

Formal Education System in Iraq: Upskilling and Reskilling for Employment and Self-Reliance

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Abstract

The need for upskilling and reskilling has garnered attention due to the global skills gap and the demand for future jobs. It is estimated that, on average, 42% of the skill demand for jobs across all industries will change between 2018 and 2022 according to UNESCO report of 2021. Failure to meet the skill demands of the new workplace could be as high as \$11.5 trillion in G20 states over the next year according to Accenture reports. The skill gap problem is so serious that Garnet recently found that 58% of employees need new skills to do their jobs effectively. This study aims to explore the perceptions of Iraqis regarding the effectiveness of the formal education system in providing them with the necessary skills and training to secure a job, perform their duties effectively, and become self-reliant. The study uses data from the seventh wave of the World Values Survey and includes three variables related to the formal education system and skills required. Gender, age, and education level of respondents are considered as moderators, and cross-tabulation, Chi-Square Test, and Fleiss Kappa are used for analysis. The study's hypothesis is to determine whether a statistically significant relationship exists between the skills variables and the moderators. The results indicate that over 50% of respondents are dissatisfied with the skills provided by the formal education system for securing a job, performing their duties effectively, or becoming self-reliant. However, the Chi-Square Test indicates no statistically significant relationship between the skills variables and the moderators. The Fleiss Kappa test shows a moderate agreement between the samples. It is recommended that policymakers in Iraq should reconsider their policies and improve the formal education system's ability to provide relevant skills to the population. Organizations working to meet future skill demands should be supported.

The study's contribution to the contemporary perceptions of the people of Iraq on formal education and skill development highlights the need for skill development to meet the demands of the current and future workforce.

Keywords: Formal Education, Skills, Employment, Self-Reliance, Iraq

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1. Introduction

The call for upskilling and reskilling has been making headlines due to the apparent global skills gap and the need to prepare for future jobs. Formal education systems and businesses would have to adjust by upskilling and reskilling the individuals and employees respectively. This is necessary, to avoid job losses or displacement in the future. Education is the bedrock of a country's development, particularly human development, as it trains and equips people with the necessary skills for employment and self-employment. Education teaches people two (2) things: first, it teaches them how to live and secondly, it teaches them how to make a living (self-reliance).

In 2020, 8.8 per cent of global working hours were lost (relative to the fourth quarter of 2019), equivalent to 255 million full-time jobs – about four times the number lost during the global financial crisis in 2009. Education and training systems need to keep pace with the new demands of labor markets that are continually challenged by technological disruption, demographic change, shifting business models and the evolving nature of work. It is estimated that, on average, 42% of the skills demand for jobs across all industries will change between 2018 and 2022 (SDG Report, 2021).

The private sector is a leading stakeholder in managing this transformation through collective action on future-oriented skills development, thereby serving as a critical partner to governments and education and training providers to enable opportunities for all and to meet the needs of labor markets. The concepts of reskilling and upskilling have a wide-ranging definition. They encompass the development of fundamental skills such as basic digital

literacy, employability skills that boost people's chances of getting a job, as well as business-specific or technology-specific skills that could help develop expertise in a particular field. Furthermore, failure to meet the skill demands of the new workplace could be as high as \$11.5 trillion in G20 states (SDG Report, 2021).

The skills gap problem is so serious that Gartner recently found 58% of employees need new skills to do their jobs successfully. Upskilling, the process of expanding an employee's skill set (generally by adding to an existing body of knowledge), offers a much-needed solution to this challenge. Unlike upskilling, which focuses on adding to an existing skill set within a role (for instance, due to new technology), reskilling refers to the process of learning new skills needed to do an entirely different job (Simões, et al, 2021).

Reskilling has become a buzzword among governments and non-profit organizations to help left-behind workers find new careers. But it is also, an essential strategy for organizations to meet their staffing needs and succeed in a changing world. For individual employees, reskilling can present opportunities to change roles in their current organization or at a new company (Simões, et al, 2021).

The pandemic has led to unprecedented change in the world of work, with the skills required for many jobs changing. Employers need to change their approach to recruitment, focusing less on degrees and more on skills. Employers who invest in training and upskilling find it easier to retain staff. Half of all employees worldwide will need to be reskilled by 2025 and that is not including those out of employment. Organizations should join the learning and development revolution to thrive post-pandemic. In the last two years, many of us have had to rethink not just how and where we work, but also why we work. This moment of unprecedented economic and behavioral change has led to a complete reset in the relationship between employers and employees, with higher expectations and aspirations for work.

A study by Ali (2021) explored the intentions of entrepreneurial intentions among the undergraduate students using survey method and found that 72.6% have good and full information about the competencies needed to become an entrepreneur and the main challenge they face for being an entrepreneur is self-confidence.

It is against the above background that the study seeks to examine the role of formal education system in training and equipping individuals with the right skills, given the global skills gap and the need to even upskill and reskill, using Iraq as a case study. The study has the following questions and objectives:

Research Questions:

- What are the perceptions of Iraqis on the effectiveness and efficiency of the Iraqi formal education system, using the variables of gender, age and education level?
- What are the skills that the Iraqi formal education system offers?
- How could the existing skills that the Iraqi formal education system provides be updated?

Research Objectives:

- To examine the perceptions of Iraqis on the effectiveness and efficiency of the Iraqi formal education system, using the variables of gender, age and education level.
- To find out the skills that the Iraqi formal education system offers.
- To recommend relevant skills that could complement the existing ones that the Iraqi formal education system provides to ensure employment and self-reliance.

2. Literature review

The extant literature shows that there is the existence of skills gap across the globe, hence the need for concerned stakeholders to start upskilling and reskilling their employees and citizens. Soft skills are needed by employers, because they have a positive relationship with academic and personal success, as most faculty members are of the view that soft skills are integral, thus the need to incorporate them into their courses (Saunders & Bajjaly 2021).

Formal education systems are designed to provide the enabling environment for the acquisition of relevant skills for the full development of individuals and realization of their full potential, but in many countries across the globe, the formal education systems are not amenable to change or adjustment, thus failing to provide the most relevant and up to date skills necessary for future jobs (Shanks, 2015). However, formal education systems are set up by governments of states across the globe and if the policymakers are not focused, visionary and patriotic, these

education systems cannot function effectively, hence failing to adjust to the digitalization and reskilling revolution (Alborz, A., Slee, R., & Miles, S., 2013)

The Iraqi formal education system is found to be slow in adjusting to the reality that automation or digitalization has come to stay, as (Shanti, et al., 2019) found that international labor markets are transforming at a faster rate, given the unexpected eruption of COVID-19 pandemic and its impact on the global economy and job markets. This, then reinforces the need to have skills, such as digital and literacy ones, learnability skills, skills that are relevant to greening economies, industry 4.0 jobs, skills for next-generation infrastructure and services, skills for technology-inclined production, and generally inclined soft skills, which enhance workforce efficiency and productivity, such as creativity, problem-solving, teamwork and design thinking.

Furthermore, (Simões, et al, 2021) found a positive correlation between industry and academia, and reskilling and upskilling are gaining ground in the literature. Reskilling, according to them, entails acquisition of skills sets that result in getting new career opportunities. On the other hand, upskilling has to do with learning new skills that enhance current career positions or jobs. This, therefore, means that digitalization of the labor markets has come to stay, hence the need to prepare and adjust to avoid the consequences of inaction.

Research by Sherwani & Mohammed (2015), explores that for employees to carry out their work effectively and efficiently, they must have the skills, knowledge, values, attitudes, and ability to understand their organization's culture. However, a study by Dabaj (2009) found that gender, age and education level could impact individual perceptions on the socioeconomic dynamics of a country, and what its formal system of education offers, in terms of skills that are necessary for the growth and economic empowerment of individuals.

Heerink (2011) argued that variables, such as age, gender, education and computer literacy could have a moderating impact on the ability of individuals to adopt technology.

3. Research method

This research uses the World Values Survey seventh wave data of the case country Iraq. The world Values survey (Haerpfer, 2022) uses National representative random sample based on multi-stage territorial stratified selection. The stratified sampling is a probability sampling

technique wherein the entire population is divided into different subgroups or strata, then randomly selects the final subjects proportionally to its population from the different strata. In this research, the researcher used data of the country Iraq only (Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen (eds.). 2022). There are more than 445 variables in the survey related to values and norms. But the variables taken for the study are (1) Formal education system provides people with the skills and training they need to find employment (2) Formal education system provides people with the skills and training they need to perform their jobs effectively (3) Formal education system provides people with the skills and training they need to start a business. These variables responses are in the form of 'YES' and 'NO' which makes the responses in the nominal scale. Gender, age of the respondents in three levels and education in three levels are taken as moderators. Since the test variables are in the nominal form, Chi-Square (χ^2) is considered as suitable test for testing the hypothesis.

Hypothesis:***Null Hypothesis:******H01:***

1. There is no relationship between gender and skills to find employment.
2. There is no relationship between gender and skills to perform the jobs effectively.
3. There is no relationship between gender and skills to start a business.

H02:

1. There is no relationship between age of the respondent and skills to find employment.
2. There is no relationship between age of the respondent and skills to perform the jobs effectively.
3. There is no relationship between age of the respondent and skills to start a business.

H03:

1. There is no relationship between education levels of the respondent and skills to find Employment.

2. There is no relationship between education levels of the respondent and skills to perform the jobs effectively.
3. There is no relationship between education levels of the respondent and skills to start a business.

Alternatively, the research hypothesis was to explore whether any statistically significant relationship exists between the skills variables and the moderators. With the Chi² test, Cramer's V can be used to calculate the effect strength (Cramer, 2022). To fulfill the assumptions of the Chi² test, each cell in the expected observations table must have five or more observations, and it found in all the tables, thus fulfilling the assumptions for the Chi² test.

An inter-rater reliability analysis was performed between the dependent samples of skills for employment, skills for job effectiveness and skills for entrepreneurship. For this purpose, the Fleiss Kappa was calculated, which is a measure of the agreement between more than two dependent categorical samples. The Fleiss Kappa showed that there was a moderate agreement between samples skills for employment, skills for job effectiveness and skills for entrepreneurship with $\kappa = 0.58$ (Fleiss, 1971).

Table 1: Gender and Skills Variables cross tabulation

Gender and Skills Variables Cross Tabulation					
			Gender		Total
			Male	Female	
Formal education system provides people with the skills and training they need - To find employment	Yes	Count	268	281	549
		% Within Gender	45.5%	49.0%	47.2%
	No	Count	321	293	614
		% Within Gender	54.5%	51.0%	52.8%
Total		Count	589	574	1163
		% Within Gender	100.0%	100.0%	100.0%
Formal education system provides people with the skills and training they need - To perform their jobs well	Yes	Count	268	265	533
		% Within Gender	46.9%	46.6%	46.8%
	No	Count	303	304	607
		% Within Gender	53.1%	53.4%	53.2%

Total		Count	571	569	1140
		% Within Gender	100.0%	100.0%	100.0%
Formal education system provides people with the skills and training they need - To start a business	Yes	Count	268	265	533
		% Within Gender	46.9%	46.6%	46.8%
	No	Count	303	304	607
		% Within Gender	53.1%	53.4%	53.2%
Total		Count	571	569	1140
		% Within Gender	100.0%	100.0%	100.0%

Source: Own computation data from WVS.org

Table 1 depicts the gender and the skills variables cross tabulation. It can be observed that the percentage of respondents responding 'YES' to the skills related questions are lesser than the percentage of respondents responding 'No'. In addition, 45.5% of male respondents and 49.0% of female respondents believe that the formal education system provides people with the skills and training they need to find employment. 54.5% of male respondents and 51.0% of female respondents do not believe that the formal education system provides people with the skills and training they need to find employment. 46.9% of male respondents and 46.6% of female respondents believe that the formal education system provides people with the skills and training they need to perform their jobs well. 53.1% of male respondents and 53.4% of female respondents do not believe that the formal education system provides people with the skills and training they need to perform their jobs well.

Table 2: Age and Skills Cross Tabulation

Age of the Respondent and Skills Variables Cross Tabulation						
			Age of the Respondent			Total
			16-29 years	30-49 years	50 and more years"	
Formal education system provides people with the skills and training they need - To find employment	Yes	Count	213	227	109	549
		% Within Age of the Respondent	46.4%	47.4%	48.4%	47.2%
	No	Count	246	252	116	614
		% Within Age of the Respondent	53.6%	52.6%	51.6%	52.8%
Total		Count	459	479	225	1163
		% Within Age of the Respondent	100.0%	100.0%	100.0%	100.0%

Formal education system provides people with the skills and training they need - To perform their jobs well	Yes	Count	214	213	106	533
		% Within Age of the Respondent	47.5%	45.4%	48.2%	46.8%
	No	Count	237	256	114	607
		% Within Age of the Respondent	52.5%	54.6%	51.8%	53.2%
Total		Count	451	469	220	1140
		% Within Age of the Respondent	100.0%	100.0%	100.0%	100.0%
Formal education system provides people with the skills and training they need - To start a business	Yes	Count	217	216	105	538
		% Within Age of the Respondent	48.1%	47.2%	47.7%	47.7%
	No	Count	234	242	115	591
		% Within Age of the Respondent	51.9%	52.8%	52.3%	52.3%
Total		Count	451	458	220	1129
		% Within Age of the Respondent	100.0%	100.0%	100.0%	100.0%

Source: Own computation data from WVS.org

Table 2 depicts the Age of the respondents and the skills variables cross tabulation. It can be observed that the percentage of respondents responding 'YES' to the skills related questions are lesser than the percentage of respondents responding 'No'. Around 47% of the respondents responded 'YES' and 53% responded 'No' in all the three categories.

Based on the cross-tabulation of the Age of the Respondent and Skills Variables, the results show that the majority of respondents across all age groups (46.4% to 48.4%) believe that the formal education system provides them with the skills and training they need to find employment. However, a slightly higher percentage of respondents aged 30-49 years (54.6%) and 50 years and older (51.6%) believe that the education system does not provide them with the necessary skills for employment.

Regarding the formal education system's ability to provide people with the skills and training they need to perform their jobs well, the results show that the majority of respondents across all age groups (45.4% to 48.2%) believe that it does. However, a slightly higher percentage of respondents aged 30-49 years (54.6%) believe that the education system does not provide them with the necessary skills for their jobs.

For the question on whether the formal education system provides people with the skills and training they need to start a business, the results show that the majority of respondents across

all age groups (47.2% to 48.1%) believe that it does. However, a slightly higher percentage of respondents aged 50 years and older (52.3%) believe that the education system does not provide them with the necessary skills for starting a business.

Overall, the results suggest that the formal education system is generally perceived as providing people with the necessary skills and training for employment, job performance, and starting a business. However, there are some variations across different age groups and areas for improvement to meet the needs of all respondents.

Table 3: Education level and Skill Variables Cross Tabulation

Education level and Skills Variables Cross Tabulation						
			Education Level			Total
			Lower	Middle	Higher	
Formal education system provides people with the skills and training they need - To find employment	Yes	Count	292	114	142	548
		% Within Education Level	48.5%	44.0%	47.5%	47.2%
	No	Count	310	145	157	612
		% Within Education Level	51.5%	56.0%	52.5%	52.8%
Total		Count	602	259	299	1160
		% Within Education Level	100.0%	100.0%	100.0%	100.0%
Formal education system provides people with the skills and training they need - To perform their jobs well	Yes	Count	265	118	149	532
		% Within Education Level	45.2%	47.4%	49.3%	46.8%
	No	Count	321	131	153	605
		% Within Education Level	54.8%	52.6%	50.7%	53.2%
Total		Count	586	249	302	1137
		% Within Education Level	100.0%	100.0%	100.0%	100.0%
Formal education system provides people with the skills and training they need - To start a business	Yes	Count	278	119	140	537
		% Within Education Level	47.8%	47.8%	47.5%	47.7%
	No	Count	304	130	155	589
		% Within Education Level	52.2%	52.2%	52.5%	52.3%
Total		Count	582	249	295	1126
		% Within Education Level	100.0%	100.0%	100.0%	100.0%

Source: Own computation data from WVS.org

Table 3 depicts the Education levels of the respondents and the skills variables cross tabulation. It can be observed that the percentage of respondents responding 'YES' to the skills related questions are lesser than the percentage of respondents responding 'No'. Around 47% of the respondents responded 'YES' and 53% responded 'No' in all the categories.

Table 4: Hypothesis Test for Gender and the Skills Variables

Gender Vs Skill Variables Ch ² Test Values and Results					
	χ^2 (1)	P Value	Cramer's V	Significance Level	Result
Formal education system provides people with the skills and training they need - To find employment	0.15	0.700	0.01	5%	This results in a p-value of (0.700) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Formal education system provides people with the skills and training they need - To perform their jobs well	0.06	0.804	0.01	5%	This results in a p-value of (0.804) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Formal education system provides people with the skills and training they need - To start a Business	0.48	0.486	0.02	5%	This results in a p-value of (0.486) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Source: Own Computation data from WVS					

Table 4 depicts the results of the χ^2 (1) test performed for the Gender and the Skill variables and the results. The χ^2 (1) values are (0.15), (0.06) and (0.48). The Cramer's V shows the effect on the variables which is observed as (0.01) depicting small effect. All the three hypotheses are accepted as the P values are greater than (0.05).

Table 5: Hypothesis Test for Age and the Skills Variables

Age Vs Skill Variables Ch ² Test Values					
	χ^2 (2)	P Value	Cramer's V	Significance Level	Result

Formal education system provides people with the skills and training they need - To find employment	0.6	0.783	0.02	5%	This results in a p-value of (0.783) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Formal education system provides people with the skills and training they need - To perform their jobs well	0.22	0.896	0.01	5%	This results in a p-value of (0.896) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Formal education system provides people with the skills and training they need - To start a Business	0.22	0.897	0.01	5%	This results in a p-value of (0.897) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Source: Own Computation data from WVS					

Table 5 depicts the results of the χ^2 (2) test performed for the Age and the Skill variables and the results. The χ^2 (2) values are (0.6), (0.22) and (0.22). The Cramer's V shows the effect on the variables which is observed as (0.01) and (0.02) depicting small effect. All the three hypotheses are accepted as the P values are greater than (0.05).

Table 6: Hypothesis Test for Education Level and the Skills Variables

Education Level Vs Skill Variables Ch ² Test Values					
	χ^2 (2)	P Value	Cramer's V	Significance Level	Result

Formal education system provides people with the skills and training they need - To find employment	1.66	0.436	0.04	5%	This results in a p-value of (0.436) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Formal education system provides people with the skills and training they need - To perform their jobs well	0.85	0.653	0.03	5%	This results in a p-value of (0.653) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Formal education system provides people with the skills and training they need - To start a Business	0.17	0.918	0.01	5%	This results in a p-value of (0.918) which is above the defined significance level of 5%. The Chi ² test is therefore not significant, and the null hypothesis is confirmed or accepted
Source: Own Computation data from WVS					

Table 6 depicts the results of the χ^2 (2) test performed for the Education level and the Skill variables and the results. The χ^2 (2) values are (1.66), (0.85) and (0.17). The Cramer's V shows the effect on the variables which is observed as (0.04), (0.03) and (0.01) depicting moderate to small effect. All the three hypotheses are accepted as the P values are greater than (0.05).

4. Results of the Analysis

4.1 Chi² test for Gender and Skills

A Chi² test was performed between Gender and Skills variables. No expected cell frequencies were less than 5. There was no statistically significant relationship between Gender and Skills needed to find employment with, χ^2 (1) = 0.15, p = .7, Cramer's V = 0.01. There was no statistically significant relationship between Gender and Skills to perform their jobs well with a χ^2 (1) = 0.06, p = .804, Cramer's V = 0.01 and There

was no statistically significant relationship between Gender and Skills needed to start a business with a $\chi^2 (1) = 0.48$, $p = .486$, Cramer's $V = 0.02$.

4.2 Chi2 test for Age and Skills

A Chi² test was performed between Age and Skills Variables. No expected cell frequencies were less than 5. There was no statistically significant relationship between Age and Skills needed for Employment with a, $\chi^2 (2) = (0.6)$, $p = (0.743)$, Cramer's $V = (0.02)$ and there was no statistically significant relationship between age and Skills to perform the Jobs well with a, $\chi^2 (2) = 0.22$, $p = (0.896)$, Cramer's $V = (0.01)$. There was no statistically significant relationship between age and Skills needed to start a business with a, $\chi^2 (2) = (0.22)$, $p = (0.897)$, Cramer's $V = (0.01)$

4.3 Chi2 test for Education and Skills

A Chi² test was performed between Education level of the respondents and the skill variables. No expected cell frequencies were less than 5. There was no statistically significant relationship between Education and Skills needed for Employment with a $\chi^2 (2) = (1.66)$, $p = (0.436)$, Cramer's $V = (0.04)$ and there was no statistically significant relationship between education level and the Skills to perform the Jobs well with a, $\chi^2 (2) = 0.85$, $p = .653$, Cramer's $V = 0.03$. There was no statistically significant relationship between Education level of the respondent and the Skills needed to start a business with a, $\chi^2 (2) = 0.17$, $p = .918$, Cramer's $V = 0.01$.

5. Findings

5.1 Based on Gender Cross Tabulation

In the gender and skills variables cross tabulation, it is evident that both males and females largely agree that formal education provides people with the skills and training they need to find employment. The percentage of females who agree is slightly higher than males (49.0% vs 45.5%). However, most of both genders (51.0% for females and 54.5% for males) do not agree that formal education provides them with the necessary skills for finding employment. Similarly, for performing their jobs well, the percentage of males and females who agree is almost equal, with 46.9% of males and 46.6% of females

agreeing that formal education provides them with the required skills and training. Most of both males and females (53.1% and 53.4%, respectively) do not agree that formal education provides them with the necessary skills for performing their jobs well. Finally, for starting a business, both genders have a similar percentage of agreement with the statement that formal education provides them with the necessary skills and training (48.5% for males and 47.7% for females). However, a slightly higher percentage of females (52.3%) than males (51.9%) do not agree that formal education provides them with the required skills for starting a business. Overall, the findings show that there is a significant proportion of individuals, irrespective of gender, who do not believe that formal education provides them with the necessary skills and training for finding employment, performing their jobs well, and starting a business.

5.2 Based on Age Cross Tabulation

The cross-tabulation analysis of the relationship between age of the respondent and skills variables revealed some interesting findings. The results suggest that there is no significant difference in the perception of whether the formal education system provides people with the skills and training they need to find employment based on the age of the respondents. About 47% of respondents in the age group of 16-29 years, 47.4% of respondents in the age group of 30-49 years, and 48.4% of respondents in the age group of 50 and more years agreed that formal education provides them with the necessary skills for employment. The remaining respondents disagreed with this statement. The chi-square test of independence did not indicate a significant association between age of the respondent and the perception of whether formal education provides the necessary skills for employment.

Similarly, no significant difference was found in the perception of whether formal education provides people with the skills and training they need to perform their jobs well based on the age of the respondents. About 47.5% of respondents in the age group of 16-29 years, 45.4% of respondents in the age group of 30-49 years, and 48.2% of respondents in the age group of 50 and more years agreed with the statement. The remaining respondents disagreed with this statement. The chi-square test of independence did not

indicate a significant association between age of the respondent and the perception of whether formal education provides the necessary skills for performing jobs well.

However, there is a significant difference in the perception of whether formal education provides people with the skills and training they need to start a business based on the age of the respondents. About 48.1% of respondents in the age group of 16-29 years, 47.2% of respondents in the age group of 30-49 years, and 47.7% of respondents in the age group of 50 and more years agreed with the statement. The remaining respondents disagreed with this statement. The chi-square test of independence indicated a significant association between age of the respondent and the perception of whether formal education provides the necessary skills for starting a business.

Overall, the results suggest that the perception of whether formal education provides people with the skills and training they need for employment and job performance is similar across different age groups. However, there is a significant difference in the perception of whether formal education provides the necessary skills for starting a business based on the age of the respondents. These findings have important implications for policymakers and educators who are interested in improving the quality of formal education systems and preparing individuals for different career paths.

5.3 Based on Education Cross Tabulation

For the "to find employment" skills variable, most individuals in all education levels (lower, middle, and higher) believe that formal education provides them with the skills and training they need. However, there is a slightly higher proportion of individuals in the middle and higher education levels who hold this belief compared to those in the lower education level.

For the "to perform their jobs well" skills variable, a slightly higher proportion of individuals in the higher education level (49.3%) believe that formal education provides them with the skills and training they need compared to those in the lower and middle education levels.

For the "to start a business" skills variable, there is a similar proportion of individuals in each education level who believe that formal education provides them with the skills and training they need.

6. Discussion

Based on the results of the cross-tabulation between gender and skills variables in Iraq, the perception of the effectiveness of the formal education system in providing necessary skills and training varies between male and female respondents. The variance of gender on different aspects is consistent with another study by Begum & Ahmad (2021) where the opinion of males and females was significantly different on the economic values variables.

The authors suggest that gender bias and discrimination may contribute to such differences in perceptions. But the Chi square tests results in the acceptance of no difference based on gender of the respondents on the skills variables. This finding is not in consistent with a study by Abed & Begum (2023) where there was significant variance based on gender, age and education for the perception of people on the perception of science and technology, taking the data from the world values survey.

Overall, the findings of the current study suggest that the effectiveness of the formal education system in providing necessary skills and training is viewed differently by male and female respondents in Iraq. These findings are consistent with the previous study by Kavlu & Begum (2022) where a significant variance was found across different gender, ages, and education on the justifiability of parents beating children, taking the Iraq's data. Further research is needed to explore the underlying factors that contribute to such differences in perception and to develop strategies to address any existing gender biases and inequalities in education.

Furthermore, the study found that age was not significantly related to the necessary skills for employment, job performance, and starting a business. And that there was no significant relationship between education level and the necessary skills for employment, job performance, and starting a business.

The study also found no significant relationship between gender, age, education level, and skills variables, in terms of the ability to find employment, perform jobs well, and start a business. This suggests that the formal education system in Iraq is not biased in terms of gender, age, or education level, and that it provides people with the necessary skills and training to succeed in the job market regardless of their background.

The results of the present study suggest that gender, age, and education level are not significant predictors of the necessary skills for employment, job performance, and starting a business. These findings have important implications for policymakers, employers, and job seekers. Policymakers and employers should focus on providing job training and development programs to all individuals, regardless of their gender, age, or education level, to enhance their skills and improve their chances of obtaining employment and performing their jobs well. Job seekers should focus on developing their skills through continuous education and training to enhance their employability and job performance.

7. Conclusion

Based on the cross-tabulation of education level and skills variables in Iraq, as well as the additional analysis of gender and age, the following conclusion can be drawn:

Gender differences were observed in the perceptions of the relationship between education and skill development. Female respondents were more likely to agree that formal education provides people with the necessary skills and training to find employment and perform their jobs well, but there was no statistically significant gender difference in the perception of the relationship between education and starting a business.

Age was also found to be related to perceptions of the relationship between education and skill development, with younger respondents being more likely to agree that formal education provides the necessary skills and training compared to older respondents.

Education level is significantly related to the perception that formal education provides people with the skills and training they need to find employment, perform their jobs well,

and start a business. Respondents with higher levels of education were more likely to agree that formal education provided the necessary skills and training compared to those with lower levels of education.

Ultimately, it is concluded based on the analysis of the data from the seventh wave of the World Values Survey, all the null hypotheses were accepted. There was no statistically significant relationship found between the variables of gender, age, education levels, and skills required for finding employment, performing jobs effectively, or starting a business in Iraq. The Fleiss Kappa test shows a moderate agreement between the samples. However, the study highlighted that more than 53% of the respondents were dissatisfied with the formal education system's method of providing skills, suggesting a need for policy changes in skill development in Iraq. The findings contribute to a better understanding of the perceptions of the Iraqi people about formal education and skill development, which can help policymakers and organizations in designing effective strategies to address the skill gap problem.

These findings are consistent with the results of previous studies that have explored skill development in Iraq. For example, a report by (World Bank Group, 2018) found that the quality of education in Iraq is low, and graduates often lack the skills necessary to compete in the job market.

8. Recommendations

Based on the findings of this study, it is recommended that the government of Iraq increase its investment in formal education, particularly at the lower education level. This investment should be accompanied by efforts to improve the quality of education, in order to ensure that students are gaining the necessary skills and knowledge to succeed in the workforce. The government should also consider targeted programs to help bridge the gap in skills between different education levels, and to address gender and age disparities in education and employment opportunities.

Education ministry in Iraq must take more initiatives to strengthen the formal education system. One of the studies by Sherwani & Singh (2015), concludes that the ministry of

higher education has a very strong intension to strengthen the higher education in Kurdistan.

The Universities should play a major role in filling the skill gaps. For example, a study by Ali (2016), named "A Survey on Employability Skills of Business Graduate Students: A Case Study of Ishik University" examines how skill development is in progress in Erbil, Iraq. The study, which focuses on both technical and soft skills, uses a mixed-methods approach to investigate the efficacy of skill development programs at Ishik University, the present Tishk International University. Results show that the curriculum improves interpersonal, communication, and teamwork skills.

It is strongly recommended that Universities in Kurdistan Region and the Ministry work on Skill Iraq to reach the sustainable development goal 2030 as well as to improve the perceptions of the people that the education system is providing them with the required skills and knowledge to make them employable and self-reliant.

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