The impact of entrepreneurship dimensions on solving unemployment problems among Soran University Graduate Students from 2010 to 2023

Abstract. Entrepreneurship is a potent force in addressing unemployment and fostering economic growth. However, there remains a research gap in understanding the specific impact of entrepreneurship on unemployment among Soran University Graduate Students within 2010-2023. Hence, the study aims to provide information to address policies and interventions aimed at promoting entrepreneurship and mitigating unemployment challenges among Graduate Students in the specified period. During the research, a descriptive-analytical approach and a quantitative method with 134 participants. As such, the study established a noteworthy and positive correlation between entrepreneurship and the reduction of unemployment. The analysis reveals key insights into the pivotal role of entrepreneurship education, access to funding, and resource facilitation in effectively addressing unemployment challenges among Soran University Graduate Students. The results highlight the significance of empowering graduates to shape their success, contributing not only to personal growth but also to regional economic development. Such findings of the study also emphasize implementing proactive strategies to promote entrepreneurship. All mentioned is supported by a qualitative literature review of previous publications. As a practical value, the study suggests that by fostering an entrepreneurial mindset and providing necessary support, institutions can play a pivotal role in mitigating unemployment and offering a solution to persistent issues.

Keywords: entrepreneurship impact; unemployment alleviation; economic development; opportunity recognition; risk taking; resource leveraging

INTRODUCTION

Economists assert that entrepreneurs, along with creativity and resourcefulness, can convert environmental risks into opportunities, particularly in extreme situations, such as hyperinflation. In the dynamic landscape, where unemployment persists as a formidable challenge, entrepreneurship emerges as a compelling force for economic growth.
and job creation. The ramifications of unemployment extend beyond mere economic concerns, encompassing social crimes and impeding overall economic expansion, as highlighted by G.G. Rotimi et al. (2021). S. Chaura-
sia (2023) related entrepreneurship to innovation. The research relevance of this socio-economic issue is deter-
mained by the experiences of Soran University Graduate Students from 2010 to 2023, who faced increased unem-
ployment rates, prompting many to seek opportunities abroad. Despite the global recognition of entrepreneurship as a potential solution, a substantial proportion of Soran University graduates encounter challenges in establish-
ing personal businesses. Unemployment is defined as the state where a person actively seeking employment remains jobless despite possessing the necessary qualifications, thus presenting a complex challenge. This phenomenon extends to individuals who, despite being physically and cognitively capable, choose not to engage in employment (Gajraj & Saxena, 2019).

R. Kapur (2022) notes that unemployment in developing countries is influenced by several key factors. The lack of competencies and abilities presents a significant challenge, necessitating individuals to prepare thoroughly for diverse job opportunities. Concurrently, the absence of essential skills becomes a central barrier, complicating individuals’ navigation of employment contexts. Fostering economic growth is crucial for generating employment opportunities. Initiatives targeting skill development, economic planning, and increased investments play a pivotal role in creating a conducive environment for diverse employment prospects. The increase in population intensifies challenges in securing employment, with a growing population heightening job competition. Poor quality education compounds unemployment issues, limiting graduates’ capacity to create their employment opportunities. Low rates of savings and investments further contribute to the unemployment quandary, affecting various sectors and compelling individuals, irrespective of their backgrounds, to prioritize the search for employment opportunities.

Unemployment in the Kurdistan region yields social, political, and economic consequences. Socially, it induces discomfort, anxiety, and societal effects such as increased crime rates and altered marriage dynamics. Politically, it can cause instability and security issues, as evidenced by such examples as the Arab Spring. Economically, the lack of an active workforce diminishes production, disrupts demand-supply balances, and increases the unemployment rate (Mahmood, 2022). B. Kareem (2018) advocates for the integration of entrepreneurial skills into education to empower graduates to become entrepreneurs and address the challenge of underemployment. N. Apergis & J.E. Payne (2016) underline the consistent correlation between entrepreneurship growth and job creation, emphasizing the need for proactive measures to enhance individual lives and national prosperity. In the context of the Kurdistan region, the works of local scholars provide valuable insights.

The study aimed to contribute to the existing body of knowledge by providing a comprehensive analysis of the relationship between entrepreneurship dimensions and unemployment issues among Soran University Graduate Students from 2010 to 2023. The synthesis of current literature reveals a growing awareness of the potential of entrepreneurship in addressing unemployment, yet the specific challenges faced by Soran University graduates remain underexplored.

LITERATURE REVIEW

J.B. Say (1836) was the first to define the term “entrepre-
nuership”. C. Adam & S. Dercon (2009) contributed by de-
noting entrepreneurship as a dynamic force that mobilizes resources to address market gaps, emphasizing its proactive role. M.O. Agwu & G.R. Luke (2014) elaborate on entrepre-
nuership as a complex process involving the identification of opportunities, strategic resource allocation, and the creation of substantial value. M.A. Adawo & J.A. Atan (2013) add depth to the understanding, portraying entrepreneur-
ship as a strategic pursuit involving the identification of market opportunities and the effective mobilization of resources for sustainable gains. Y. Lowrey (2003) described economic system perspectives, characterizing entrepre-
nuership as a complex interplay of economic goals pursued by entrepreneurs, with significant support from social in-
situtions and government. S. Maina (2013) captures the essence of entrepreneurship as the willingness to seek investment opportunities and successfully launch a business.

O.M. Hassan (2013) defined an entrepreneur as someone leveraging land, labour, and capital to create and sell a product. P.D. Reynolds (2005) defines entrepreneurship as the identification of opportunities and the generation of new economic activity, often manifested through the creation of new organizations. F.C. Okeke & E.C. Edikpa (2014) addressed the risk element, defining an entrepre-
nuer as one willing to take financial risks in initiating and managing a business, particularly those involving novel concepts or methods. H.O. Bula (2012) emphasised multiple dimensions enriching the study of entrepreneurship, while P.F. Drucker (1993) perceived it as endowing existing resources with new wealth-producing capacities. H. Frederick et al. (2007) defined entrepreneurship as a dynamic process of vision, change, and creation, encompassing any endeavour to initiate a new enterprise or firm.

Numerous studies addressed entrepreneurial aspects of university graduate unemployment, with each emphasizing dimensions crucial to entrepreneurial success. R. Makgo-
sa & H. Ongori (2012), S. Kalyoncuoglu et al. (2017) and A. Padi & A. Musah (2022) provided diverse perspectives on entrepreneurial success in solving unemployment. In the Education Dimension, the relationship between un-
employment and education is scrutinized, emphasizing the necessity to align educational programs with market de-
mands for enhanced employability, a concept supported by P. Restrepo (2015). Transitioning to the Market Dimension, the impact of supply and demand dynamics on unemployment becomes apparent, particularly when an oversupply
of university graduates surpasses available positions, contributing to escalating unemployment rates, as observed by M. Hedayat et al. (2013). Within the Economic Dimension, inadequate economic growth emerges as a contributor to unemployment, with a robust correlation established between Gross Domestic Product (GDP) and unemployment rates, a perspective articulated by J. Amani (2017). Challenges are further compounded by such issues, as inefficient career guidance and counselling services. Turning to the Individual Dimension, factors such as age, gender, marital status, and discrimination are recognized as contributors to individual-level unemployment, noting a negative correlation between age and unemployment, with young individuals facing higher rates. This comprehensive analysis of diverse perspectives lays the foundation for understanding the multifaceted nature of entrepreneurship, setting the stage for a nuanced exploration of its impact on unemployment among Soran University Graduate Students from 2010 to 2023.

MATERIALS AND METHODS
The study employed a comprehensive research methodology to investigate the impact of entrepreneurship on addressing unemployment issues among graduates from Soran University. Following the guidance of J.M. Saunders (2022), a survey method was adopted for data collection. Informed consent was obtained from all survey participants, ensuring their anonymity and explaining the purpose of the survey, the use of their data, and the potential risks involved. The survey was conducted following ethical standards for working with people, and ethical approval was obtained from the relevant ethics committee.

The structured questionnaire, developed for precision, served as a key tool in gathering quantitative data. To maintain ethical standards, confidentiality of participant responses was ensured. The acquired data was analysed using spreadsheet software and statistical analysis, as suggested by N. Gavriluță et al. (2022). Soran University, selected for its strategic managerial and geographical significance, was prioritised. Situated in Soran city across three provinces, especially Erbil, the political capital, the university's prominence as of 2024 aligns with the study's focus on entrepreneurship.

The study addressed all graduates of Soran University from 2010 to 2023. The sample, collected using snowball sampling, consisted of 134 participants for the year 2023. Face validity was ensured by presenting the questionnaire to experienced teachers in the business and accounting management department, and content tests were administered to Soran University Students for question clarity. Due to time constraints and a lack of comprehensive data on the entire graduate population, systematic random sampling was not employed.

To gauge variables, a questionnaire survey comprising three parts was utilized. Part one captured respondent profiles and their faculties, while parts two and three addressed independent and dependent variables, respectively. A Likert-scale of 1 – strongly disagree to 5 – strongly agree measured the extent of agreement or disagreement, adopting the works of N. Meyer (2014), K. Chienwattanasook & K. Jermsittiparsert (2019) and U.C. Okolie et al. (2021).

The collected data were analysed using the Social Science Statistical Package (SPSS V25), employing four key data analysis techniques. Firstly, Descriptive Data Analysis was employed to summarize respondent profiles and facilities. This initial step provided an overview of the study participants. Secondly, Regression Analysis was used to analyse the impact between variables, elucidating the nature of their relationship.

In investigating the impact of entrepreneurship and unemployment, various dimensions of entrepreneurship play significant roles. Innovation, encompassing novel products, processes, or ways of thinking, holds a dual role in unemployment dynamics. Therefore, based on this, the current study among Soran University Graduate Students from 2010 to 2023, proposes the following hypotheses:

- **H1.** Innovation has a statistically significant impact on solving unemployment problems;
- **H2.** Risk-taking has a statistically significant impact on solving unemployment problems;
- **H3.** Proactiveness has a statistically significant impact on solving unemployment problems;
- **H4.** Opportunity recognition has a statistically significant impact on solving unemployment problems;
- **H5.** Resource leveraging has a statistically significant impact on solving unemployment problems.

RESULTS AND DISCUSSION
In the context of Innovation, entrepreneurs actively pursue novel ideas, taking risks to ensure the success of business, thereby contributing to addressing market demands and fostering organizational growth. This emphasis on Innovation is a primary aspect of entrepreneurial success. Moving to risk-taking, an inherent trait in entrepreneurship, entrepreneurs willingly embrace significant risks to explore the business potential and foster innovation, underscoring the entrepreneurial ability to navigate uncertainty and unknown consequences (Yamada, 2004). Proactiveness, as another critical dimension, characterizes entrepreneurs who take initiative, stay ahead of the competition, and act proactively to understand market prospects, showcasing the importance of perceiving market demands and seizing opportunities before others (Kirzner, 2015). Entrepreneurial Opportunity Recognition, a dimension described by I.M. Manev et al. (2005), emphasizes an individual's capacity to identify and capitalize on potential business opportunities, reflecting a strategic approach to finding resources for innovative outputs. Lastly, Resource Leveraging, as outlined by M.H. Morris et al. (2002), highlights the entrepreneurial skill of utilizing resources effectively by identifying unseen resources, leveraging the resources of others, complementing resources, and extending them beyond conventional limits. These dimensions collectively form a comprehensive framework guiding effective entrepreneurial strategies to address unemployment challenges.
The demographic composition among Soran University Graduate Students from 2010 to 2023 indicated a significant gender imbalance, with 67.2% of respondents identifying as male and 32.8% as female. In terms of age distribution, the majority falls within the 26-30 years bracket (45.5%), closely followed by those aged 22-25 years (42.5%). Respondents above 30 years constituted a smaller percentage at 11.9%. Family status among the participants reveals that 50.7% are married, while 49.3% identify as single. Moreover, the Soran University Graduate Students from 2010 to 2023 exhibited diverse profiles across faculties, graduation years, and entrepreneurial status. In terms of faculties, most respondents graduated from the Art faculty (36.6%), followed by Law, Political Science, and Management (20.9%), Science (29.1%), Education (10.4%), and Engineering (3.0%). This showcases the varied academic backgrounds within the surveyed group. Addressing graduation years, 25.4% graduated between 2013 and 2016, 47.0% between 2017 and 2020, and 27.6% after 2020, offering insights into the university Graduate Students of their academic experiences. In terms of employment, a substantial 75.4% identify as employed, while 24.6% are unemployed, providing a nuanced perspective on the entrepreneurial landscape among Soran University Graduate Students from 2010 to 2023. Simple linear regression has been used to accept or reject hypotheses (H1 to H5).

Table 1. The impact of innovation on unemployment

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized coefficients</th>
<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Constant)</td>
<td>2.890</td>
<td>0.324</td>
<td>8.908</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td>0.195</td>
<td>0.080</td>
<td>0.249</td>
</tr>
</tbody>
</table>

Source: compiled by the authors

Table 2. The impact of risk-taking on unemployment

<table>
<thead>
<tr>
<th>Model</th>
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<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(Constant)</td>
<td>2.288</td>
<td>0.422</td>
<td>10.421</td>
</tr>
<tr>
<td></td>
<td>Risk-taking</td>
<td>0.242</td>
<td>0.080</td>
<td>0.256</td>
</tr>
</tbody>
</table>

Source: compiled by the authors

Table 3. The impact of proactiveness on unemployment

<table>
<thead>
<tr>
<th>Model</th>
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<th>Standardized coefficients</th>
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<th>Sig.</th>
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<tbody>
<tr>
<td></td>
<td>(Constant)</td>
<td>2.016</td>
<td>0.522</td>
<td>7.837</td>
</tr>
<tr>
<td></td>
<td>Proactive</td>
<td>0.226</td>
<td>0.107</td>
<td>0.190</td>
</tr>
</tbody>
</table>

Source: compiled by the authors
Table 4 shows a statistically significant and positive impact of opportunity recognition on solving unemployment problems among Soran University graduates from 2010 to 2023. The coefficient for “Opportunity recognition” is 0.320, indicating that for each unit increase in recognizing opportunities, there is a corresponding positive impact of 0.320 on resolving unemployment. This relationship is underscored by a t-value of 3.021 and a p-value of 0.003, demonstrating statistical significance at the 0.05 level. The standardized coefficient (Beta) of 0.287 further emphasizes the meaningful positive impact of opportunity recognition. In summary, the findings affirm the fourth hypothesis (H4), suggesting that higher levels of opportunity recognition significantly contribute to the effective resolution of unemployment issues among Soran University graduates from 2010 to 2023.

<table>
<thead>
<tr>
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<th>Standardized coefficients</th>
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<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.998</td>
<td>0.461</td>
<td>8.329</td>
</tr>
<tr>
<td></td>
<td>Opportunity recognition</td>
<td>0.320</td>
<td>0.106</td>
<td>0.287</td>
</tr>
</tbody>
</table>

Source: compiled by the authors

Table 5 demonstrates a statistically significant impact of resource leveraging on solving unemployment problems among Soran University graduates from 2010 to 2023. The p-value of 0.030 is less than 0.05, leading to the rejection of the null hypothesis and acceptance of the alternative hypothesis that the regression coefficient is not equal to zero. This implies that resource leveraging has a meaningful effect on unemployment problem resolution (a < 0.05). The coefficient for “Resource leveraging” is 0.242, suggesting that a one-unit increase in resource leveraging results in a positive impact of 0.242 on solving unemployment problems. As a result, the findings affirm the fifth hypothesis (H5), indicating that resource leveraging significantly contributes to addressing unemployment issues among Soran University graduates from 2010 to 2023.

<table>
<thead>
<tr>
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<th>Standardized coefficients</th>
<th>t</th>
<th>Sig.</th>
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<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.639</td>
<td>0.538</td>
<td>5.046</td>
</tr>
<tr>
<td></td>
<td>Resource leveraging</td>
<td>0.242</td>
<td>0.110</td>
<td>0.215</td>
</tr>
</tbody>
</table>

Source: compiled by the authors

The analysis of entrepreneurship dimensions in addressing unemployment issues among Soran University graduates from 2010 to 2023 demonstrates the complex interplay between entrepreneurial activities and unemployment dynamics. In this discussion, the results will be compared with those of other authors, drawing on the literature review section to provide a comprehensive analysis.

Beginning with the impact of innovation (H1), the findings align with the perspectives of J. Schumpeter & U. Backhaus (2003). These scholars have emphasized the positive relationship between innovation and job creation. The study further supports this assertion, highlighting innovation as a significant factor in addressing unemployment problems among recent graduates. However, it is essential to note that technological advancements, a subset of innovation, pose challenges by contributing to increased unemployment due to dynamic shifts in the workforce. This nuanced perspective contrasts with some prior studies that may primarily focus on the positive aspects of innovation.

Moving on to the role of risk-taking (H2), the results resonate with discussions by J.O. Ajamobe (2021) and S. Sugandha & N. Singh (2022). Responsible risk-taking in entrepreneurship is a critical factor in creating job opportunities for recent graduates. This aligns with broader discussions on the importance of mitigating risks while fostering an entrepreneurial mindset. However, it is worth noting that different authors may emphasize distinct aspects of risk-taking, such as financial risk or market risk, providing diverse insights into its impact on unemployment dynamics.

Considering the significance of proactiveness (H3), the findings align with existing literature, including works by S.T. Certo et al. (2009) and M. Hosseini & F. Eskandari (2014). A proactive approach is highlighted as a significant aspect for recent graduates in navigating the job market. This consensus underlines the positive relationship between proactiveness and employment outcomes. However, variations in the emphasis on specific aspects of proactiveness, such as market-oriented proactiveness or strategic proactiveness, may differentiate the findings across studies.

Turning to the impact of opportunity recognition (H4), the study aligns with foundational principles
discussed by B. Ogbojafor et al. (2009). Recognizing and utilising opportunities are identified as crucial drivers of job creation for recent graduates. This consensus reinforces the enduring significance of opportunity recognition as a key factor in employment outcomes. However, differences in the conceptualization of opportunity recognition and the specific contexts studied may lead to nuanced differences in the findings.

Lastly, the results regarding resource leveraging (H5) align with perspectives from M.H. Morris et al. (2002) and D. Politis et al. (2011). Efficient resource utilization is emphasized for job creation and business growth. This insight underscores the importance of resource leveraging in effectively addressing unemployment challenges. However, differences in the definition and measurement of resource leveraging across studies may contribute to variations in the reported findings.

In summary, this discussion has systematically compared the study's results with insights from existing literature, highlighting both commonalities and differences. This comparative analysis provides a nuanced understanding of entrepreneurship dimensions in addressing unemployment issues among Soran University graduates from 2010 to 2023. The varied perspectives from different authors contribute to a comprehensive view of the topic, inviting further discussion and exploration.

CONCLUSIONS

The findings of this study shed light on the pivotal role of entrepreneurship dimensions in addressing unemployment challenges among Soran University Graduate Students from 2010 to 2023. Each dimension (Innovation, Risk-taking, Proactiveness, Opportunity Recognition, and Resource Leveraging) reveals a unique contribution to the complex interplay between entrepreneurial activities and unemployment dynamics. The positive and statistically significant impacts underscore the potential of fostering an entrepreneurial mindset to empower graduates and alleviate unemployment issues. As the study validates the hypotheses, it confirms that embracing entrepreneurship can be a transformative force in the lives of Soran University Graduate Students from 2010 to 2023, not only fostering individual growth but also contributing to regional economic development.

The implications of this research extend beyond academic discourse to practical considerations for various stakeholders. Educational institutions should consider integrating entrepreneurship education into their programs. This will equip Students with the skills and mindset needed for entrepreneurial success, contributing to their employability and job creation. Policymakers should formulate and implement policies that support and incentivize entrepreneurship. This includes providing funding opportunities, and mentorship programs, and creating a regulatory environment that fosters entrepreneurial initiatives. Employers should recognize and value proactive traits in employees. Creating a work culture that encourages initiative, innovation, and risk-taking can lead to increased job creation and economic growth. Institutions and support organizations can provide resources and guidance on efficient resource leveraging. This can empower entrepreneurs to maximize the impact of available resources, contributing to sustainable business growth and job creation. Continued research in the field of entrepreneurship and unemployment is essential. Collaboration between academia, government bodies, and industry stakeholders can lead to the development of comprehensive strategies that address the evolving challenges in the job market.

In conclusion, the recommendations outlined above aim to create a holistic approach towards addressing unemployment issues among Soran University Graduate Students from 2010 to 2023. By fostering entrepreneurship education, implementing supportive policies, and encouraging a proactive and resourceful workforce, stakeholders can collectively contribute to mitigating unemployment challenges and fostering economic development. The study lays the foundation for understanding the intricate relationship between entrepreneurship and unemployment among Soran University graduates from 2010 to 2023. Exploring the long-term impact of entrepreneurship education programs on graduates' entrepreneurial endeavours and employment outcomes could provide valuable insights. Additionally, investigating the role of government policies and support mechanisms in promoting entrepreneurship and reducing unemployment remains a crucial area for further exploration. A comparative analysis of entrepreneurship initiatives across different academic disciplines and their varying impacts on employment prospects could contribute to a more nuanced understanding. Lastly, delving into the influence of socio-cultural factors on the entrepreneurial aspirations and outcomes of Soran University graduates could offer a comprehensive perspective. By addressing these areas, future research can contribute to the development of effective strategies and policies for fostering entrepreneurship and mitigating unemployment challenges in the specified context.

ACKNOWLEDGEMENTS

None.

CONFLICT OF INTEREST

None.

REFERENCES


The impact of entrepreneurship dimensions...


Вплив вимірів підприємництва на вирішення проблем безробіття серед аспірантів університету Соран з 2010 по 2023 роки

Анотація. Підприємництво є потужною силою у вирішенні проблеми безробіття та сприянні економічному зростанню. Однак залишається прогалина в розумінні конкретного впливу підприємництва на рівень безробіття серед аспірантів університету Соран в 2010-2023 роках. Таким чином, дослідження має на меті надати інформацію для розробки політики та заходів, спрямованих на заохочення підприємництва та пом’якшення проблем безробіття серед аспірантів у зазначений період. Під час дослідження було використано описово-аналітичний підхід та кількісний метод, в якому взяли участь 134 учасники. Таким чином, дослідження встановило помітну позитивну кореляцію між підприємництвом та зниженням рівня безробіття. Аналіз розкриває ключові моменти щодо ключової ролі навчання підприємництву, доступу до фінансування та сприяння в отриманні ресурсів для ефективного вирішення проблем безробіття серед аспірантів університету Сорана. Результати дослідження підкреслюють важливість надання випускникам можливостей формувати свій успіх, що сприяє не лише особистому зростанню, але й регіональному економічному розвитку. Такі висновки дослідження також підкреслюють важливість впровадження проактивних стратегій сприяння підприємництву. Все це підтверджується якісним літературним оглядом попередніх публікацій. Практична цінність дослідження полягає в тому, що, сприяючи розвитку підприємницького мислення та надаючи необхідну підтримку, інституції можуть відіграти ключову роль у зниженні рівня безробіття та вирішенні нагальних проблем

Ключові слова: вплив підприємництва; зменшення безробіття; економічний розвиток; розпізнавання можливостей; прийняття ризиків; залучення ресурсів