

Context of Saudi Arabia: Does Education Influence Effective Communication amongst Individuals?

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ABSTRACT

Education is critical for learning how to communicate with others. Through formal schooling, people learn the language (how to read and write) and interact with others in the same setting. One of the study's assumptions is that well-educated people communicate well, leading to better jobs and higher income. Another assumption is that communication skills improve with age due to the practicality of employing what has been taught on a daily basis, especially among professionals. An experienced medical doctor, journalist, or educator has enhanced communication skills compared to entrants within the same profession. Also, people with any formal career in the sector have better communication skills than illiterate individuals or those with elementary-level education. In Addition, the chance to apply one's skills can make a difference in people's communication skills in varying careers. For these reasons, respondents' level of education was analyzed with monthly income and work sector. The chi-square test was applied, and it was found that there is a significant relationship between the level of education and monthly income and age group but now work sector. One possible reason for the latter finding is that respondents' careers and professions were not specified. Despite these findings, there are variables to consider among individuals when assessing their education and communication skills such as their experience and whether they are self-taught.

1. Introduction

Education is mandatory for imparting knowledge about people and the world around them. Through education, people increase their chances of getting employed, running a business or engaging in any activity effectively. Communication is one area that requires education or training to be effective. Whether education influences and changes how people communicate should not be looked at in isolation because education is dynamic and continues to evolve. Currently, people are not just talking about face-to-face classroom education but digital education.

Moreover, education involves learning which can happen formally and informally through self-learning (Sharp, 2017). This study hypothesizes that education positively influences how

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people communicate because it increases understanding, vocabulary, and other communication skills, such as interpersonal skills, active listening, non-verbal communication, giving and receiving feedback, written communication, and presentation (Albalawi & Nadeem, 2020). However, it takes years to build these skills, as evidenced by the years taken to obtain an education. Therefore, someone who has spent years reading, writing, and speaking with others through training have a better chance of being effective than someone who has not received an education.

One of the variables to be studied is the correlation between the level of education and effective communication. However, as the literature review section will divulge, newly employed graduates struggle with effective communication. This suggests communication training, "soft skills", and continual practice. There is also the question of communication skills varying in diverse fields. In such cases, the evidence of the importance of education is shown in the outcome of how individuals interact in certain fields. For instance, highly educated people who consult doctors tend to be satisfied and ready to comply with doctors' advice because they comprehend the language and vocabulary used by doctors. However, those with low literacy skills struggle to understand what doctors communicate and have poor health and life outcomes. For this study, the education issue will not be judged on understanding English. However, it is theorized/speculated that this is the case even among people speaking the same language. The purpose of the research is to determine if education influences effective communication and this is done using people of varying education levels, of different work sectors and monthly incomes.

1.1. Study Significance

The study significantly highlights the importance of education in enhancing communication skills. In particular, this study targets students, teachers, and parents to provide empirical evidence about whether education is critical to developing soft skills. As a result, students are expected to value their education, put what they learn into practice, and try to attain even higher education as possible.

2. Literature Review

The literature review is driven by specific themes, namely the significance of education or high literacy level, whether education does enhance a person's communication skills, and fields or situations where this is apparent. The ultimate goal is to establish whether there is a correlation between the level of education and communication skills. The literature used in this review spans different timeframes/periods, and it was important to discover different findings since education remains relatively the same.

2.1. Significance of Education/High Literacy Levels

Education increases a person's literacy level, as argued in the studies used in this subsection. However, it should be noted that the dynamic nature of learning does not just constitute formal education obtained in schools and colleges but also self-learning. Therefore, self-learning for this study will be taken as or added to education since it involves learning. I start with this basic form of learning. A study by Pratibha (2017) found that self-learning activities such as reading, taking notes, engaging in conversations, and watching educational videos increased one's communication skills. However, this is only likely to be done consistently, whereby the learner is intentional about learning. The factors that make education an important process in garnering communication skills are that it allows for content skills and interpersonal relationship skills

(Bender, 1975). For instance, content skills enable one to express themselves adeptly, which aligns with other people's degree of comprehension. Thus, it goes beyond the ability to express oneself suitably and also considering other people's level of comprehension. This is evidenced in different fields, whereby others may misinterpret communication in those fields. For instance, a layperson communicating with nuclear physicists or a medical doctor may be confused with vocabulary specific to those fields. Thus, it would not be easy to understand what they mean unless one is educated. Both communicators should understand the meanings of the vocabulary used for communication to be effective.

The study by Morreale and Pearson (2008) explains that education is critical to students' personal and professional success. More than 90 journals, reports, and newspapers showed the centrality of education or learning in developing a person into a holistic and responsible social and cultural person. This was demonstrated in the fields of business and leadership (Morreale & Pearson, 2008). Effective communication, a concept variable used in this study, is described as accurate comprehension. It is significant for the communicator to share their ideas so that the recipient knows the content and general nature of the message. Education is in diverse forms through visual and oral learning, and written learning can help to gain communication skills that influence the entire communication, especially how it is received. Sharifirad et al. (2012) note that in the teaching process, only teachers' scientific stances and experiences are not transferred to students. No acquisition or behavioural change is exchanged during teaching or training unless the teacher creates a good relationship with the students (Sharifirad et al., 2012).

In one study, the role of education in developing communication skills has been referred to as communication education. Morreale and Pearson (2008) note that some themes support the role of communication education, and they include the growth of the entire person (self-development) through the enhancement of relationships with oneself, others and the general society; the enhancement of the educational enterprise as seen in classrooms and workplaces; creating a responsible person to the world (both socially and culturally) especially when it comes to an understanding the sensitivities that shape people socially and economically; and success in one's profession and the enterprise world and in creating upward mobility (Morreale & Pearson, 2008). However, the study does not look into how communication affects and influences families, a vital area of society, since important relationships are found in such setups. However, the study underscores that the capacity to communicate effectively is learned and, thus, can and should be taught. It mainly addresses key areas such as personal, educational and professional development (Morreale & Pearson, 2008).

The significance of education in influencing effective communication is witnessed in job interviews. In most cases, certain dos and don'ts are part of verbal and non-verbal communication that interviewers should display (Sharp, 2017). Pratibha (2017) argues that communication skills are necessary for most careers. Therefore, employers try to identify communication as one of the basic qualifications for each graduate - because it can cause one to be hired and lead to a successful career. The author also notes that oral and writing skills are necessary for a work environment, such as communicating with peers in teams and workgroups with people of different backgrounds (Pratibha, 2017).

The level of education of a communicator also matters, and this is one of the areas investigated in this study. Sabbah et al. (2020), whose study explored communication skills (listening, speaking, understanding, and emotional skills) among undergraduate students, found that college students were adept in three skills, namely listening, speaking and understanding. The same study divulged that there was no considerable difference in communication skills regarding gender, faculty and academic year (Sabbah et al., 2020). The study by Reith-Hall

(2022) also found that relationships among college students influenced their academic outcomes greatly, especially when exchanging ideas and experiences. Moreover, enhanced communication skills can positively affect the student's personality and academic achievement (Reith-Hall, 2022).

The significance of education in developing people's communication skills is yet again seen in personal and professional outcomes. The US National Work Group of Literacy and Health (1998) investigated the link between literacy and health. At the time, the study established that some citizens (about 43 million) had rudimentary literacy skills and could not comprehend written content that required only basic reading competence. The study concluded that poor reading skills were linked to poor health among the sick and poor life outcomes, especially if no simple and non-written material is appropriate for low-literacy levels (The National Work Group on Literacy and Health, 1998). Sharp (2017) notes, as regards education, that basic concepts highlight the significance of education as a tool for improving communication skills, namely teaching, which entails modelling and demonstrating, as well as learning, which entails practising and considering information obtained.

Chambers and Radbourne (2015) note that high literacy levels are important because they indicate a person's ability to read, write, and speak, guaranteeing effective communication with others and the environment. However, when individuals lack the necessary literacy skills, they will likely suffer daily difficulties in school, the workplace, and society because of incoherence, misinterpretation and misunderstanding. Thus, gaining high literacy skills enables people to think critically, understand intricate issues, and appreciate reading, writing, and communicating with others (Chambers & Radbourne, 2015). Confidence while communicating can be obtained through education and training due to the skills one imparts to what one already has (Helyer, 2011).

2.2. Does Education Improve Communication Skills

The previous section explored the significance of education and training in enhancing one's communication skills; this section explores whether education does improve communication skills. A study by Nuland et al. (2017) about literacy levels among patients found that highly educated patients had better ratings regarding therapy compliance, clinical consultation understanding, symptom resolution, and physiological measures such as hypertension and blood sugar control. The same study also found that advanced communication skills were linked to improved outcomes, compliance with a doctor's advice, patient satisfaction and better healthcare (Nuland et al., 2017). However, education cannot be taken as a face-to-face event as digital education is here. The study by Kway et al. (2019) found minimal evidence indicating that digital education was as effective as traditional learning in improving medical students' communication skills. This finding provides a contrary view of the significance of education, but because it is the area of digital education, which needs further exploration. Here, digital education applies to virtual reality and mobile learning - remote learning requires digital devices and the internet.

To understand whether education improves communication skills, one has to assess the effects in critical and practical places such as the school and workplace. For example, Chambers and Radbourne's (2015) study established that education in producing graduates to fill the job market centres on academic attainment and soft skills necessary in a competitive world. Moreover, employers currently emphasize soft skills and personality when selecting recruits (Chambers & Radbourne, 2015). The authors further add that since communication /soft skills are crucial to employment, graduates should seek opportunities in activities that enable them

to develop their communication skills in a broader form so that such skills can be fully developed, especially when it comes to oral and written skills (Chambers & Radbourne, 2015).

The study by Sonnenschein and Ferguson (2020) found that employers claim that the most significant attributes required of a graduate in the present work are interpersonal and soft skills that can be gained through education or training. The authors further mention that students expect colleges to provide degree programs that adequately prepare them for work. In contrast, employers expect graduates to transition efficiently to high performance in their professions. Arguably the single-most important distinguisher is one's ability to communicate with others. Communication will be an integral part of one's life and career, and the ability to persuade or avoid misunderstanding can be made by having communication skills (Sonnenschein & Ferguson, 2020). Dauber and Spencer-Oatey (2023) agree with Sonnenschein and Ferguson's argument when they state that communication skills are one of the most sought-after skills by employers, as shown by industry reports. However, the same report also shows employers are dissatisfied with new graduates' communication skills in culturally diverse organizations, perhaps indicating the need to practice and apply what has been taught (Dauber & Spencer-Oatey, 2023). The study concluded that for new graduates to apply their communication skills successfully, they needed to come out of their comfort zone and interact with a diverse college or work community. This shows that obtaining an education or training in communication skills is insufficient, but practicing what is learnt is even more important.

As earlier pointed out, it should also be noted that different industries require different communication skills. For instance, the service industry and professions such as nurses and caregivers require advanced interpersonal communication skills. In addition, the language and vocabularies used in different industries vary. Wahyu et al. (2019) found that written communication skills vary across different sectors. Thus, it is not easy to identify generic communication skills required in a specific job. The same study found that while communication skills are important, they are the least developed in graduates, especially written communication and interpersonal skills, even though they were mandatory courses in the syllabus (Wahyu et al., 2019). This highlights the need to train in communication skills and put the learnt skills into practice. Wahyu et al. (2019) study also found that speaking skills should be trained regularly to enhance conversational skills so that students are encouraged to discuss more and share opinions. Also, speech and reading comprehension skills should be maximized to master language literacy (Wahyu et al., 2019).

Helyer (2011) found that higher education makes graduates (of all levels) well-informed and responsive to situations and opportunities. Moreover, higher education provides students opportunities to develop skills, and most have export efficiency ability - meaning that they can work in geographical locations or countries other than their own.

3. Methodology

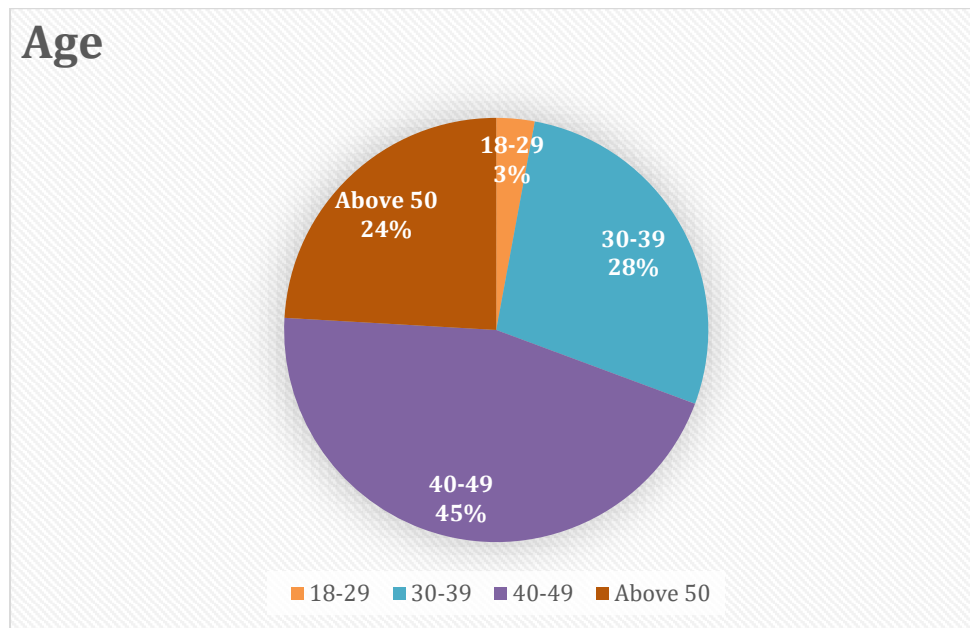
The study employed quantitative study in the form of descriptive statistics and inferential statistics. The participants, from Saudi Arabia, had mixed demographic variables such as age, gender, and education levels that formed the categorical variables of the study. Specifically, five categorical variables (independent variables) were used for measurement: age, gender, level of education, monthly income, and work sector.

3.1. Research Design

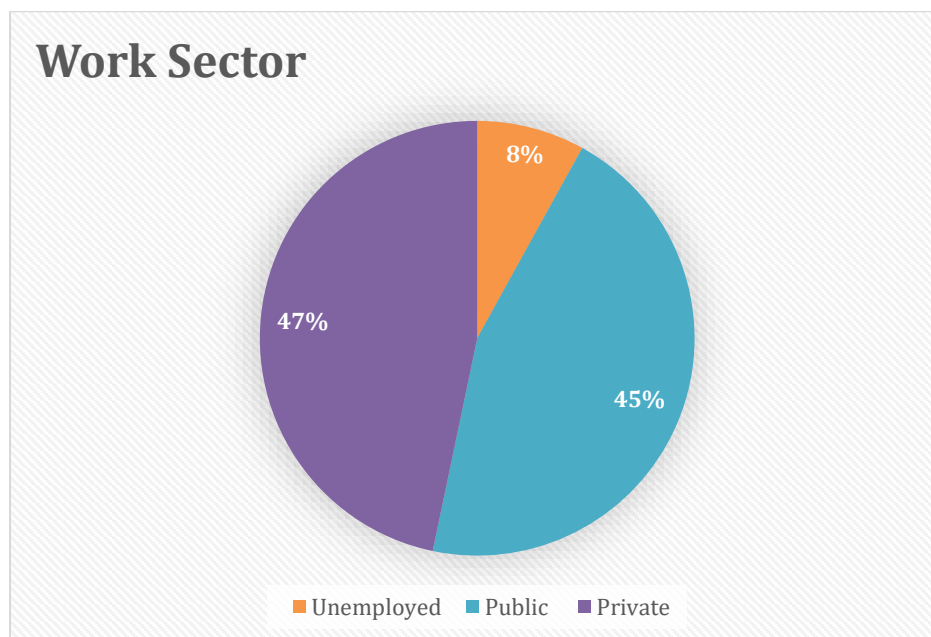
The study applied the chi-square test to measure different categorical variables linked to higher education. For instance, we wanted to determine if there was an association between level of education and monthly income and work sector. As mentioned earlier, one assumption was that people who are well-educated communicate well and tend to get employed and earn higher. Each of the test formulated a null hypothesis that was tested as will be seen.

3.2. Participants

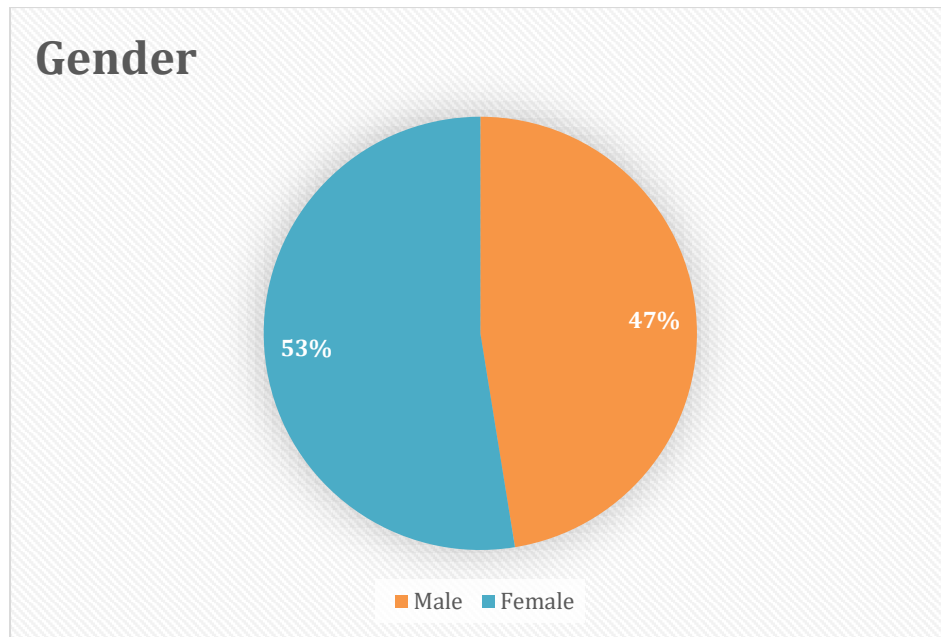
The total number of participants was 137. These participants comprised individuals of both genders, diverse age-group (what would be considered working-class), different levels of education, diverse monthly incomes, and work sectors as represented in the below pie charts.



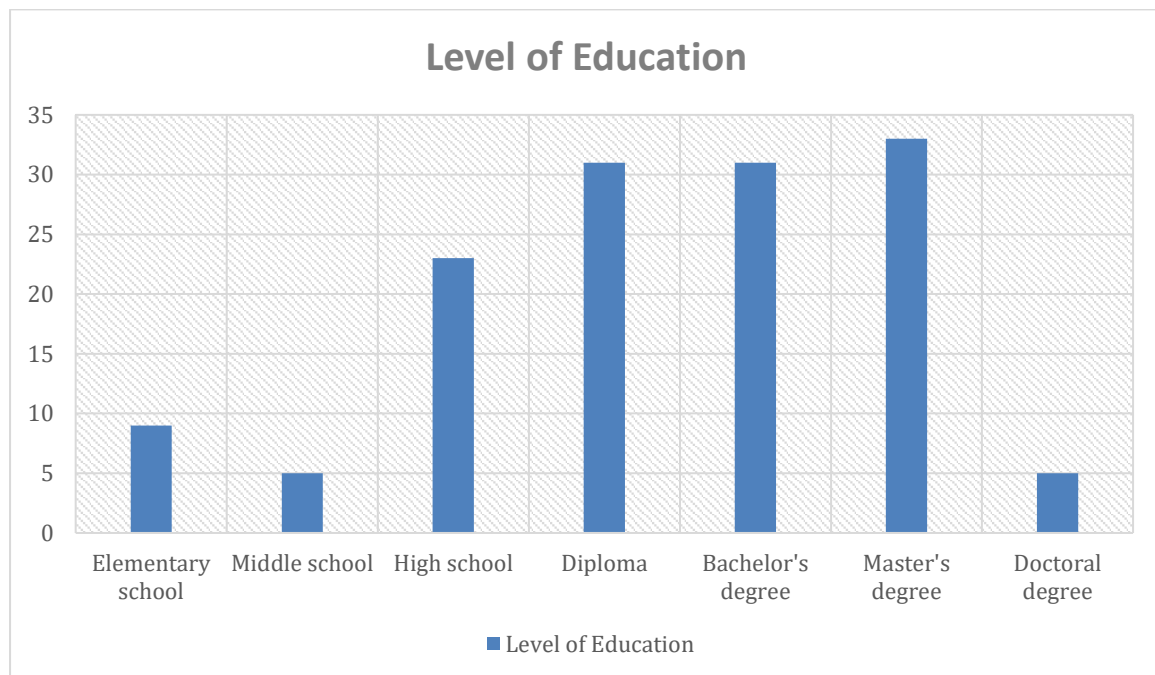
(a)



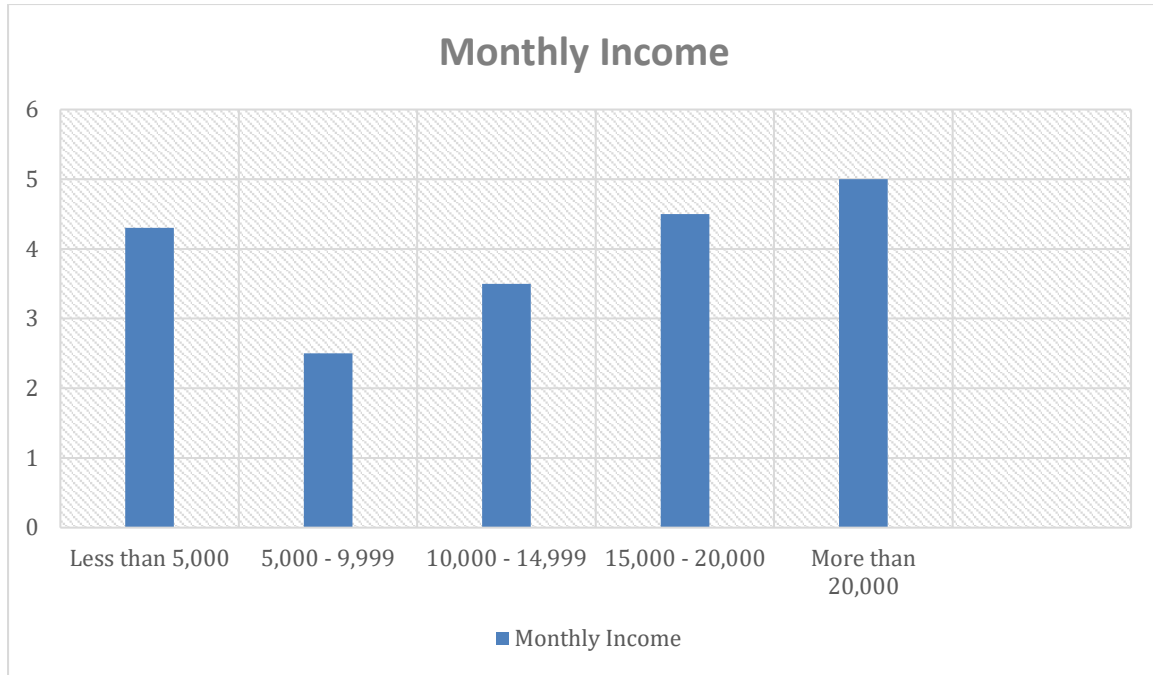
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(d)



(e)

Figure 1. Characteristics of the participants

Table 1.

Illustrates the various attributes of the categorical variables

Categorical variable	Attribute	Frequency	Percentage
Gender	• Male	65	47%
	• Female	72	53%
Age	• 18-29 years	4	3%
	• 30-39 years	38	28%
	• 40-49 years	62	45%
	• Above 50 years	33	24%
	• Elementary school	9	6%
Level of education	• Middle school	5	4%
	• High school	723	17%
	• Diploma	31	22%
	• Bachelor's degree	31	23%
	• Master's degree	33	24%
	• Doctoral Degree	5	4%
Monthly income (SAR currency)	• Less than 5,000	26	20%
	• 5,000 – 9,999	29	21%
	• 10,000 – 14,999	48	34%
	• 15,000 – 20,000	29	21%
	• More than 20,000	5	4%
Work sector	• Unemployed	11	8%
	• Public sector	62	45%
	• Private sector	64	47%

3.3. Data Collection Tool

A survey was conducted using a structured questionnaire. The questionnaire was distributed online through emails and social networks like Facebook, LinkedIn and Twitter. The

respondents were notified of the date and time to participate. They were also initially told about the purpose of the study.

3.4. Sampling Procedure and Sampling Size

The study used purposive sampling, which made it possible to identify suitable cases such as the work sector, education level, and monthly income. The initial target number of the study was 160, but it got a sample size of 137. The questionnaire was distributed on Monday and Wednesday between 9 am and 11 am since it was presumed that this was working time and the respondents would be available. The participants availed themselves as agreed.

4. Results

4.1. Chi-Square Analysis

The Chi-Square test was used to test the categorical variables, namely level of education, age group and work sector, to determine whether they are independent or related. This would ultimately test the proposed hypothesis in each case, as shown below. The level of education was measured against the other two variables because it was constant given that the main object of the study is to determine the effect of education level on communication skills and, hence, employability. Some studies mentioned in the literature review found that enhanced communication skills can positively influence an individual's personality, academic achievement, and career outcome (Reith-Hall, 2022; Sabbah et al., 2020). The results show that the level of education has a significant association with monthly income and age group but not the work sector.

The formula for Chi-Square was used to get the observed and expected frequencies and statistical software was employed to get the final analysis:

$$X^2 = \sum (\text{Observed Value } (O_i) - \text{Expected Value } (E_i))^2 / \text{Expected Value } (E_i) \quad (1)$$

4.1.1. Level of Education and Monthly Income

H0: There is no significant association between level of education and monthly incomes.

Table 2.

Observed frequencies

Level of Education	Monthly Income					Grand Total
	10,000 – 14,999	15,000 – 20,000	5,000 – 9,999	Less than 5,000	More than 20,000	
Bachelor's degree	15	6	7	2	1	31
Diploma	12	2	8	8	1	31
Doctoral Degree		1		2	2	5
Elementary school	1	1	1	6		9
High school	9	3	8	2	1	23
Master's degree	11	15	4	3		33
Middle school		1	1	3		5
Grand Total	48	29	29	26	5	137

Table 3.
Expected frequencies

	10,000 – 14,999	15,000 – 20,000	5,000 – 9,999	Less than 5,000	More than 20,000	Grand Total
Bachelor's degree	10.861313	6.5620437	6.5620437	5.8832116	1.1313868	31
Diploma	10.861313	6.5620437	6.5620437	5.8832116	1.1313868	31
Doctoral Degree	1.7518248	1.0583941	1.0583941	0.9489051	0.1824817	5
Elementary school	3.1532846	1.9051094	1.9051094	1.7080291	0.3284671	9
High school	8.0583941	4.8686131	4.8686131	4.3649635	0.8394160	23
Master's degree	8.0583941	6.9854014	6.9854014	6.2627737	1.2043795	33
Middle school	1.7518248	1.0583941	1.0583941	0.9489051	0.1824817	5
Grand Total	48	29	29	26	5	137

P-Value = 0.0000251

$0.0000251 < 0.05$

H0 is rejected: There is a significant association between the level of education and monthly income.

4.1.2. Level of Education and Age Group

H0: There is no significant association between level of education and age group.

Table 4.
Observed frequencies

Level of Education	Age Group				Grand Total
	18-29	30-39	40-49	above 50	
Bachelor's degree	1	7	17	6	31
Diploma	1	8	17	5	31
Doctoral Degree			3	2	5
Elementary school		3	2	4	9
High school	2	9	5	7	23
Master's degree		8	16	9	33
Middle school		3	2		5
Grand Total	4	38	62	33	137

Table 5.
Expected frequencies

	18-29	30-39	40-49	above 50	Grand Total
Bachelor's degree	0.905109489	8.59854	14.0292	7.46715328	31
Diploma	0.905109489	8.59854	14.0292	7.46715328	31
Doctoral Degree	0.145985401	1.386861	2.26277	1.20437956	5
Elementary school	0.262773723	2.49635	4.07299	2.16788321	9
High school	0.671532847	6.379562	10.4088	5.54014599	23
Master's degree	0.96350365	9.153285	14.9343	7.94890511	33
Middle school	0.145985401	1.386861	2.26277	1.20437956	5
Grand Total	4	38	62	33	137

P-Value = 0.637253965

$0.637253965 > 0.05$

H0 is accepted: There is a significant relationship between the level of education and age group.

4.1.3. Level of Education and Work Sector

H0: There is no significant association between the level of education and the work sector.

Table 6.
Observed frequencies

Level of Education	Work Sector			Grand Total
	Private Sector	Public Sector	Unemployed	
Bachelor's degree	15	14	2	31
Diploma	16	13	2	31
Doctoral Degree	3	2		5
Elementary school	3	3	3	9
High school	11	10	2	23
Master's degree	16	17		33
Middle school		3	2	5
Grand Total	64	62	11	137

Table 7.
Expected frequencies

	Private Sector	Public Sector	Unemployed	Grand Total
Bachelor's degree	14.48175182	14.02919708	2.489051095	31
Diploma	14.48175182	14.02919708	2.489051095	31
Doctoral Degree	2.335766423	2.262773723	0.401459854	5
Elementary school	4.204379562	4.072992701	0.722627737	9
High school	10.74452555	10.40875912	1.846715328	23
Master's degree	10.74452555	14.93430657	2.649635036	33
Middle school	2.335766423	2.262773723	0.401459854	5
Grand Total	64	62	11	137

P-Value = 0.116720965

0.116721 > 0.05

H0 is accepted: There is no significant association between the level of education and the work sector.

5. Discussion

The findings indicate a significant relationship between the level of education, monthly income, and age group. However, there is no correlation with the work sector. Regarding monthly income, the chi-square test shows that two people with a doctoral degree, one with a master's and bachelor's degree, and one with a high school certificate earned more than 20,000. Most respondents earning less than 5,000 had elementary-school level education and diplomas. Generally, those with a Bachelor's degree and higher education earned more. One of the assumptions of this study is that those with advanced higher education have enhanced communication skills compared with low-level education respondents. Thus, higher education leads to improved communication skills that increase employability and earnings. However, for the fewer cases of individuals (five of whom had elementary, middle school, and high school education) having lower-level education and earning between 15,000 – 20,000 SAD, this could have different explanations, one of which was suggested earlier that education can also be self-taught (Sharp. 2017).

There was also a significant link between the level of education and age groups. One of the assumptions of this study is that those below 25 years had minimal education compared to their counterparts of other age groups, as indicated by the chi-square analysis. As the age group increased, so did the number of respondents (30-39 years – 38 and 40-49 years - 62). However, this ceased after the age of 50 years, possibly due to retirement. Also, those with doctoral

degrees were among those aged 40 and above. Thus, an assumption was made that older individuals with higher education have better communication skills than younger people. As noted in the literature review, newly employed graduates struggle with effective communication (Helyer, 2011). This suggests that communication training of soft skills is a continual practice. As mentioned earlier, a survey revealed that employers are not happy with recent graduates' ability to communicate in culturally diverse workplaces, which may mean that students need to put their lessons into practice (Dauber & Spencer-Oatey, 2023). The study concluded that for recent graduates to apply their communication abilities successfully, they needed to step outside of their comfort zone and engage with a diverse student body or workplace (Dauber & Spencer-Oatey, 2023). This demonstrates that learning communication skills through education or training alone is insufficient—practicing what is learned is far more crucial.

However, there was no significant relationship between the level of education and the work sector since all levels of education were scattered across the different sectors. For instance, master's degrees were equally concentrated in the private and public sectors. The unemployed comprised those with bachelor's, elementary, and diploma levels. This indicates a possible limitation of not specifying the careers or professions which would have been suitable for this case. For instance, an option of career such as medicine, journalism, law, manager or clerk would have helped us understand the level of education – since the careers require different degree of education. Probably, this would also have correlated with monthly income since medical physicians generally earn higher than clerks. Therefore, for this study we did not establish whether the people were doctors or clerks. Also, it is not unusual to find lay business people earning more than 20,000 SAR. Moreover, experienced professionals tend to earn more than entrants. This study did not specify and it can be assumed that a manager who supervises people in a five-star hotel can earn higher than an entrant in the medical fields. These assumptions should have been considered and can help explain the findings.

6. Conclusion & Limitations

In summary, education influences one's communication skills, ultimately increasing one's employability and earning potential. This study found what has generally been assumed that well-educated people communicate well and have better jobs in notable sectors such as law, medicine, journalism, and education. The study analyzed categorical variables that would confirm this: education level, monthly income, and work sector. There was a significant relationship between the level of education and monthly income as well as age group to confirm that enhanced communication skills are obtained through education (formal or informal) and experience. In the work sector, a limitation existed whereby the sector or career was not specified to determine differences, providing an area for further research. We could not tell in this study whether the respondents have applied their training in career spaces because it is possible to have advanced education and not be employed in one's area of training or be unemployed (this affected the work sector results since some highly educated people were not employed). The resounding theme in this study as related to education is the need to apply what has been trained.

Similar to other studies, this study had its limitations and some have been mentioned through the course of writing the study report. Foremost, the study should have considered critical factors such as respondents experience or lack of experience when it comes to work as well as different sectors so that we can know which sectors have variations. This would have helped to further explain any correlation with work sector and monthly income. We note that one's education may be advanced but lack of practice in that area can render someone inept

communication-wise. Second, it had a minimal sample size for statistical measurement that could make generalization more accurate. Finally, there were minimal research studies, especially those focusing on Saudi Arabia so we focused on studies from other regions as a result.

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Appendix

Questionnaire

The Communication Questionnaire

For each statement, click the button in the column that best describes you. Please answer questions as you are (rather than how you think you should be).

	Not at all	Rarely	Sometimes	Often	Very often
	1	2	3	4	5
1. I try to anticipate and predict possible causes of confusion, and I deal with them up front.					
2. When I write a memo, email, or other document, I give all of the background information and detail I can to make sure that my message is understood.					
3. If I don't understand something, I tend to keep this to myself and figure it out later.					
4. I'm surprised to find that people haven't understood what I've said.					
5. I can tend to say what I think, without worrying about how the other person perceives it. I assume that we'll be able to work it out later.					
6. When people talk to me, I try to see their perspectives.					
7. I use email to communicate complex issues with people. It's quick and efficient.					
8. When I finish writing a report, memo, or email, I scan it quickly for typos and so forth, and then send it off right away.					
9. When talking to people, I pay attention to their body language.					
10. I use diagrams and charts to help express my ideas.					
11. Before I communicate, I think about what the person needs to know, and how best to convey it.					
12. When someone's talking to me, I think about what I'm going to say next to make sure I get my point across correctly.					
13. Before I send a message, I think about the best way to communicate it (in person, over the phone, in a newsletter, via memo, and so on).					
14. I try to help people understand the underlying concepts behind the point I am discussing. This reduces misconceptions and increases understanding.					
15. I consider cultural barriers when planning my communications.					