



GUESSS 2023

Iraq report

National Delegate

University of Duhok

June 2024

Authors:

Assist. Prof. Dr. Nabaz Ibraheem Mohammed
Assist. Prof. Dr. Shivan Ahmed Mohammad

Contact:

Assist. Prof. Dr. Nabaz Ibraheem Mohammed
UoD VP for students' affairs
University of Duhok
Nabaz.mohammed@uod.ac

Assist. Prof. Dr. Shivan Ahmed Mohammad
Director of Scientific Research
College of Administration and Economics
University of Duhok
Shivan.mohammad@uod.ac

Acknowledgements

The author thanks the CEO of GUESSSS Prof. Dr. Philipp Sieger, and UoD president Assist. Prof. Dr. Dawod Atroshi for supporting the role of University of Duhok as country delegate for Iraq and the participation of the five Iraqi universities students in the survey. Further thanks go to the representatives of the Iraqi universities (University of Duhok, Sulaimani Polytechnic University, University of Zakho, Duhok Polytechnic University and University of Raparin) who took part in the survey. Our special thanks go to all the students who participated in the GUESSSS 2023 survey in Iraq, in addition our thanks go to Dr. Nabaz Mohammed Vice present for students' affairs at university of Duhok for disseminating the survey among students in Iraq.



Iraqi Universities as national Collaborators



Citation*

Mohammed, N.I., & Doski, S.A.M. (2024). GUESSSS Report Iraq 2023, University of Duhok (UoD).

***The GUESSSS Report Iraq 2023 is available online.**

ref. <https://www.guesssurvey.org/publications/publications/national-reports.ht>

CONTENTS

1. Preface	6
2. Sample description	7
3. Study program characteristics	9
4. Career choice and entrepreneurial intentions in the university context	13
5. Students' entrepreneurial activities in planning and action	16
6. Results	24
7. Recommendations	26
6. References	26

TABLES

No.	TABLE NAME	PAGES
1	Language Used by the Participants	7
2	Participants by universities	7
3	Participants level of study	8

FIGURES

No.	FIGURE NAME	PAGES
1	Participants main field of study	8
2	Career participants want to pursue after graduation	9
3	Career path participants intend to pursue 5 years later	10
4	Universities in Iraq have a favorable climate for becoming an entrepreneur	10
5	Universities in Iraq encourages students to engage in entrepreneurial activities	11
6	Students in Iraqi universities can get entrepreneurship-related advice and guidance easily	11
7	Currently trying to start your own business or to become self-employed	12
8	Already running your own business or are you already self-employed	12
9	Attended at least one entrepreneurship course as elective	13
10	Studying in a specific program on entrepreneurship	13
11	The courses and events they attended increased their understanding of the attitudes, values, and motivations of entrepreneurs	14
12	The courses and events they attended increased my understanding of the actions someone has to take to start a business	15
13	The conditions of participant's life are excellent	16
14	The participants are convinced that they can successfully discover new business opportunities	16
15	Participant's believe they can grow in positive ways by dealing with difficult situations	17
16	Participant's believe they are convinced that they can think creatively	17
17	There is no need for tougher regulations on business to protect the environment	18
18	Regulations to protect the environment are too much of a burden on business	18

19	Addressing social problems causing crime (e.g., poverty and joblessness) is not the best way to reduce crime	19
20	Government should redistribute income from the better off to the less well off	19
21	Ordinary working people do not get their fair share of the nation's wealth	20
22	Government should spend a great deal on improving the life of people	20
23	Inequality of income distribution	21
24	There is one law for poor and another law for rich people	22
25	Received venture capital funding for their business	23

1. PREFACE

It is the second time Iraq been participated in the Global University Entrepreneurial Spirit Students' Survey (GUESSS), started in GUESSS 2021, and continuing to GUESSS 2023. As international research project that investigates and compares student entrepreneurship coordinated by the Swiss Research Institute of Small Business and Entrepreneurship at the University of St. Gallen and at the University of Bern in Switzerland. In its 10th edition, GUESSS surveyed 226,718 university students in 57 countries and is a primary source of information on student entrepreneurship worldwide.

This report presents the results of the data collection conducted in Iraq. The sample consists of 1,461 students enrolled in 5 different universities throughout Iraq in Fall of 2023. The report is prepared by the country delegate of the GUESSS project for Iraq, by Assist. Prof. Dr. Shivan Ahmed Mohammad, Director of Scientific Research, College of Administration and Economics, University of Duhok under the supervision of Assist. Prof. Dr. Nabaz Mohammed vice president of University of Duhok for students' affairs.

Assist. Prof. Dr. Nabaz Ibraheem Mohammed
UoD VP for students' affairs
University of Duhok
Nabaz.mohammed@uod.ac

Assist. Prof. Dr. Shivan Ahmed Mohammad
Director of Scientific Research
College of Administration and Economics
Shivan.mohammad@uod.ac

We encourage leaders of Iraqi universities to contact the Iraqi GUESSS team to participate to the next rounds and obtain the GUESSS data collected at their university.

For further information, please contact Shivan.mohammad@uod.ac

2. SAMPLE DESCRIPTION

Due to fact that the study language in Kurdistan region's universities is based in mother tongue (Kurdish) and formally uses both Arabic and Kurdish, besides the study language in some colleges is the English, thus the participants answered in the preferred languages, after the materials been translated to the Kurdish Baidni Dialect. in three languages

Table No. 1
Language Used by the Participants

Language Used by the Participants	Percentage
Kurdish	57.7%
Arabic	30.7%
English	11.6%

After official communication with many universities in Iraq in general and specially with universities in Kurdistan region, only four universities participated with the national delegate (University of Duhok), as shows in table no. (2) that the majority of the participants were from university of Duhok (UoD) with around 63% of the participants were from it, while the second most respondents were from Sulaimani Polytechnic University with 19%, then University of Zakho with 14.3% of responses, and Duhok polytechnic university with only 2.2% and lastly university of Raparin with only 0.1.% of the respondents. In addition, around 1.5% of the participants were other universities that the respondents did not specify their universities.

Table No. 2
Participants by universities

Participants by universities	Percentage
University of Duhok	62.9%
Sulaimani Polytechnic University	19.0%
University of Zakho	14.3%
Duhok Polytechnic University	2.2%
University of Raparin	0.1%
Other	1.5%

Table No. 3
Participants level of study

Participants level of study	Percentage
Undergraduate (Bachelor level)	92.1%
Graduate (Master level)	2.6%
PhD	0.4%
Other (e.g., MBA)	3.8%
Missing	1.1%

Table no. (3) shows that the majority of the responses were from undergraduate with 92.1% of total responses, while around 1% did not answer the question or leave it empty. In addition, around 6.4% answered by graduates (master level).

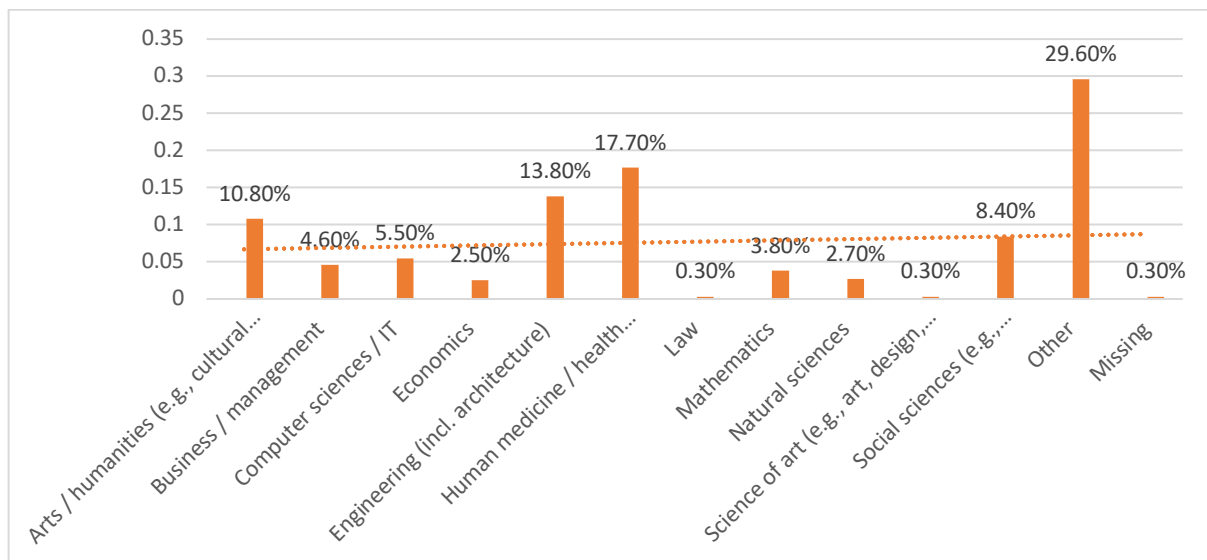


Figure No. 1
Participants main field of study

Figure no. (1) illustrates the education background (field of study) of the participants in Iraq, it shows that human medicine and health sciences were the most field of study answered the questions of the GUESSS 2023 in Iraq with around 18% of the total responses, while the responses from business, economics and other related sciences to finance and accounting were around 7% only, thus indicates that the later answers will be very related to this percentage participation.

3. STUDY PROGRAM CHARACTERISTICS

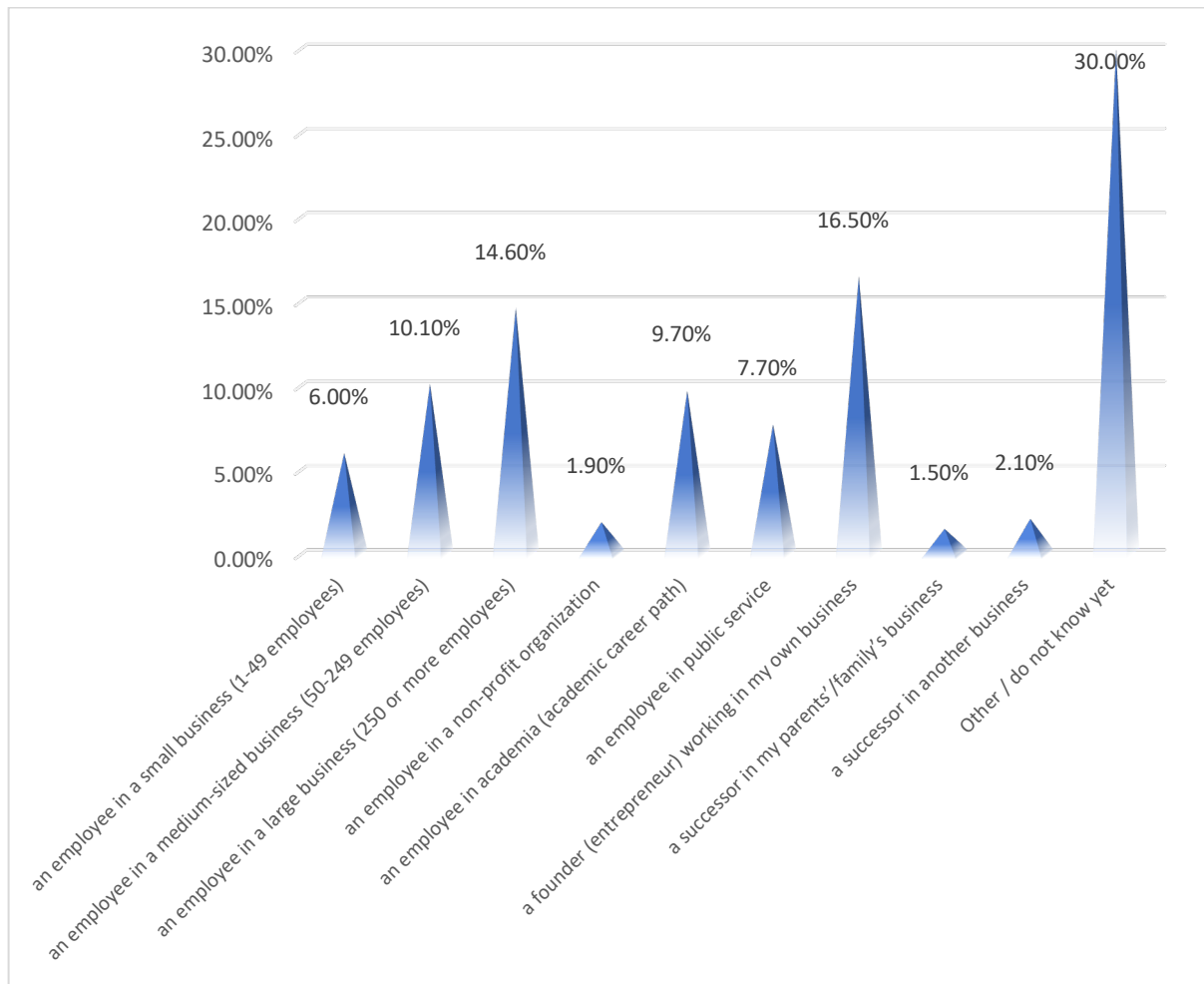


Figure No. 2

Career participants want to pursue after graduation

Figure no. (2) illustrates the responses regarding the question which career path do you intend to pursue right after completion of your studies?, 30% of the responses answered that they do not know yet, while around 17% of responses in GUESSS 2023 in Iraq were they intend to become a founder (entrepreneur) working in their own business which is very interesting due to fact that this percentage it much higher than the responses from college of administration and economics responses field of study.

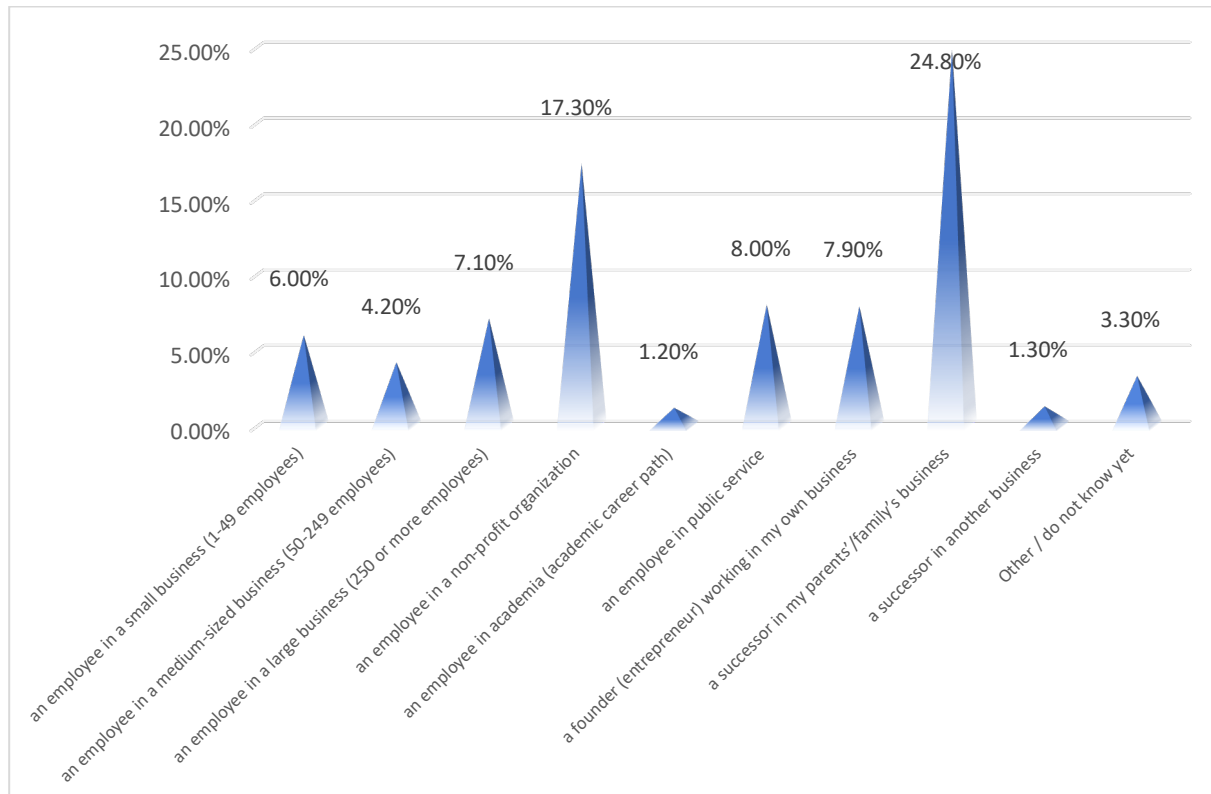


Figure No. 3

Career path participants intend to pursue 5 years later

Figure no. (3) illustrates the responses regarding the question which career path they intend to pursue after 5 years after the graduation, 25% of the responses answered that they intend to be a successor of their parent's or family business, while around 8% still have faith that they can be a public servant as governmental job this is highly not happening due to financial difficulties by the Kurdistan Regional Government and its relation with Iraqi federal government and issues related to oil and gas with budget disagreements.

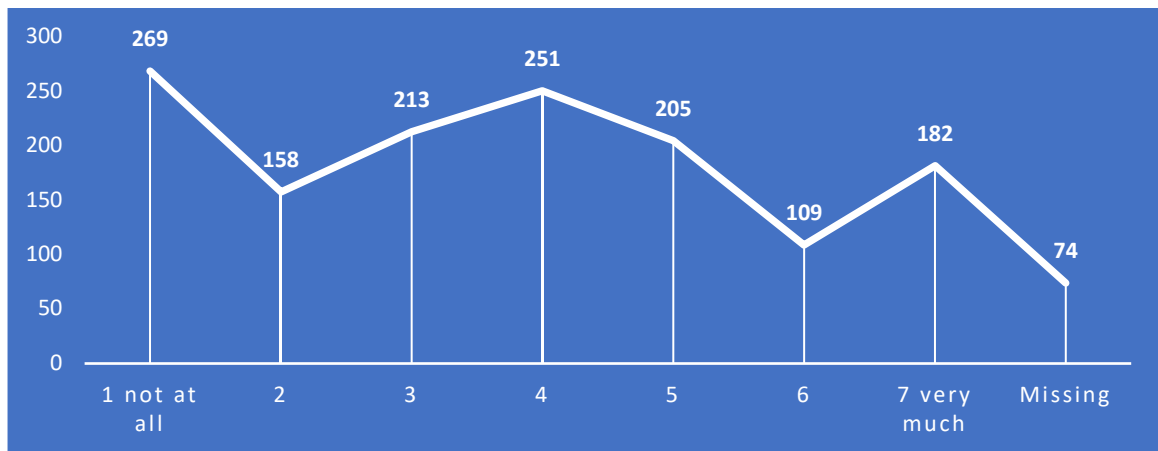


Figure no. (4)

Universities in Iraq have a favorable climate for becoming an entrepreneur

Figure no. (4) illustrates the responses regarding the question which favorable climate for becoming an entrepreneur at university, only 20% agreed to that their universities environment is favorable for becoming entrepreneur, while 74 out of 1461 responses were missing or did not answer the question, in addition around 45% did not agree with this question thus indicates that there is gap and need to be fulfilled, the universities must work on it, and prepare strategies and plans for a better environment of becoming favorable place of becoming an entrepreneur.

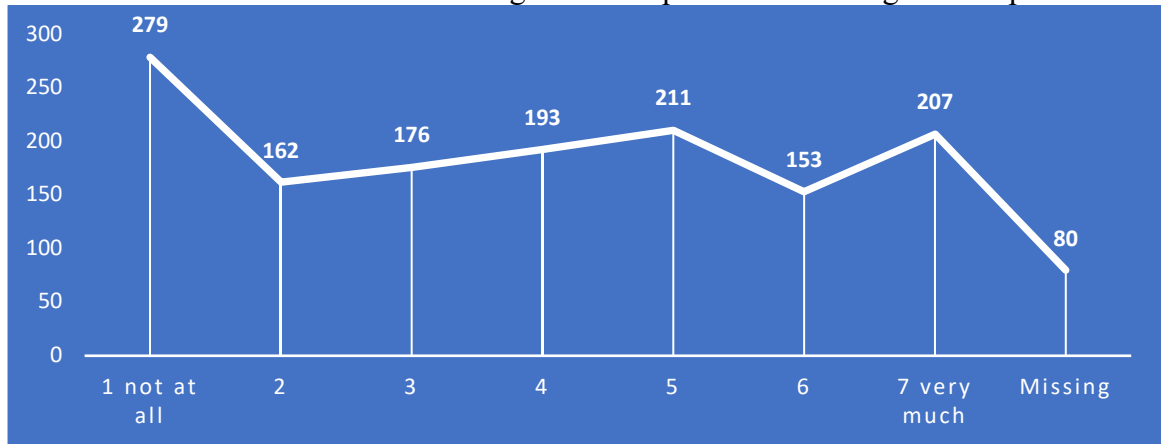


Figure no. (5)

Universities in Iraq encourages students to engage in entrepreneurial activities

Figure no. (5) illustrates the responses regarding whether their universities encourages student to engage in entrepreneurial activities, only 25% agreed to that their universities in Iraq encourages students to engage in entrepreneurial activities, while 80 out of 1461 responses were missing or did not answer the question, in addition around 44% did not agree with this question thus indicates that there is gap and need to be fulfilled, the universities must work on it, and prepare strategies and plans to encourages students to engage in entrepreneurial activities in Iraqi students.

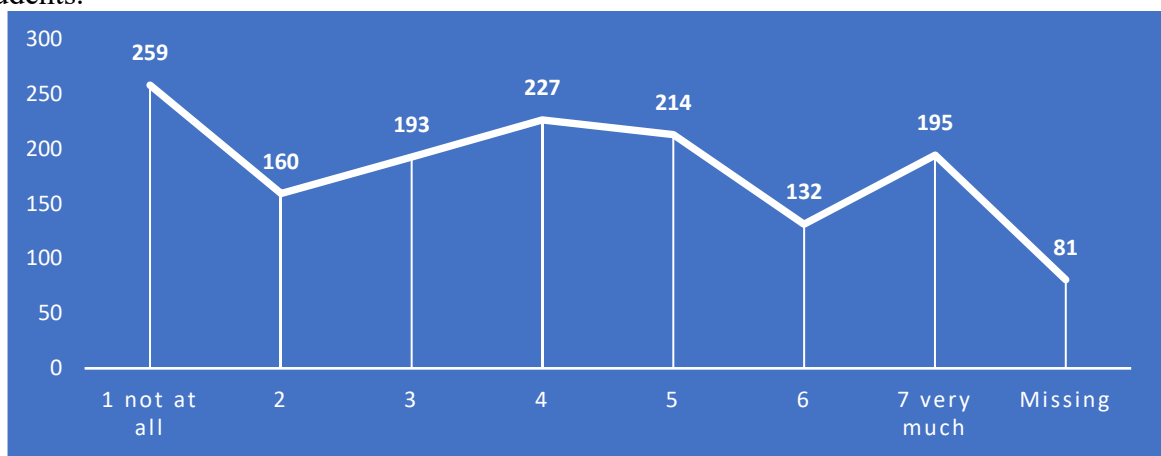


Figure no. (6)

Students in Iraqi universities can get entrepreneurship-related advice and guidance easily

Figure no. (6) illustrates that only 22% agreed of the students and alumni that their universities in Iraq provide students entrepreneurship-related advice and coaching and guidance easily, while 81 out of 1461 responses were missing or did not answer the question, in addition around 43% did not agree with this question thus indicates that there is gap and need to be fulfilled, the universities must work on it, and prepare strategies and plans to encourages students to engage in entrepreneurial activities in Iraqi students.

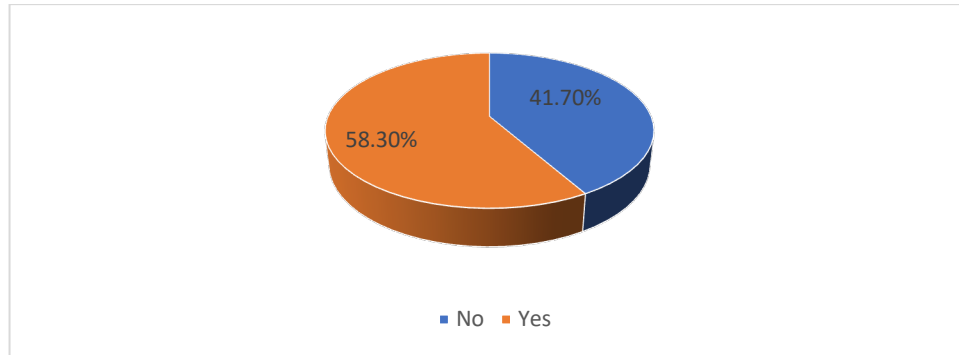


Figure no. (7)
Currently trying to start your own business or to become self-employed

Figure no. (7) shows that 58% agreed that they are currently trying to start your own business or to become self-employed, which is regarded as good intention which will help to generate more jobs if ministry of higher education and scientific research in Kurdistan region of Iraq take the responsibility of involving entrepreneurship course compulsory to all college's in all universities whether public and private, which will enhance the student's knowledge, generate solid business ideas, plan for their projects with scientific and practical matter.

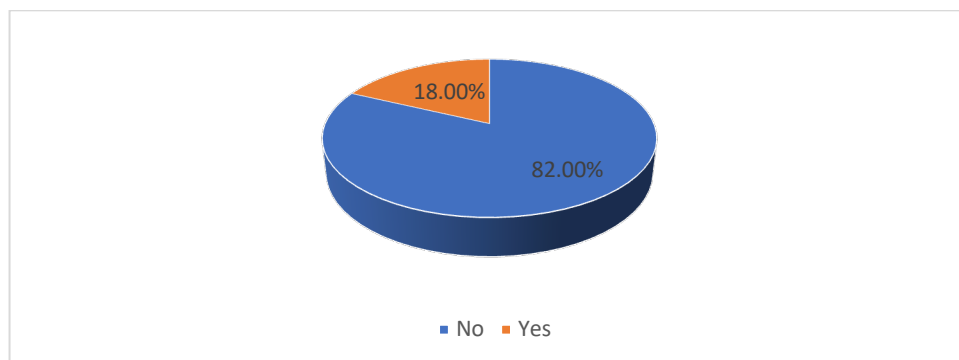


Figure no. (8)
Already running your own business or are you already self-employed

Figure no. (8) shows that 82% they not running their own business or they are not already self-employed, thus this is a scientific explanation that highlights the gap that not many graduates have an economic secure job in Kurdistan region that helps them to increase their family's prosperity, develop their career and create a professional live in the future for themselves. Therefore, the cabinet of Kurdistan region must act and give order to all ministries and other public entities to take action and will help to generate more jobs for the private sector.

4. CAREER CHOICE AND ENTREPRENEURIAL INTENTIONS IN THE UNIVERSITY CONTEXT

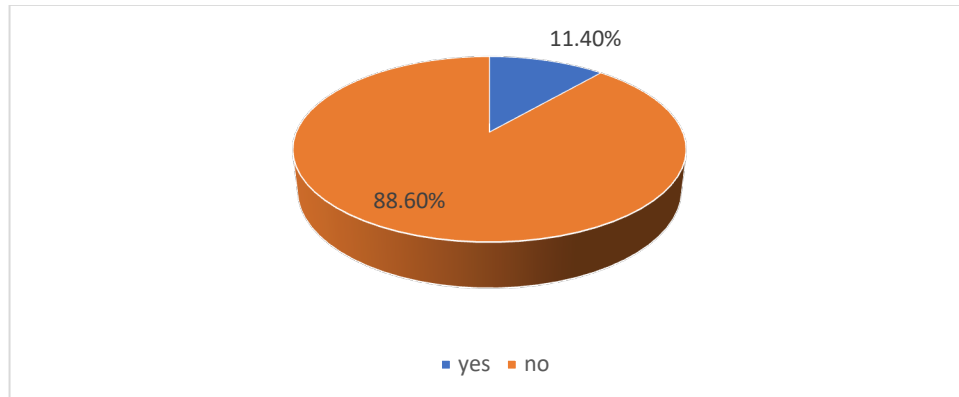


Figure no. (9)

Attended at least one entrepreneurship course as elective

Figure no. (9) explain more details about why 82% of the participants of GUESSS 2023 Iraq edition do not currently trying to start their own business or to become self-employed because around 89% of them did not attend any course related to entrepreneurship, therefore they do not know how to generate business ideas, which sector have better opportunities for successful start-ups, how to plan for their business, and develop it later on. Thus, the give us concrete evidence that ministry of higher education and scientific research in Kurdistan region of Iraq must take the responsibility of involving entrepreneurship course compulsory to all colleges in all universities whether public and private, in order to will enhance the student's knowledge, generate solid business ideas, plan for their projects with scientific and practical background.

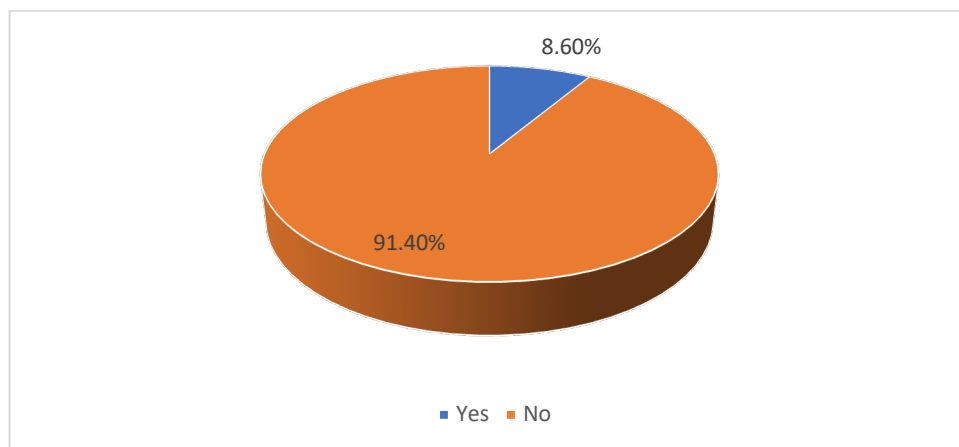


Figure no. (10)

Studying in a specific program on entrepreneurship

Figure no. (10) explain further more details about why 82% of the participants of GUESSS 2023 Iraq edition do not currently trying to start their own business or to become self-employed

because around 92% of them did not study a specific program on entrepreneurship, therefore they do not know business management fundamentals in its sub scientific aspects, which sector have better opportunities for successful start-ups, how to plan for their business, and develop it later on. therefore, universities in Kurdistan region of Iraq must take the responsibility of involving entrepreneurship course at least as elective to all scientific departments and field of study (all disciplines), which will enhance the student's knowledge about business management, entrepreneurship, and start-ups as scientific knowledge.

This can be attributed to the fact that entrepreneurship programs have not been introduced in Iraq universities in total yet which need special attention from the ministry of higher education and scientific research in the federal government and the ministry of higher education and scientific research in Kurdistan Regional Government KRG.

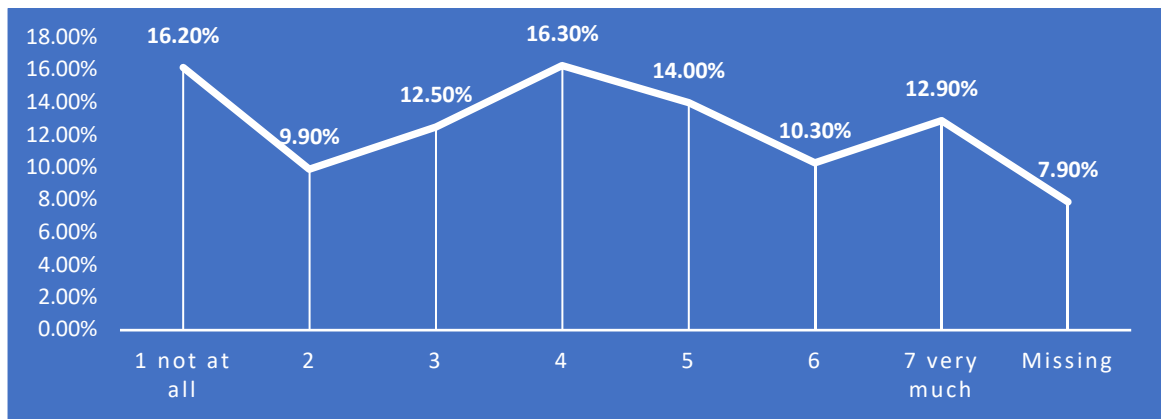


Figure no. (11)

The courses and events they attended increased their understanding of the attitudes, values, and motivations of entrepreneurs

Only 37% of the participants agreed that the courses and events they attended increased their understanding of the attitudes, values, and motivations of entrepreneurs, thus a special attention must be on the materials been used in the courses, specialty and scientific background of the lecturer, and many other aspects. therefore, thus give us addition evidence that is the scientific department in the colleges in the universities of Kurdistan region of Iraq to take responsibility of making sure that the business management, start-ups and entrepreneurship course been taught have the adequate requirements of implementing it as shown in figure no. (11), while around 8% of the responses did give their opinions regarding this question, which give us more information that there should be more interest and efforts dedicated to this matter.

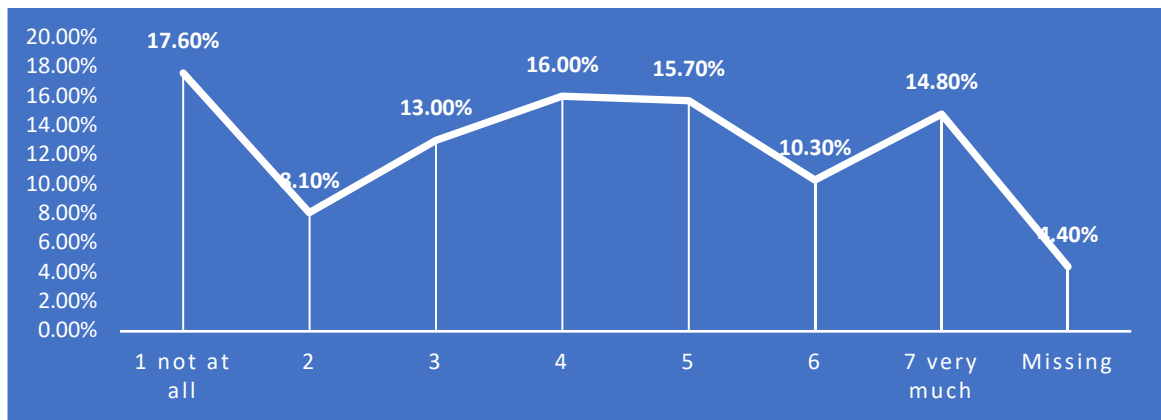


Figure no. (12)

The courses and events they attended increased my understanding of the actions someone has to take to start a business

From figure no. (12) we get solid evidence of why only 37% of the participants agreed that the courses and events they attended increased their understanding of the attitudes, values, and motivations of entrepreneurs, because of around 45% of the participants agreed that the courses and events they attended increased my understanding of the actions someone has to take to start a business. therefore, thus give us addition evidence that is the scientific department in the colleges in the universities of Kurdistan region of Iraq to take responsibility of making sure that the business management, start-ups and entrepreneurship course been taught have the adequate requirements of implementing it.

Also, regarding the question “The courses and events I attended enhanced my practical management skills to start a business”, around only 40% agreed that the course they attend enhanced their practical management skills that led to a start-up. Thus, it is not important the information that been given to the students, but also the practical aspects must be used as well for a better understanding about opportunities in the private sector.

In addition, regarding the question “The courses and events I attended encouraged me to identify business opportunities closely aligned with my own knowledge and interests”, around less than 40% agreed that the course and events they attend encouraged them to identify business opportunities closely aligned with their own knowledge and interests. Thus, it is not important the information that been given to the students, but also the practical aspects must be used as well for a better understanding about opportunities in the private sector starting from selecting a solid business idea, prepare a good business plan using practical tools such as CANVAS business model.

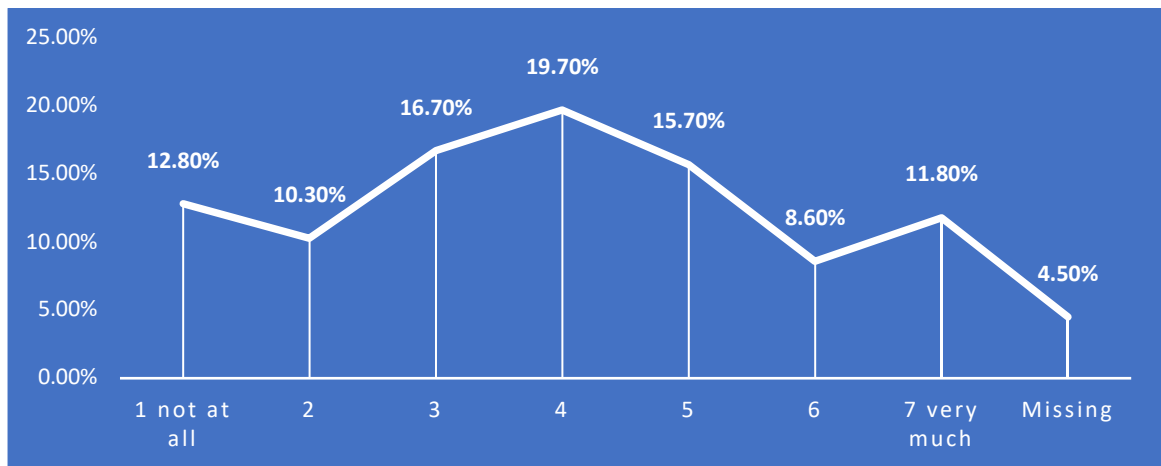


Figure no. (13)

The conditions of participant's life are excellent

figure no. (13) shows that the conditions of participant's life are not excellent, because around 50% did not agree with this question. Only 11.8% of the participants agreed the condition of their life is excellent, thus their personal and family lives face many challenges from many aspects (economic and financial, social, political, psychological, and career path).

5. STUDENTS' ENTREPRENEURIAL ACTIVITIES IN PLANNING AND ACTION

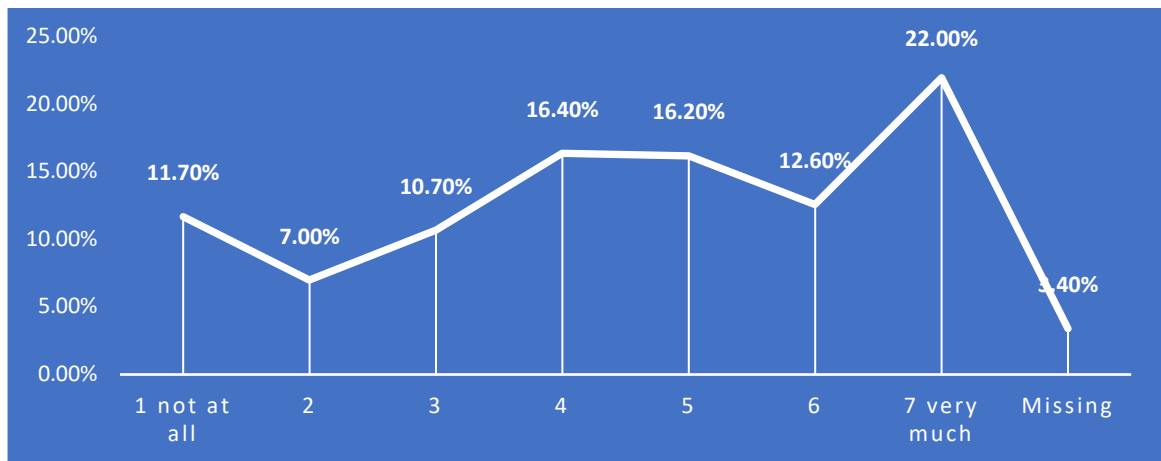


Figure no. (14)

The participants are convinced that they can successfully discover new business opportunities

Figure no. (14) shows that more than 50% did agree with this question which elaborate that they are convinced that they can successfully discover new business opportunities, thus give us a very good information about their positive mindset that a sincere work should be devoted to this matter my all entities whether public, private or even NGOs because they believe in themselves, they have a positive mindset regarding discovering a new business opportunity inside Kurdistan region of Iraq.

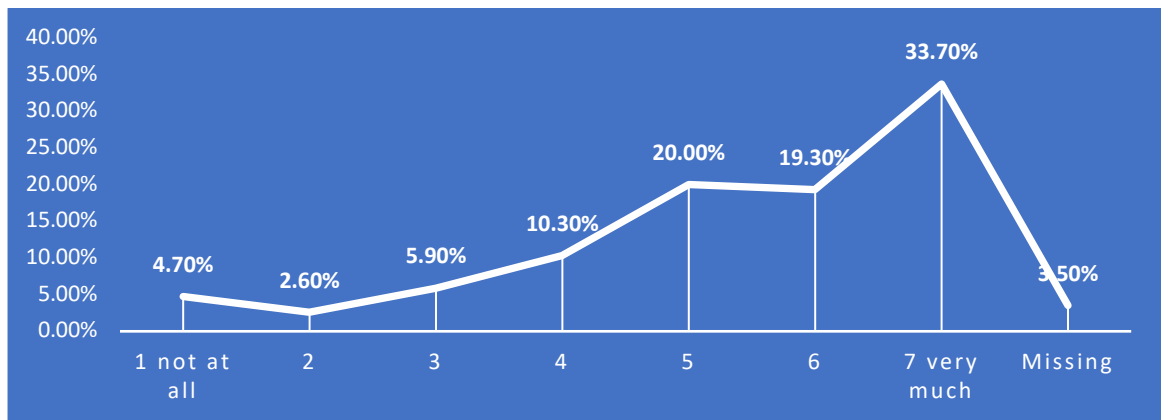


Figure no. (15)

Participant's believe they can grow in positive ways by dealing with difficult situations

Around 73% of the participants agreed to that they believe they can grow in positive ways by dealing with difficult situations, which give us more evidence about why more than 50% did agreed with the previous question which elaborate that they are convinced that they can successfully discover new business opportunities as shown in figure no. (15).

Around 50% of the participants agreed to that they believe they are convinced that they can successfully create new products that will improve the economy of Iraq and helps to reinvest the local capital in new products by Iraqi youths, which give us more evidence about why more than 50% did agreed with the previous question which elaborate that they are convinced that they can successfully discover new business opportunities. Therefore, a focus must be on how innovation and creativity will be engaged in the classroom, inspire creativity and encourage the mindset of thinking and working out side of the box as many international programs focus on it, beside the student-centered approach must be encouraged and implemented by the academic staff of all universities in Iraq.

Beside around 70% of the participants agreed to that they look for creative ways to alter difficult situations in their personal and family lives, thus it is an excellent insight for a positive attitude and mindset that is needed for a better world, which basically helps to create new business opportunities, and set up new business ventures.

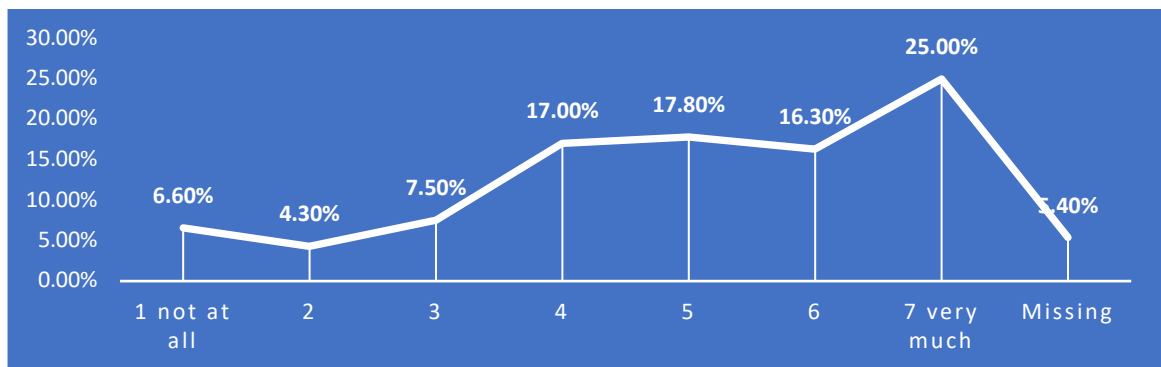


Figure no. (16)

Participant's believe they are convinced that they can think creatively

Around 60% of the participants agreed to that they Participant's believe they are convinced that they can think creatively, this is a very critical outcomes, more effort must be devoted to this matter because when the students and graduates that they are convinced they can think creativity, this will helps them to think outside of the box, think in business opportunities that are sound good and aligned with local culture, needs and desires, besides think of international issues, business opportunities gaps after considering political, social, economic, environmental, and technological factors that affects local and international costumes, daily life style as shown in figure no. (16).

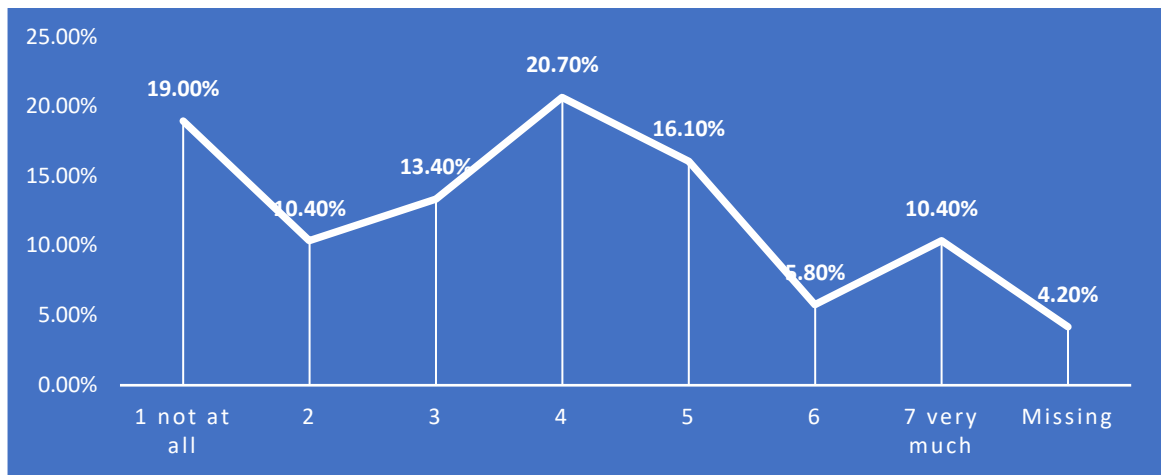


Figure no. (17)

There is no need for tougher regulations on business to protect the environment

Around 30% of the participants agreed that there is no need for tougher regulations on business to protect the environment, due to fact that the majority of the participant did not attend any course related to business environment, thus they not know enough information about it, which give thus ideas about whether they answered by their intentions of their knowledge, and around 5% did not answer this question due to many reasons luck of knowledge about the topic could be one of them as shown in figure no. (17).

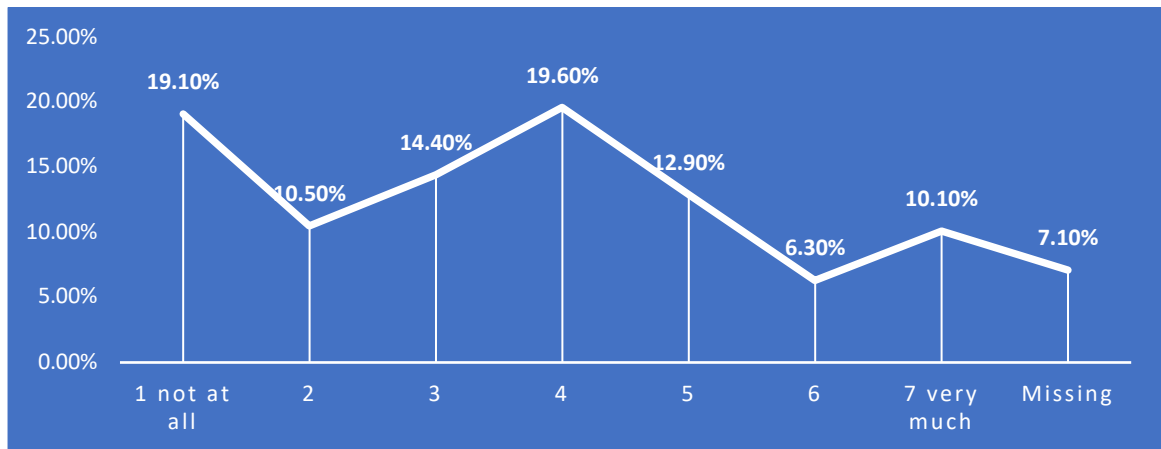


Figure no. (18)

Regulations to protect the environment are too much of a burden on business

Around 55% of the participants agreed that it is not a burden on business to protect the environment, but instead it will help business to think more as good citizens, become more morally directed, socially oriented and environmentally targeted that will increase its image and brand among the official entities in Iraq as this topic is quite new to Iraqi context which started by imposing the code of corporate governance for banks in Iraq by the central bank of Iraq in 2018 in collaboration with IFC international Finance Corporation and Iraqi institute of directors. Besides around 7% of the respondents did not answer this question which could be related to their knowledge about the topics triggered as shown in figure no. (18).

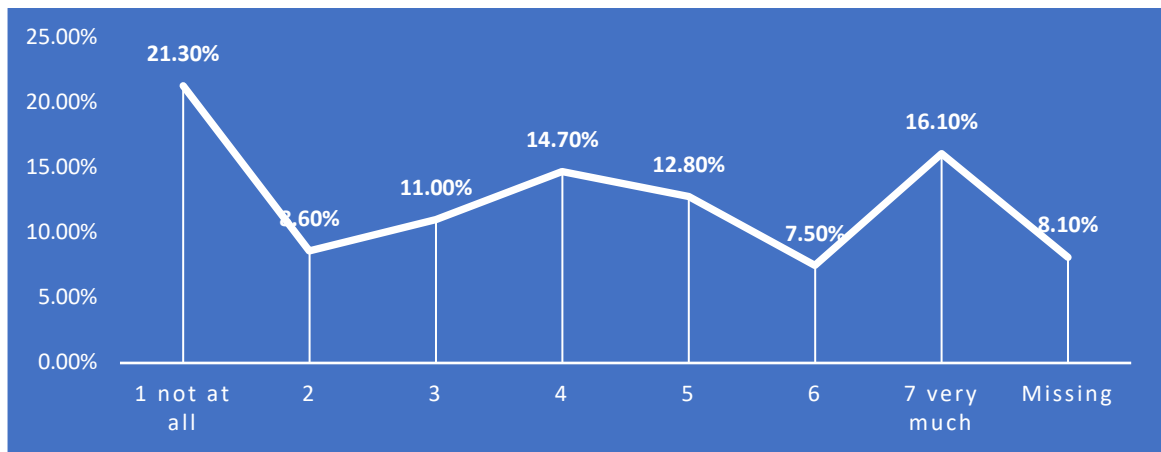


Figure no. (19)

Addressing social problems causing crime (e.g., poverty and joblessness) is not the best way to reduce crime

Around 40% of the participants did not agree that poverty and joblessness are best way to decrease crime, in their opinions, when the people in general and specially youths have a securely economy job that generate adequate income for their daily life needs which prevent them of becoming very poor which could lead them to do criminal activities. In addition, the data of around 9% are not provided, beside 16% of the responses were agreed on the topic as shown in figure no. (19).

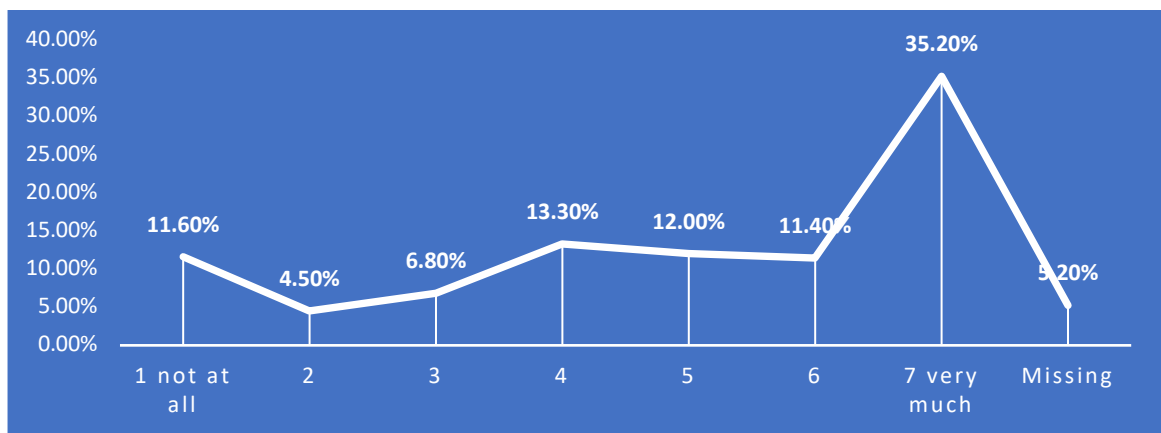


Figure no. (20)

Government should redistribute income from the better off to the less well off

Around 60% of the participants agree on that the responsibility of the government should redistribute income from the better off to the less well off, as income equality index that many international institutions highlight it in their reports such as world bank group and The Organization for Economic Co-operation and Development OCED. In addition, the data of around 5% are not provided as shown in figure no. (20).

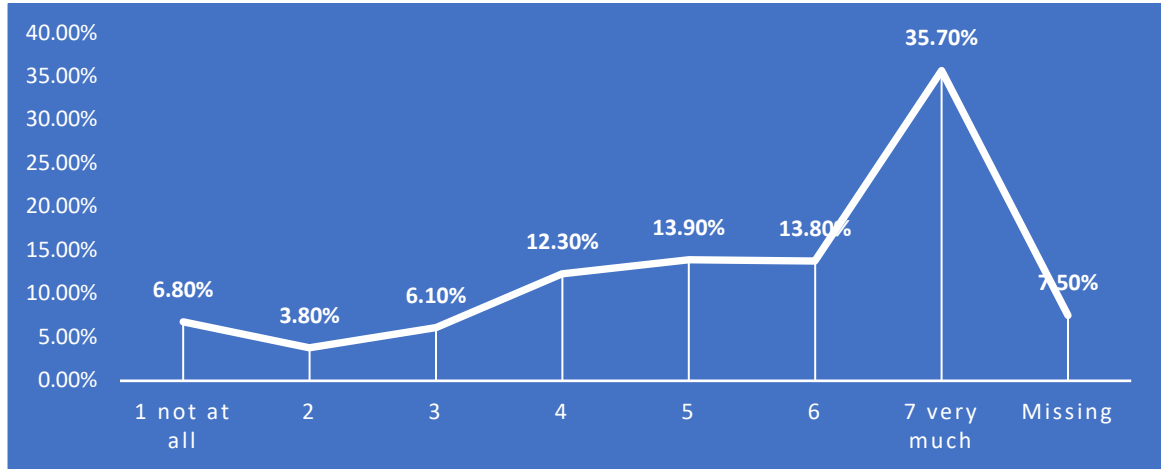


Figure no. (21)

Ordinary working people do not get their fair share of the nation's wealth

Figure no. (21) confirm the importance of the income distribution among the nation's population as round 64% of the participants agree on ordinary working people do not get their fair share of the nation's wealth. In addition, the data of around 7.5% are not provided, while around 15% of the responses did not agree with the question.

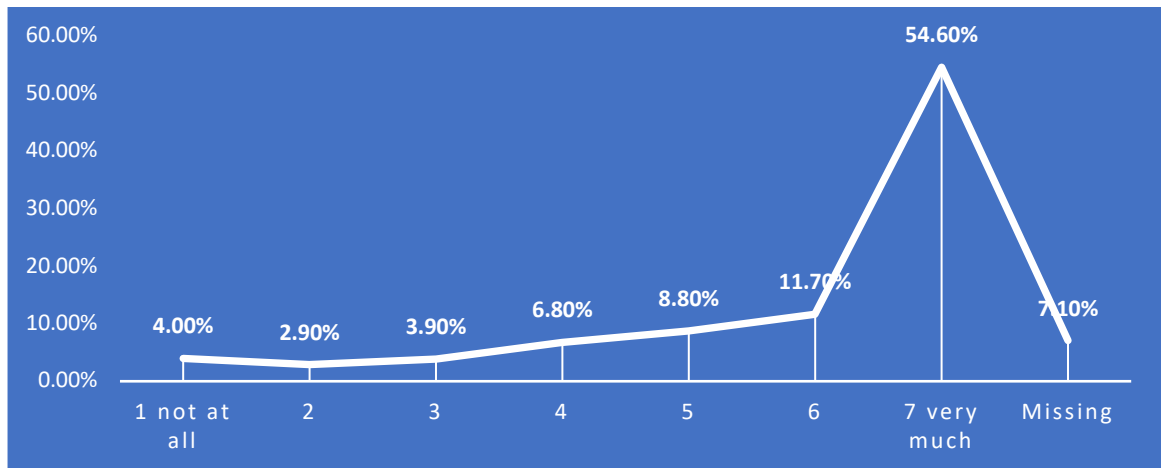


Figure no. (22)

Government should spend a great deal on improving the life of people

Figure no. (22) illustrate that the majority of responses converge on the government's responsibility to enhance people's lives by allocating substantial resources toward achieving this goal through strategic plans, policies, and procedures. There is widespread agreement that effective governance involves proactive measures aimed at improving societal well-being, encompassing initiatives in healthcare, education, infrastructure development, and social welfare. By prioritizing these areas through comprehensive strategic frameworks and transparent policies, governments can foster sustainable growth, equitable opportunities, and a higher quality of life for all citizens. This collective viewpoint underscores the critical role of governmental leadership in addressing societal needs and advancing towards a more prosperous and inclusive future. In addition, the data of around 7.5% are not provided, while around 15% of the responses did not agree with the question.

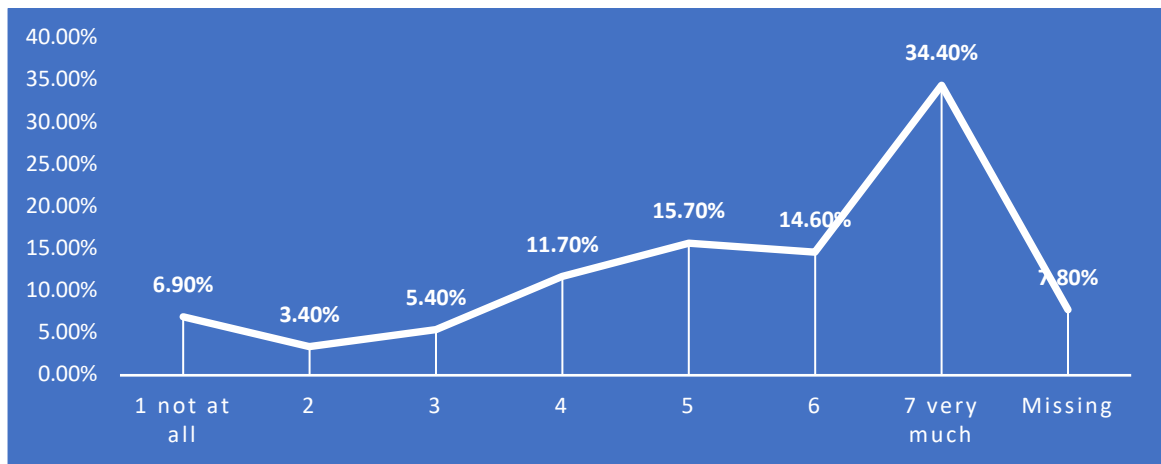


Figure no. (23)
Inequality of income distribution

In Iraq, large business owners often enjoy significant gains at the expense of workers. This disparity is glaring in the unequal distribution of wealth and power within corporations. Owners and executives profit considerably and hold substantial sway over decision-making, while workers face stagnant wages, minimal benefits, and uncertain job stability. This imbalance highlights wider concerns about economic fairness, necessitating policies that foster more equitable allocation of resources and opportunities in the business sector. Addressing these issues involves advocating for enhanced labor protections, fairer compensation practices, and policies that prioritize the inclusion and empowerment of workers in corporate governance. Therefore, around 65% of the responses agreed that the big companies take the port the biggest portion of profits at the expense of the daily workers or normal employees which could lead to inequality of income among people inside the country in the figure above. While around 8% did not answer this question.

Regarding their business orientation and emphasizes, around 8% agreed to that their business emphasize the importance of its social responsibilities to the society, participates in activities which aim to protect and improve the quality of the natural environment and targets sustainable growth which considers future generations, which gives us a positive thinking about their future in business world.

Responses came in different direction regarding starting business with cofounders, as only 15% of them agreed they want to start their business in collaboration with one co- founder, and only 4% agreed to establish their business with two cofounders and around 20% don't want another founder to start up the business but they want it solely by themselves. As usual around 60% have not answered this question due to find that they didn't start any business yet in their life. The opinions were almost identical regarding their intention to open up a private business which is in the same city they have studied.

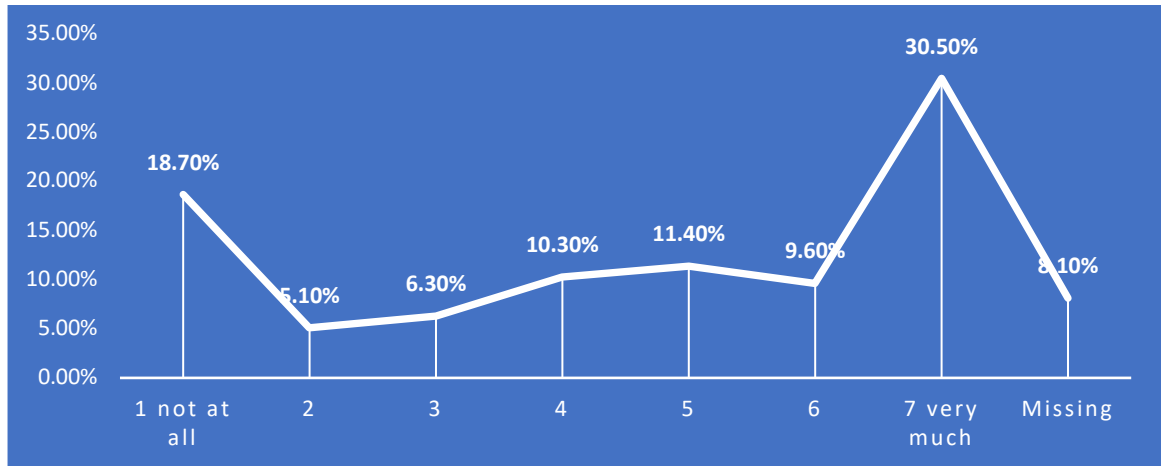


Figure no. (24)

There is one law for poor and another law for rich people

In Iraq, as in many societies worldwide, the idea that the wealthy receive different treatment under the law than the poor is a harsh reality. This inequality is evident across various aspects of the legal system, where individuals with more financial resources and influence often benefit from leniency and special privileges. Affluent individuals can afford top-tier legal representation, access superior facilities, and navigate legal complexities more effectively. Conversely, those from lower socioeconomic backgrounds face obstacles such as limited access to legal assistance, harsher penalties for similar offenses, and systemic biases that perpetuate their disadvantage. This unequal application of justice underscores profound inequalities within legal structures and emphasizes the urgent need for reforms to ensure fair access to justice for all, regardless of economic standing. Efforts to address these issues involve advocating for reforms that uphold fairness, transparency, and equal treatment under the law, ultimately promoting a more equitable and inclusive society. That is likely happening in Iraq as evident from the opinion of the participants in this survey because more than 55% of them agreed on this notion which mentioning that there is one law for poor and one law for rich people, beside around 8% answer this question as showing in the figure above.

From their opinions about the question regarding their intentions to start own business, they are deeply committed to launching their own business in the future. This aspiration stems from a strong passion for entrepreneurship and a desire to create something meaningful and impactful. They envision leveraging their skills, creativity, and dedication to build a venture that not only meets market needs but also contributes positively to the community. They are actively preparing themselves by acquiring knowledge in business management, acquiring relevant skills, and

studying market trends. Their determination is fueled by a belief in the potential for innovation and growth, and they are eager to embark on this journey to turn their entrepreneurial dreams into reality. Therefore, this intention must be incubated and accelerated by the educational institutions in Iraq.

There are many factors affecting entrepreneurs' intentions to succeed, including social influence, work effort expectancy and motivation expectancy. (Gonzalez-Tamayo et al., 2024). The development of startup activity among students is usually regarded as critical factor to improve entrepreneurship levels and decreasing unemployment rates among youth. In addition, the individual entrepreneurial orientation increases the scope of students' startup activities, and the university entrepreneurial climate (Bodolica et al., 2024), and they aimed to draw researchers' and practitioners' attention to the need of both exploring the nuances of students' personal traits that influence their involvement in startup activities and building an effective university entrepreneurial ecosystem to stimulate entrepreneurial endeavours among students and alumni as they are the engine of the future of country's economy as they are youth.

Only 4% of participants answered that they already established a business by themselves, while the majority of them did not answer this question maybe because they don't understand how to prepare a business plan and start up their business (start-up) in the region in Kurdistan region in Iraq. In addition, regarding the question of which sector they prefer to engage in the future, the majority of the participants (around 82%) did not answer this question due to lack of information and past experience in industrial classification of economic sectors, while only about 5% agreed that they want to be part of service sector and about 4% of the participants agreed that they wish to start their own business tourism sector.

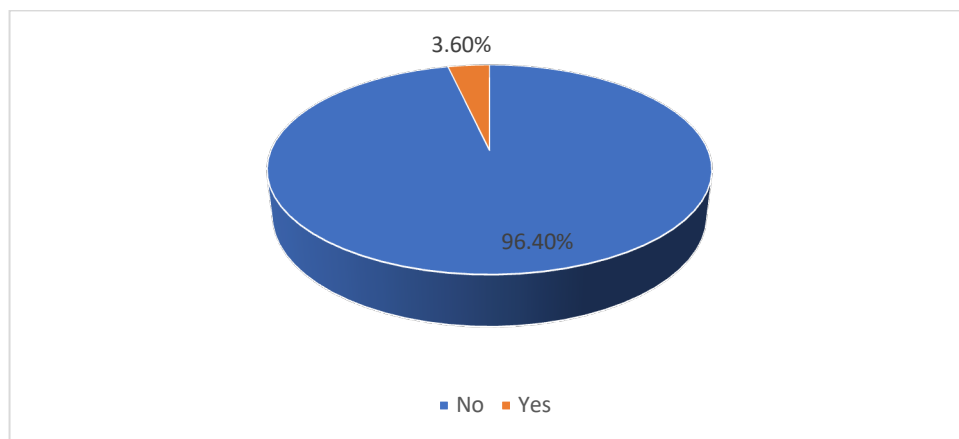


Figure no. (25)
Received venture capital funding for their business

Only 3.6% received venture capital funding for their business as they need it additional fund to grow up their private project in the private sector, you give us insight about the importance of having business angels in Iraq general and Kurdistan region particularly due to fact that supporting business idea and funding good business plans to actually start up in the market this could lead to increase the job opportunity specially for youth whom newly graduated.

6. RESULTS

The results of the 2023 GUESSS survey showed that Iraq was at one of the lowest levels in a global comparison in terms of students' post-graduation entrepreneurial intentions due to that this topic has not been introduced total by the majority of the colleges and universities in Iraq yet.

We strongly believe that the Global Student Entrepreneurial Spirit Survey (GUESSS) holds significant importance for researching and advancing entrepreneurship on both a global scale and within individual countries. The findings presented in the report offer a valuable opportunity to evaluate the current state of affairs and to initiate measures aimed at fostering a more supportive educational environment for nurturing and realizing students' entrepreneurial aspirations.

Establishing entrepreneurial infrastructure within universities plays a crucial role in influencing the realization of entrepreneurial ambitions during the initiation and growth phases of new ventures. Introducing entrepreneurship courses into curricula or developing specialized educational programs in this field provides students with access to essential entrepreneurial resources, particularly human capital. This includes a spectrum of knowledge, skills, and capabilities necessary for creating and nurturing businesses, as well as bolstering confidence in their abilities to overcome the challenges associated with starting a business. The integration of entrepreneurship courses within science education programs, where innovation potential among young individuals is high, is viewed as a pivotal objective.

Regarding the question of which political side they support the majority of opinion of the participants where they prefer not to answer this question due to sensitivity of the matter in Iraq general region particularly therefore only 6% supported the left and with the same percentage for the right political alliance.

Besides around 50% of the opinion was they don't publicly express their opinion on social economic and environmental issues in Iraq and Kurdistan region, while 23% of them did not prefer to answer this question. And only around 22% agreed that they openly express their opinion regarding economic social environmental and even political issues, which give us insight about the mosaic of culture inside Iraq.

Around 64% of the parts spent did not answer one of the critical questions about entrepreneurship spirit and orientation, why only 20% of them are ready to do anything in order to become an entrepreneur and start up their business. As additional evidence around 65% also of the parts spent did not answer the question regarding their professional career in the future is to become an entrepreneur, only 20% of them are visualizing their future as profession to become an entrepreneur, which gives us insight about a very big problem that still the majority of the students and the newly graduated youth are thinking about working with the public sector and become a governmental servant which is likely due to financial restriction in the Iraqi budget general and particularly in Kurdistan region budget, as they have thousands of employees that actually they don't work.

As robust evidence for the above notion around 65% of the responses were live empty and have not been answered to the question regarding will they make every effort to start and run their business, while only around 17% already to make every effort and plan ahead to start their private project and run their own business. The participants are not determined to create a business in the future as the results shown of the opinion of this survey in Iraq due to find out around 65% of them did not answer this question while only around 20% of them already and determined to create a business in the future by themselves and for themselves.

Almost all questions regarding business idea of the participant have not been answered by the majority (around 87%) which gives us a solid insight that they still don't have knowledge about how to generate a business idea. As this matter have not been introduced to the universities in Iraq as a strategy and practical oriented curricular which is needed and can be implemented by using the most widely program by international labor organization ILO named SIYB start and improve your business which consist of three parts the first part focus on how to generate a business idea GYB, second part focus on how to start your business SYB, and third part is related how to improve your business IYB, which has been officially recognized and implemented in more than 101 countries around the globe in Iraqi context this program has been widely used by many international organizations in collaboration with local private sector companies as Peshdari Ltd. for managerial consulting, staff training, and feasibility study as implemented to around 1000 trainees in North Iraq particular in Kurdistan region.

In the same direction of the previous question, only 7% of the participants gathered information, prepared plans for their business as they entered the private sector world in Iraq. Additionally, only 7% have organized and implemented control processes to make sure that they meet their objectives. As additional evidence to the above only 7% researched and selected target markets and did meaningful competitive analysis. Furthermore, also only 8% have designed and planned production and marketing efforts. As well as only 8% have gut feeling for potential opportunities.

Regarding the technology they are using in their products only 8% have agreed that they acquire the needed skills and knowledge to do so besides around 8% have the knowledge about the needs of the target customers and how to implement that. The performance of their business compared to its competitors since establishment in many dimensions such as sales market share and profit growth, innovation and recreation, only 8% of them I agreed that the performance of their business have been improved, while around 87% did not answer question or leave it empty.

In addition to business behavior and professional ethics the majority of the responses have not been collected (around 86%) because of lack of information, not enrolled in relevant academic courses or any practical workshop that give them the necessary information knowledge about business ethics in general.

The majority of responses did not answer the question regarding whether they want other attention or they want to be admired by others. Only 6% of them seeks prestige and statue as they want get fame.

7. RECOMMENDATIONS

1. Ministry of fire education on scientific research in Iraq general and in Kurdistan region particularly introduce entrepreneurship topic to universities and institutions as a core topic to all scientific department.
2. More academic scientific and practical conferences, workshops, training sessions and seminars must be dedicated to engage us in economic development process via small and medium enterprises regarded as the most critical private sector entities for any economic development.
3. More efforts must be dedicated to increase the innovation and creativity inside classes as it opens the mind of the students at alumni which brings new ideas and opinions to establish different business project in the private sector.
4. Strategic plan must be devoted by the government in Iraq the thoughts of graduates and students for working in the future with the public as becoming public servants, instead of that preparing action plans to concentrate their thoughts to work in the private sector and build their own professional career as they start from scratch.
5. Incubation and acceleration centers must be established by the universities in collaboration with professional private sector companies and non-government organizations whether local or international which enhance engagement activities all the universities with the society and private sector.

6. REFERENCES

- Bodolica, V., Shirokova, G., Ragulina, D., & Lushnikova, A. (2024). Students' individual entrepreneurial orientation and the scope of startup activities in Russia: The role of university infrastructure. *The International Journal of Management Education*, 22(2), 100986.
<https://doi.org/10.1016/j.ijme.2024.100986>
- Gonzalez-Tamayo, L. A., Maheshwari, G., Bonomo-Odizzio, A., & Krauss-Delorme, C. (2024). Successful business behaviour: An approach from the unified theory of acceptance and use of technology (UTAUT). *The International Journal of Management Education*, 22(2), 100979.
<https://doi.org/10.1016/j.ijme.2024.100979>
- GUESSS 2021 and 2023 National Reports. Retrieved on June 2024 from
<https://www.guesssurvey.org/publications/publications/national-reports.html>
- GUESSS 2023 Iraq Data, gathered from January till April, 2024.
-