	○	○

Q15 - V kolikšni meri se strinjate z naslednjimi trditvami? (1 - ne strinjam se, 5 - strinjam se) Za zmanjševanje učinka Dunning-Kruger pri udeležencih uporabljamo strategijo:

	1 - ne strinjam se	2 - delno se ne strinjam	3 - niti se strinjam, niti se ne strinjam	4 - delno se strinjam	5 - strinjam se
aktivnega iskanja povratnih informacij s strani udeleženca	○	○	○	○	○
spodbujanja objektivnega ocenjevanja lastnih sposobnosti	○	○	○	○	○
poudarjanja pomena dolgoročnega učenja	○	○	○	○	○
konstantnega usmerjanja k odločitvam	○	○	○	○	○

Q16 - Ali vključujete teme, kot je učinek Dunning-Kruger, v izobraževalne vsebine za udeležence v projektu PONI LUR?

◌ Ne
◌ Da
◌ Nisem prepričan/a

Q17 - V kolikšni meri se strinjate z naslednjimi trditvami? (1 - ne strinjam se, 5 - strinjam se) Najpomembnejši izziv pri delu z udeleženci, ki so pod vplivom učinka Dunning-Kruger, je:

	1 - ne strinjam se	2 - delno se ne strinjam	3 - niti se strinjam, niti se ne strinjam	4 - delno se strinjam	5 - strinjam se
njihova odpornost na povratne informacije	◌	◌	◌	◌	◌
njihova prekomerna samozavest	◌	◌	◌	◌	◌
njihovo pomanjkanje pripravljenosti na spremembe	◌	◌	◌	◌	◌
prepoznavanje realnosti	◌	◌	◌	◌	◌

Q18 - Ali menite, da udeleženci, ki precenjujejo svoje sposobnosti zaradi učinka Dunning-Kruger, dosegajo slabše poslovne rezultate v dolgem roku?

◌ Ne
◌ Da
◌ Nisem prepričan/a

Q19 - Kako pogosto opažate, da udeleženci podcenjujejo lastne vrline, ki bi jim lahko pomagale pri doseganju uspeha? (1 - nikoli, 5 - vedno)

◌ 1 - nikoli
◌ 2 - redko
◌ 3 - občasno
◌ 4 - pogosto
◌ 5 - vedno

Q20 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Razumevanje učinka Dunning-Kruger je ključno za dolgoročni uspeh podjetnikov.

◯ 1 - ne strinjam se
◯ 2 - delno se ne strinjam
◯ 3 - niti se strinjam, niti se ne strinjam
◯ 4 - delno se strinjam
◯ 5 - strinjam se

Q21 - Kako ocenjujete potrebo po večjem vključevanju tem, kot je Dunning-Kruger, v projekt PONI LUR? (1 - nepomembno, 5 - pomembno)

◯ 1 - nepomembno
◯ 2 - delno nepomembno
◯ 3 - niti pomembno, niti nepomembno
◯ 4 - delno pomembno
◯ 5 - pomembno

Q22 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Višja stopnja ozaveščanja o učinku Dunning-Kruger s strani mentorjev in svetovalcev bi pozitivno vplivala na obvladovanje učinka med udeleženci PONI LUR.

◯ 1 - ne strinjam se
◯ 2 - delno se ne strinjam
◯ 3 - niti se strinjam, niti se ne strinjam
◯ 4 - delno se strinjam
◯ 5 - strinjam se

Q23 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Boljša usposobljenost mentorjev in svetovalcev na področju kognitivnih pristranskosti bi pozitivno vplivala na obvladovanje učinka Dunning-Kruger v okviru projekta PONI LUR.

◯ 1 - ne strinjam se
◯ 2 - delno se ne strinjam
◯ 3 - niti se strinjam, niti se ne strinjam
◯ 4 - delno se strinjam
◯ 5 - strinjam se

Q24 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Vključitev analitičnih orodij za implementacijo objektivnih odločitev bi pozitivno vplivala na obvladovanje učinka Dunning-Kruger v okviru projekta PONI LUR.

◯ 1 - ne strinjam se
◯ 2 - delno se ne strinjam
◯ 3 - niti se strinjam, niti se ne strinjam
◯ 4 - delno se strinjam
◯ 5 - strinjam se

Q25 - Ali menite, da lahko precenjevanje lastnih znanj pri udeležencih vodi tudi do pozitivnih rezultatov? (1 - nikoli, 5 - vedno)

◯ 1 - nikoli
◯ 2 - redko
◯ 3 - občasno
◯ 4 - pogosto
◯ 5 - vedno

Q26 - V kolikšni meri se strinja te z naslednjimi trditvami? (1 - ne strinjam se, 5 - strinjam se) Pozitivna korist, ki izhaja iz učinka Dunning-Kruger pri udeležencih, je:

	1 - ne strinjam se	2 - delno se ne strinjam	3 - niti se stirnjam, niti se ne strinjam	4 - delno se strinjam	5 - strinjam se
povečana samozavest, ki spodbuja podjetniško inovativnost	◯	◯	◯	◯	◯
hiter začetek podjetniškega projekta brez prekomernega dvoma	◯	◯	◯	◯	◯
velika mera poguma za sprejemanje tveganj in novih priložnosti	◯	◯	◯	◯	◯
povečana pripravljenost za raziskovanje novih področij	◯	◯	◯	◯	◯

Q27 - V kolikšni meri se strinjate z naslednjo trditvijo (1 - ne strinjam se, 5 - strinjam se) Udeleženci, ki precenjujejo svoje sposobnosti, kažejo večjo vztrajnost pri reševanju težav in premagovanju ovir.

- ○ 1 - ne strinjam se
- ○ 2 - delno se ne strinjam
- ○ 3 - niti se strinjam, niti se ne strinjam
- ○ 4 - delno se strinjam
- ○ 5 - strinjam se

Q28 - V kolikšni meri se strinjate z naslednjimi trditvami? (1 - ne strinjam se, 5 - strinjam se) Precenjevanje lastnih znanj pozitivno vpliva na udeleženca, ko:

	1 - ne strinjam se	2 - delno se ne strinjam	3 - niti se strinjam, niti se ne strinjam	4 - delno se strinjam	5 - strinjam se
nima prevelikega strahu pred neuspehom	○	○	○	○	○
ne podcenjuje lastnih sposobnosti, saj mu omogoča podjetniško delovanje z večjimi ambicijami	○	○	○	○	○

Q29 - Ali menite, da lahko učinek Dunning-Kruger pri udeležencih na začetku podjetniškega procesa pripomore k večji ustvarjalnosti?

- ○ Ne
- ○ Da
- ○ Nisem prepričan/a

Q30 - V kolikšni meri se strinjate z naslednjimi trditvami? (1 - ne strinjam se, 5 - strinjam se) Učinek Dunning-Kruger:

	1 - ne strinjam se	2 - delno se ne strinjam	3 - niti se strinjam, niti se ne strinjam	4 - delno se strinjam	5 - strinjam se
ima v podjetniškem svetu bolj negativen prizvok	○	○	○	○	○
pozitivno vpliva na udeležence, saj spodbuja odločnost in sposobnost hitrega ukrepanja	○	○	○	○	○
pozitivno vpliva na udeležence, saj poveča verjetnost za prevzemanje tveganj	○	○	○	○	○
pozitivno vpliva na udeležence, saj krepi zaupanje v lastne sposobnosti, kar spodbuja inovacije	○	○	○	○	○

Q31 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Pri delu z udeleženci je pomembno redno poudarjati obvladovanje učinka Dunning-Kruger, da bi spodbudili realistično samoocenjevanje.

○ 1 - ne strinjam se
○ 2 - delno se ne strinjam
○ 3 - niti se strinjam, niti se ne strinjam
○ 4 - delno se strinjam
○ 5 - strinjam se

Q32 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Prekomerna samozavest lahko udeležence vodi do novih, zanimivih priložnosti, kljub večjemu tveganju.

- ○ 1 - ne strinjam se
- ○ 2 - delno se ne strinjam
- ○ 3 - niti se strinjam, niti se ne strinjam
- ○ 4 - delno se strinjam
- ○ 5 - strinjam se

Q33 - Ali bi imeli udeleženci večje možnosti za uspeh, če bi bili pravočasno seznanjeni z učinkom Dunning-Kruger in znali obvladovati njegov vpliv?

- ○ Ne
- ○ Da
- ○ Nisem prepričan/a

Q34 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Udeleženci bi se morali v okviru projekta usposabljati za prepoznavanje in obvladovanje kognitivnih pristranskosti, vključno z učinkom Dunning-Kruger, da bi izboljšali svoje podjetniške sposobnosti.

- ○ 1 - ne strinjam se
- ○ 2 - delno se ne strinjam
- ○ 3 - niti se strinjam, niti se ne strinjam
- ○ 4 - delno se strinjam
- ○ 5 - strinjam se

Q35 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Pretirano osredotočanje na omejitve udeležencev lahko zmanjša njihov potencial za ustvarjanje inovativnih idej.

- ○ 1 - ne strinjam se
- ○ 2 - delno se ne strinjam
- ○ 3 - niti se strinjam, niti se ne strinjam
- ○ 4 - delno se strinjam
- ○ 5 - strinjam se

Q36 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Preveč analiziranja lastnih sposobnosti lahko ustavi udeležence pred sprejemanjem drznih odločitev.

◌ 1 - ne strinjam se
◌ 2 - delno se ne strinjam
◌ 3 - niti se strinjam, niti se ne strinjam
◌ 4 - delno se strinjam
◌ 5 - strinjam se

Q37 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Osredotočenost na pomanjkljivosti lahko prepreči ustvarjalnost in inovacije.

◌ 1 - ne strinjam se
◌ 2 - delno se ne strinjam
◌ 3 - niti se strinjam, niti se ne strinjam
◌ 4 - delno se strinjam
◌ 5 - strinjam se

Q38 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Mentorsko usmerjanje lahko zmanjša samostojnost udeležencev.

◌ 1 - ne strinjam se
◌ 2 - delno se ne strinjam
◌ 3 - niti se strinjam, niti se ne strinjam
◌ 4 - delno se strinjam
◌ 5 - strinjam se

Q39 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Pretirana mentorska pomoč lahko zmanjša občutek lastne vrednosti.

◌ 1 - ne strinjam se
◌ 2 - delno se ne strinjam
◌ 3 - niti se strinjam, niti se ne strinjam
◌ 4 - delno se strinjam
◌ 5 - strinjam se

Q40 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Napake, ki jih naredijo udeleženci, so lahko bolj poučne kot opozorila.

◯ 1 - ne strinjam se
◯ 2 - delno se ne strinjam
◯ 3 - niti se strinjam, niti se ne strinjam
◯ 4 - delno se strinjam
◯ 5 - strinjam se

Q41 - V kolikšni meri se strinjate z naslednjo trditvijo? (1 - ne strinjam se, 5 - strinjam se) Preveč mnenj drugih lahko zmanjšuje samozavest udeležencev.

◯ 1 - ne strinjam se
◯ 2 - delno se ne strinjam
◯ 3 - niti se strinjam, niti se ne strinjam
◯ 4 - delno se strinjam
◯ 5 - strinjam se

Q42 - Ali se kot izvajalec udeležujete izobraževanj s področja vedenja podjetnikov?

◯ Ne
◯ Ne, vendar bi si tega želel/a
◯ Redko (po potrebi)
◯ Redno (1-2x letno)
◯ Zelo redno (vsaj 1x v obdobju trajanja skupine PONI LUR)
◯ Drugo:

Q43 - Kako nadgrajujete svoje znanje o psiholoških dejavnikih, ki vplivajo na podjetnike? Ni nujno, da so vezani na izobraževanja na delovnem mestu (možnih je več odgovorov)

Možnih je več odgovorov
☐ Z branjem strokovne literature
☐ Udeležujem se internih usposabljanj na delovnem mestu (v živo ali online)
☐ Udeležujem se delavnic ali seminarjev izven delovnega mesta (v živo ali online)
☐ Znanja izmenjujem z drugimi izvajalci projekta PONI
☐ Drugo:

Q44 - Ali upoštevate določene smernice in postopke za pomoč udeležencem pri realnem samoocenjevanju, ko razvijajo in preverjajo podjetniške ideje?

◌ Ne
◌ Da
◌ Nisem prepričan/a

IF (1) Q44 = [2] (Da)

Q45 - Če ste odgovorili z "da" na prejšnje vprašanje, katere smernice upoštevate?