The Impact Of The Coronavirus Pandemic On Sign Language Interpreters' Economic Conditions And Social Relationships

Dareen Abed Al Fattah Khlaifat

Assistant Professor at the College of Education, Department of Special Education, Imam Abdurrahman bin Faisal University.

Abstract

This study aimed to investigate the impact of the Coronavirus pandemic on "changing the nature of work, social relations, economic conditions, and technology use among Arab sign language interpreters". To achieve this purpose; an e- questionnaire was prepared, verifying its validity and reliability, and was applied to (115) sign language interpreters in a number of Arab countries. The results of the study showed a negative impact of the Coronavirus pandemic on changing the nature of work, economic conditions had a high degree, social relations, and the use of technology in remote interpreting to a moderate degree.

The results also indicated that there were no statistically significant differences at the level of significance ($\alpha \le 0.05$) in the effects of the Coronavirus pandemic on changing the nature of work, economic conditions, social relations, and the use of technology in remote interpreting. Depending on the gender variable, the number of years of experience of the sign language interpreter, the scientific qualification of the sign language interpreter, or the variable of the presence of a deaf relative to the interpreter.

Keywords: (Coronavirus pandemic, sign language interpreter, changing nature of work, social relations, economic conditions, use of technology in remote translation).

Introduction

Study background

Coronavirus spread in the world with the beginning of the year (2020), which affected all areas of life, including work, social relations, economic decline and income resources, and this effect extended to reach various work sectors, including the sign language translation sector for the deaf, which depends on the translator transferring information to and from Deaf people through the use of gestures, facial expressions, lip and body movements, and in view of the need for deaf people to communicate with the external community, which is the vast majority of listeners; They rely on the services of the sign language interpreter to do so, which contributed

to increasing the pressure and burden on translators. Therefore, the study of the impact of the Corona pandemic on sign language interpreters for deaf Arabs came in terms of the impact on the profession, and the change it caused in the nature of work, and its impact on their social relations, And the economic conditions that sign language translators have suffered due to the Corona pandemic and what it imposed on them to use technology to work remotely.

Corona Pandemic (Covid-19):

The (World Health Organization) indicated that the disease appeared at the end of (2019) in China and then considered it a pandemic and a global epidemic in (2020), and the virus is transmitted when contact between individuals through respiratory droplets resulting from sneezing or coughing, and its symptoms include fever, coughing, and shortness of breath, Loss of the sense of taste and smell, and for prevention, hands must be washed, mouth covered when coughing, maintaining adequate distance between individuals, and wearing masks in public places. The response of authorities around the world included many measures such as imposing restrictions on air traffic, applying general closures, and setting controls, occupational hazards, isolation, and facility closures.

The effects of the Corona pandemic were reflected on the economic side due to the precautionary measures taken by the countries to confront and besiege the disease through: imposing comprehensive and partial bans, this disrupted commercial activity, stopped investment activities, imposed a state of emergency in the health sector, increased spending on prevention and health care, and prevented people from gathering in public places. As for the social aspect, tension has escalated in the community due to the lack of official information - especially at the beginning of the refugee - about the epidemic and the absence of appropriate treatment for it, and rumors have spread about the disease, the spread of social panic, and the increase in serious social consequences, especially for marginalized individuals in society due to the quarantine. (Abdul Majeed, 2020).

The effects of the Coronavirus pandemic also affected the education sector in general due to the shift from direct education in schools and universities to distance education, including education and training for people with special needs in general and those with hearing disabilities in particular. Communication with them depends on sign language interpreters, as hearing disability limits the individual's ability to access and process information, and negatively affects verbal communication, which leads to the

learning process and individual isolation, so the deaf person searches for individuals who can communicate and interact with them. (Kirk, Gallagher, Coleman, and Anastaiow, 2013), hence the need for a sign language interpreter for the deaf, who is often defined as a person who transmits ideas, information and feelings to and from the deaf person, and facilitates his communication with the surrounding community. (Cawthon, 2001)

The nature of doing sign language translation involves great challenges and pressures, such as carrying out atypical duties that require constant interaction with people, an effort to satisfy customers' desires, additional work outside work time, and the struggle between performing work requirements and family duties. (Maher, 1986). Therefore, work pressure arises, which is defined by the National Institute for the Study of Health and Safety as the physical and psychological harm that befalls an individual when the job requirements do not match his abilities and needs at work (Khattina, 2011). For example, a sign interpreter conducts language survev assessment of language needs, cultural background and communication preferences for all parties, and this evaluation begins before the assignment by gathering information about the content, objectives, environment of the venue, and the background of the participants, which helps the translator prepare better. (Webb & Napier, 2015)

For successful translation, translators must work in the community within a team and respect diversity, beneficiaries and colleagues, and confidence that the translator will keep the knowledge acquired during translation in strict professional secrecy. (Stein, Schmidt, and Ney, 2012), so the profession of sign language translation poses limitations in terms of Responding to job demands other than linguistic demands, interviews and surveys of job satisfaction, stress and fatigue in the field of

translation into reference language indicated high rates of fatigue among translators due to job dissatisfaction, stress, fatigue, frustration with lack of professional support, high demand for translation and low numbers (Dean & Pollard, 2001, 2005).

Remote translation is provided mainly by relying on technology using modern devices and various applications such as: video calls and social networking sites, making it easier for translators to work remotely when needed, and deaf people see technology as a means for them to live in the culture of the listeners (Leigh, Andrews, & Harris, 2018). Social media sites allow deaf people to find each other and stay in touch, so they are of great importance for deaf individuals (Stander & McIlroy, 2017); Although significant progress has been made in machine translation between spoken languages, sign language is a multidimensional form of communication based on both manual and nonmanual signals that present additional challenges in computer vision (Asteriadis, Caridakis, and Karpouzis, 2012). The manual signals used in front of photography differ in different place and time, as two sequences can be executed using the same signals at different speeds, with facial gestures and expressions of different shapes and sizes or in different positions of the camera (Morrissey, Somers, Smith, Gilchrist, and Dandapat, 2010). The sheen of shooting video is the difficulty and handling of sign language, which is often limited in size and vocabulary (Stein, Schmidt, and Ney, 2012).

There is a clear dearth of studies related to the subject of translators and their lives in general, and on the impact of the Corona pandemic on sign language interpreters in particular, but there are some studies that talk about the pressures of the work of the sign language translation profession. Dickson and Yates (2020) conducted a study on the experience of children and youth with disabilities and their families during the COVID-

19 pandemic, and the results indicated a wide range of impacts, including lack of access to essential products for children and youth. People with disabilities, such as special food products and hygiene products, poor access to basic services, the cancellation of support and educational programs, the problem of school closures and the challenges of learning from home, and a general lack of information about the disease, and the results also indicated concern about family income.

As for (Ashwi, Taibi, and Samir, 2019)study, it aimed to identify the sources of work pressure among educational assistants working in middle and high schools in Algeria, and the results of the study showed that educational assistants suffer from high professional pressure at work, the most important sources of which are: poor incentives, task pressure, lack of control, poor feedback, workload, conflict and ambiguity of the role, and the results of the study showed that there were no statistically significant differences in perception of sources of work stress attributed to the gender variable, except for the two dimensions of task stress, lack of control which is in favor of females, and the work system change with the exception of a dimension of poor performance feedback, which is for the benefit of the internal system employees.

In (Al-Turki, 2017) study, which aimed to identify the difficulties facing sign language translators for the deaf in Saudi Arabia from their point of view, in which the descriptive approach was used on a sample of (19) sign language interpreters in some governorates of the Kingdom using a special questionnaire, the results showed that the main difficulties facing translators respectively professional are isolation, difficulties, difficulties in training rehabilitation, psychological difficulties, physical and health difficulties, and the most prominent advantages for translators are a community

service for the deaf, while the negatives are the unpaid material return.

Webb & Napier (2015) presented a preliminary research on the experiences of sign language interpreters, job demands, and job resources in four countries, namely Australia, Canada, the United Kingdom and the United States, where work demands were identified as the main causes of fatigue leading to poor health and negative outcomes. The participants in this study indicated that there are challenges in their personal lives due to the overlap of continuous professional responsibilities such as managing the demands of their work with personal factors and family obligations, and the participants indicated that it is difficult to meet the requirements of work when the officials did not understand the nature of the profession of sign language interpreting or the complete role of a sign language interpreter, where a lack of supportive management may affect the performance and work of interpreters in general, translators have described financial resources as the main structural backbone of translation programs.

In Donner's study (2012) which he conducted on a number of sign language interpreters and some deaf students, the results showed that translators face high physical and cognitive pressures such as muscle disorders and psychological vulnerability, and that translators with longer experience and those who worked in translation at a younger age are less exposed to pressure. As a result of experience and compatibility with the profession from those with less experience and who started working in translation at an older age.

Schwenke, Tomina CI and CT, 2012 also conducted a study to uncover burnout among translator groups, using social support and latitude as potential influencing factors. A sample of 117 translators who attended the biennial register of interpreters for the 2009 National Conference of the Deaf participated in the study.

Demographic factors, variables of occupational stress and burnout levels were measured. A regression method was used for statistical analysis. This sample reported the average levels of the three components of fatigue, which include Emotional exhaustion, depersonalization, and personal achievement.

Qin et al. (2008) conducted a study aimed at investigating the pressures that sign language interpreters face for the deaf. The results indicated that the higher the physical pain in the wrist and back of the translators, the greater the pressure on them, and as a result of physical fatigue weakened control over sign language. Its speed and the signal unit used.

Commenting on previous studies:

It is concluded from the presentation of previous studies that there is a clear lack of studies that examine the life of sign language interpreters in all its fields (socially, economically, professionally, and in terms of the nature of work). However, there are studies that talk about the Corona pandemic and its impact on the field of special education, such as the study of Dickinson, & Yates, 2020).

And some studies that talked about work pressures such as (Ashwi, Taibi, and Samir, 2019) study, including work pressures for sign language interpreters, such as (Qin et. Al. 2008) study and (Schwenke, Tomina CI and CT, 2012) study. The researcher believes that the studies were dealing for work pressures and did not take into account other areas such as economic conditions and social relations, while this study is distinguished from others as it examines the impact of the Corona pandemic on Arab sign language translators in terms of changing the nature of work, economic conditions, social relations, and the use of technology in remote translation.

The study problem and its questions:

The translation profession for sign language for the deaf is a challenge and a great burden for its practitioners, in terms of training, preparation, and raising the efficiency of providing accurate translation for the deaf, in addition to the increasing burdens and pressures of work because of dealing with a group of people with special needs, there is no way to communicate with them except through sign translation, and Corona Virus pandemic has imposed new challenge on sign language translators after the shift from direct education in the institution, to distance education made it difficult for sign language ,which translators in their work in translation via electronic media that led to an increase in the burdens and pressures of life on the sign language interpreter, due - according to the researcher's careful observation and the opinions of fellow translators - to a change in the nature of work and increased pressure on translators as an essential element in transferring information to the deaf, and providing various services in light of this pandemic and under its multiple controls: lock downs, social distancing, home quarantine and others, which increased psychological, social and economic burdens, and great difficulties in translating via electronic media. The problem of the current study is to reveal the impact of the Corona pandemic on sign language interpreters by trying to answer the following study question: The impact of the Coronavirus pandemic on sign language interpreters' economic conditions and social relationships.

Study questions:

This study attempts to answer the following two questions:

- 1. What is the impact of the Coronavirus pandemic on "nature of work, economic conditions, social relationships, and using technology" of sign language interpreters?
- 2. Do the impact of the Coronavirus pandemic on "nature of work, economic conditions, social relationships, and using technology" of

sign language interpreters differ according to the variables of "gender, years of experience, academic qualification, nature of work, and the presence of deaf relatives of the translator"?

The importance of studying:

The importance of the theoretical study is to shed light on sign language translators, their economic problems, their social lives and their work in remote translation in light of the Corona pandemic, and to identify the difficulties and challenges facing their work, and the changes that affected their social life and their communication with the deaf through electronic media, as this study is one of the rare studies - according to the researcher's knowledge - that examined the work of sign language interpreters as an important category in the education sector in light of the Corona pandemic. It deals remotely with a category of special education that has no way to communicate with it except through a sign language interpreter.

As for the practical importance, it is to raise the level of community awareness of the importance of this profession and try to understand the nature of the work of sign language translators and facilitate their work in the future, and avoid errors and problems resulting from the Corona pandemic, which may extend its period of time and be repeated in the future with another pandemic.

Limitations of the study:

This study was applied several months after the start of the global Corona pandemic, in order to give the results more credibility about the impact of the Corona pandemic on translators, in view of the difficulty of movement and the imposition of a blanket ban in many countries and the difficulty of accessing translators, the study tool (the questionnaire) was used remotely through WhatsApp, Messenger and Facebook applications and posted on social networking

sites for sign language translators, their personal pages, Facebook groups, and others.

Study's procedural Definitions:

Corona pandemic (Covid-19): A continuous global pandemic that began to spread in the Chinese city of Wuhan at the end of 2019 AD and was officially declared by the World Health Organization that it had formed a public health emergency, then turned into a global pandemic at the beginning of 2020 AD, and it resulted in what More than ten million people have been infected around the world and have influenced all areas of professional, social, economic, technological and telecommunications life.

- Sign language interpreter for the deaf: they are the people (male and female) who work in sign language translation by transferring information to and from deaf people. They are qualified persons who have accreditation certificates and licenses to work as sign language interpreters in the Arab world.
- The nature of the work: the way the job is performed, the general environment for it, the duties of the individual in a particular profession, and the physical effort that the translator exerts to achieve a job in order to benefit him financially.
- **Social relations**: the translator's relationship with his family, friends, relatives and colleagues at work, in terms of communication, interaction and cooperation.

- Economic conditions: the material income for the translation profession, its sufficiency for the requirements of life, and how to obtain material income and how easy it is to obtain it.
- The use of technology in remote translation: tools, equipment and applications used by translators to convey information to deaf individuals during the Corona pandemic and the associated work difficulties.

Method and procedures:

Study methodology

In light of the objectives of the study and its questions that is trying to answer, the researcher used the descriptive approach, which is based on describing the impact of the Corona pandemic on sign language interpreters, using a questionnaire specially prepared for this study.

Study personnel:

The study included (115) sign language translators of Arabs, in light of number of study variables, and an electronic questionnaire was sent to them via electronic link, in coordination and cooperation with associations, institutions and official social media groups for translators. Table No. (1) Shows the distribution of the sample according to the main variables in the study.

Table No. (1) Distribution of t	the sample according to t	he main variables in the study
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Variables	Variable levels	number	percentage	Cumulative
				percentage
Sex	Male	43	37.4	37.4
	Female	72	62.6	100.0
	Total	115	100.0	
Years of Experience	- 5 years	26	22.6	22.6
	5-10 years	28	24.3	47.0
	11-15 years	13	11.3	58.3
	16-20 years	14	12.2	70.4

	+ 20 years	34	29.6	100.0
	Total	115	100.0	
Qualification	Secondary and lower	14	12.2	12.2
	Intermediate diploma	19	16.5	28.7
	BA	44	38.3	67.0
	MA	32	27.8	94.8
	PhD	6	5.2	100.0
	Total	115	100.0	

Study tool

The researcher reviewed the theoretical literature related to the professional competence of sign language interpreters and their self-efficacy, the obstacles of their work as translators with the deaf, the challenges that faced their work in light of the crises, the challenges of working with remote translation through electronic media and the pressure of work due to its nature and economic resources such as the study of Qin et. (al, 2008)), and based on the reality of translators in the period of the Corona pandemic and the researcher's experience as a sign language translator, and by communicating with a number of translators and taking their views on the areas and influences they felt during the pandemic, (33) paragraphs were formulated that covered the four fields of study, which is an area of change The nature of work (13) paragraphs and the field of economic conditions (7) paragraphs and the volume of social relations (6) paragraphs, and the field of using technology in remote translation (7) paragraphs with a five-point verbal scale according to Likert's scale, ranging between agreeing with a very large degree = 5, and agreeing with a degree Too few = 1 and the opposite for negative paragraphs. Validity of the questionnaire: To verify the validity of the questionnaire, it was presented to a group of specialists in special education, psychology, measurement and evaluation in order to evaluate it in light of the following criteria: clarity of the paragraph (clear, unclear), the relevance of the paragraph to its field (belonging to, not belonging), and the linguistic wording of the paragraphs (sound, Invalid), the nature of the paragraph (positive, negative), and any other remarks that the arbitrators consider. The amendments agreed upon by the arbitrators were made, whether by deletion or amendment, as the deletion of (8) paragraphs was amended, and the questionnaire became in its final form composed of (25) paragraphs distributed over the following areas of study: The field of changing the nature of work (10) paragraphs, and the field of economic conditions (5) Paragraphs and the Journal of Social Relations (5) paragraphs, and the field of using technology in remote translation (5) paragraphs. Resolution of resolution:

Resolution of resolution:

The stability of the questionnaire was verified after applying it to (30) interpreters outside the basic study sample using the Cronbach Alpha equation, as shown in Table (2).

Table (2) coefficients for internal consistency using the Cronbach-Alpha equation

consistency
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Economic conditions	5	.720
Social relations	5	.770
The use of technology in remote translation	5	.817
Total	25	.901

It appears in Table No. (2) The coefficients of the internal consistency of the questionnaire and its sub-fields ranged between (0.72-0.90), all of which are acceptable for the purposes of the study.

Study procedures:

After preparing the final image of the questionnaire, judging it and applying it to a survey sample to verify its stability, it was uploaded to the Google Drive link as an electronic questionnaire that can be answered electronically, which contributes to the ease of application and the speed of obtaining responses, and analyzing them using the (SPSS) program.

Statistical methods:

To answer the two questions of the study, the following statistical methods were used:

- 1- Cronbach's alpha equation to calculate the coefficient of stability using the internal consistency method.
- 2- Arithmetic averages, standard deviations, and the relative importance of describing the responses of the study sample to the fields of the questionnaire.
- 3- A test (T) for independent samples to examine the differences in the averages of the study sample responses to the areas of questionnaire according to the variables of the translator's sex and the presence of a deaf relative, and the monoanalysis of variance to examine the differences in the averages of the study sample responses to the areas of the resolution according to the variables

of years of experience and scientific qualification.

To judge the levels of the Corona pandemic's impact on sign language interpreters, based on the arithmetic averages of the research sample responses to the study questionnaire, as the researcher relied on dividing them based on the equation of the number of answer scale categories to find the category length = 0.8, as follows: The averages ranging from (1) - Less than 1.8 = very low level), and averages between (1.8 - less than 2.6 = low level), and averages between (2.6 - less than 3.4 = medium level), and averages between (3.4 - less than 4.2) = Very high level), and averages between (4.2 - 5 = very high level).

Study results and discussion:

Results related to the first study question: "What is the impact of the Coronavirus pandemic on "nature of work, economic conditions, social relationships, and using technology" of sign language interpreters?"

To describe the change in the nature of the work of deaf sign language interpreters, their economic conditions and their social relations, and the use of technology in remote translation caused by the Corona pandemic among Arab sign language translators, the arithmetic averages and standard deviations were used, and the relative importance of the paragraph, as shown in Table No. 3, 4, 5, 6).

First: The first area: changing the nature of work

Table No. (3) The arithmetic means, standard deviations, and the level of change in the nature of work for deaf sign language interpreters, arranged in descending order of the arithmetic mean of the paragraph.

	paragraphs	SMA	SD.	R.I.	Impact level
1	Remote translation requires more attention and focus to receive content and	4.63	.69	%92.7	Too high
	translate it into sign language				
1	I used my personal accounts on social media to interact and publish topics	4.07	1.25	%81.4	High
0	within my work as a sign language interpreter.				
5	The changing nature of work in light of the Corona pandemic imposed on	4.07	1.07	%81.4	High
	me many tasks and responsibilities related to translation to follow the				
	developments of the crisis.				
2	I have said my participation in workshops, seminars and courses related to	3.93	1.16	%78.6	High
	sign language in light of the Corona pandemic.				
3	The nature of my translation work has changed in light of the Corona	3.73	1.14	74.78	High
	pandemic and the resulting difficulties at work.			%	
6	Remote translation has increased psychological stress in the Corona	3.50	1.22	%70	High
	pandemic				
4	I worry about contracting the Coronavirus when doing field translation	3.40	1.32	%68	High
	assignments such as courts and hospitals				
9	Remote translation worries me because I am afraid of running into	2.81	1.38	56.34	Medium
	interpretation errors.			%	
8		2.65	1.31	53.04	Medium
	I feel that I cannot continue translating remotely due to extreme exhaustion			%	
	in light of the Corona pandemic.				
7	My translation skills have deteriorated during the Corona pandemic	2.47	1.32	49.56	Low
				%	
	Total	3.52	.70	%70.06	High

Table (3) refers to the responses of the study individuals about the expressions related to the change in the nature of work caused by the crisis and the Corona pandemic, as the arithmetic averages for this field ranged between (4.63 -2.47) on the five Likert scale, which indicates the high level of change in the nature of work for translators Sign language in the Corona pandemic, as the paragraph "Remote translation requires more attention and focus in receiving content and translating it into sign language" came in the first place with an arithmetic average of (4.63) and a standard deviation (0.69), followed by a paragraph "I used my personal accounts on Social networking sites in interaction and publishing topics within my work as a sign

language interpreter "with an average (4.07) and a standard deviation (1.25), and in the third place the participants recorded the paragraph" Change in the nature of work in light of the Corona pandemic imposed on me many tasks and responsibilities related to translation to follow the developments of the crisis "on My arithmetic mean (4.07) and a standard deviation (1.07), while the participants scored the answers to the paragraph "I have decreased my participation in workshops, seminars and courses related to sign language in light of the Corona pandemic" ranked fourth with a mean of (3.93) and a deviation Standard (1.16). As for the paragraph "The nature of my translation work in light of the Corona pandemic and the consequent difficulties at work," it ranked fifth with an arithmetic average (3.73) and a standard deviation (1.14), and in sixth place a paragraph was recorded. To the increase in psychological pressure in the Corona pandemic, "an arithmetic average (3.50) and a standard deviation (1.22), and in the seventh place, the paragraph" I worry about being infected with the Coronavirus when performing field translation tasks such as courts and hospitals "was recorded an arithmetic average (3.40) and a standard deviation (1.32), And in the eighth place, the paragraph "Remote translation worries me because of my fear of falling into simultaneous translation errors" scored my average (2.81) and a standard deviation (1.38), and in the ninth place came the paragraph "I feel that I cannot continue translation remotely due to extreme exhaustion in light of the pandemic. Corona ", with a mathematical average (2.65), and a standard deviation (1.31), while the paragraph," My translation skills have declined in light of the Corona pandemic, "ranked tenth and last, with an average of (2.47).

The reason for this is that sign language is a living language that needs direct communication to read facial expressions and body movements in an integrated, clear and close manner, and given that the nature of work within the Corona pandemic has changed completely and has become dependent on remote translation, it is natural to change in reactions And ways for translators to deal with the new nature of work.

The table also shows the low dispersion in the responses of the study individuals on most of the paragraphs about the burden resulting from changing the nature of work in the circumstances of the Corona pandemic, which reflects the convergence in the circumstances surrounding sign language interpreters. Translators were loud.

These results can be explained by the change that took place in all aspects of life, which affected the field of work and the nature of work, which relied on remote work, as it became through technological means and applications, which contributed to changing the nature of work and the procedures for accomplishing the task and this caused an additional burden on translators.

The main changes in the nature of the work of sign language interpreters were the need for attention and focus in receiving content and translating it into sign language in a greater way, and this is due to the fact that sign language is a process of transferring information from an audible language to a functional dynamic language and this increases the need for attention and focus to ensure that what is transmitted Hear correctly. The translators also confirmed that they have used their personal accounts on social networking sites to interact and publish topics within the work as a sign language interpreter. This is due to the privacy of the Corona pandemic, which relied on social media to transmit information in a quick manner, especially for deaf people who depend mainly on social media sites in Information transmission.

The participants also indicated that the change in the nature of work in light of the Corona pandemic has imposed on them many tasks and responsibilities related to translation to follow the developments of the crisis, and the reason for this is due to the small number of translators in relation to the number of deaf people and news channels, so the translators in the field of work are under additional pressure and burdens.

Despite this burden and fatigue, the participants indicated that they are not concerned about falling into the errors of interpretation and do not complain about the inability to complete the work because of that fatigue, as very few translators indicated that their translation skills have declined in light of the Corona pandemic. It can be explained that the workers in this field are people who are distinguished by the ability to endure and work under load, and that the

translation skill is one of the motor skills and thus it is not easy to forget with time. These results are consistent with the results of the study of Qin et. Al. (2008) that the higher the physical pain in the wrist and back of the translators, the greater the pressure on them, and as a result of physical

fatigue, the control over sign language, its speed, and the unit of sign used increases.

Second: The second area: the economic conditions

Table No. (4) The arithmetic means, standard deviations, and level of economic conditions of sign language interpreters for the deaf, arranged in descending order of the arithmetic mean of the paragraph.

	paragraphs	SMA	SD.	R.I.	Impact level
5	The demand for sign language interpreters as unpaid volunteers has increased amid the Coronavirus pandemic.	4.39	.924	%87.82	Too high
4	Employers are looking for sign language translators for less than professional translation in light of the Coronavirus pandemic	3.85	1.27	%77.04	High
2	The chances of working with sign language translation have decreased in light of the Corona pandemic	3.61	1.32	%72.34	High
3	I find it difficult to collect my financial rights from employers in light of the Corona pandemic	3.56	1.42	%71.3	High
1	I am getting insufficient wages due to the amount of my remote translation effort in light of the Corona pandemic	3.47	1.43	%69.4	High
	Total	3.77	.88	%75.6	High

Table (4) refers to the responses of the study individuals about the phrases related to the economic conditions in the crisis and the Corona pandemic, as the arithmetic averages for this field ranged between (4.39 - 3.47) on the five-year Likert scale, which indicates the high level of impact on the economic conditions of sign language translators in Corona pandemic, as it came in first place, the paragraph "The demand for sign language interpreters as unpaid volunteers has increased in light of the Corona pandemic." With a mean arithmetic of (4.39) and a standard deviation (0.92), and in second place the paragraph "Employers are looking for sign language translators for a fee less than the wages of professionals in translation in light of the Corona pandemic" with an average of (3.85), and in the third place the paragraph "I said Job opportunities with translation into sign language in light of the Corona pandemic "my average is (3.61), while the paragraph" I find it difficult to collect my financial rights from employers in light of the Corona pandemic "recorded my average (3.56), while the paragraph" I receive an insufficient wage, " For the volume of the effort I am making in remote translation in light of the Corona pandemic, it ranked fifth and last, with a mean of (1.43).

The table also shows the low dispersion in the responses of the study individuals about the economic conditions in the circumstances of the Corona pandemic with its paragraphs, which reflects the convergence of the conditions surrounding sign language interpreters, and in general it shows that the level of economic vulnerability among the sign language interpreters of the Deaf Arab participants from the translators' point of view was high.

This means that Arab translators have faced difficulties as a result of the impact of the Corona pandemic on their economic living conditions, and that employers in light of this pandemic have become seeking to obtain the service for little or no financial compensation. These results may be due to the fact that the world in general has faced difficulties. An economic depression and reduced financial resources for the owners of companies and employers, which increased the demand for

volunteer work without material compensation, which in turn led to a decrease in the financial return of translators and an increase in the economic burden on them, and these results are consistent with what was mentioned in (Abdul Majeed, 2020), from the impact Corona pandemic on the global economy.

Third: The third area: social relations

Table No. (5) The arithmetic means, standard deviations, and the level of social relations of sign language interpreters of the deaf, arranged in descending order, according to the arithmetic mean of the paragraph.

	paragraphs	SMA	SD.	R.I.	Impact level
4	In light of the Corona pandemic, cooperation has increased between sign language interpreters in improving services provided to the deaf	4.19	1.03	%83.82	High
2	The frequent requirements of remote translation affected my comfort and family time.	3.33	1.28	%66	Medium
3	My personal relationships with friends and relatives have been affected by the increased requirements for remote translation in light of the Coronavirus pandemic	3.03	1.33	%60.07	Medium
5	My relationships with the beneficiaries of the translation profession have been strained due to the psychological stress of the Corona pandemic	2.67	1.34	%53.4	Medium
1	I refuse to translate remotely to preserve my family privacy in light of the Corona pandemic	2.43	1.34	%48.7	Low
	total	3.13	.921	%62.7	Medium

Table (5) refers to the responses of the study individuals about the phrases related to social relations in the crisis and the Corona pandemic, as the arithmetic averages for this field ranged between (4.19 - 2.43) on the Likert five-point scale, which indicates the high level of impact on social relations among sign language translators in Corona pandemic, as it came in first place, the paragraph "In light of the Corona pandemic, cooperation between sign language interpreters has increased in improving services provided to the deaf." With a mean arithmetic of (4.19), and in second place, the section "Frequent

requirements for remote translation that affected my comfort and family time" was recorded with an average of (3.33), and I recorded the paragraph "My personal relationships with friends and relatives were affected due to the increase in remote translation requirements in light of the Corona pandemic. "The third place, with my average score (3.03), while I scored in the fourth place the paragraph" My relations with the beneficiaries of the translation profession have been strained due to psychological pressure in the Corona pandemic "with my average (2.67), while the paragraph" I refuse to translate remotely to

preserve my family privacy in light of Corona pandemic "is ranked fifth and last, with a mean of (2.43). This may be due to the fact that the human race is always affected by surrounding disasters, including diseases, and that man resorts to helping others in these circumstances and society joins forces to withstand disasters, and at the same time, work conditions often affect a person's relationship with his family and his social life.

The table also shows the low dispersion in the responses of the study individuals about social relations in the circumstances of the Corona pandemic with its paragraphs, which reflects the convergence in the circumstances surrounding

sign language interpreters, and in general it appears that the level of social impact among the sign language interpreters of the Arab deaf participants from the translators' point of view was average.

These results are consistent with what was stated in Webb & Napier, 2015) that there are personal challenges in the lives of sign language interpreters and workers with the deaf due to the overlap of continuous professional responsibilities such as managing their work demands with personal factors and family obligations.

Fourth: The fourth area: the use of technology in remote translation

Table No. (6) Arithmetic means, standard deviations, and the level of technology use in remote translation for deaf sign language interpreters, arranged in descending order according to the arithmetic mean of the paragraph.

	paragraphs	SMA	SD.	R.I.	Impact level
5	A translation with reference to a distance does not suffice enough for direct face to face.	3.88	1.31	%77.74	High
1	I had difficulties with remote translation due to technical problems and poor internet.	3.73	1.21	%74.6	High
4	I believe that signal translation via electronic media affects the quality of translation.	3.28	1.26	%65.74	Medium
3	I encountered difficulties in translating via media and electronic applications	3.00	1.38	%60	Medium
2	I had difficulties with remote translation due to my poor knowledge of the technology used	2.76	1.42	%55.3	Medium
	total	3.33	1.00	%66.7	Medium

Table (6) refers to the responses of the study individuals about the phrases related to the use of technology in remote translation in the crisis and the Corona pandemic, as the arithmetic averages for this field ranged between (3.887 - 2.765) on the five Likert scale, which indicates the high level of impact on the use of technology in Remote translation for sign language translators in the Corona pandemic, as the paragraph

"Remote Signal Translation does not suffice enough for direct face-to-face" with an average of (3.88), and the paragraph "I encountered difficulties in remote translation due to problems Technical and weak Internet "ranked second with my average (3.73), and in third place scored the paragraph" I think that signal translation through electronic media affects the quality of translation "my average (3.28), and also recorded the

paragraph" I encountered difficulties in translation through media and electronic applications. "My average is (3.00), while the paragraph "I faced difficulties in remote translation due to my poor knowledge of the technology used in this" ranked fifth and last, with my average of (2.765).

Therefore, most translators believe that remote translation is not considered sufficient and does not substitute for direct translation, due to the fact that sign language is a direct sensory language that depends on direct communication in translation and to increase the quality of translation is always preferable for the deaf and the translator to be present in the same room to convey information using techniques. Accurate translation, such as 3D translation and others, as they have faced many problems in working with its new nature due to technical problems and weakness in the Internet, and many of them believe that translation through the use of technology negatively affects the quality of translation, and this may be due to the high pressure that He got access to the Internet globally, where all information and news are transmitted on the Internet for faster access, and it is a refuge for those outlawed at home, and it is a tool for remote work and study in the pandemic.

Some of the results of this study are consistent with what was indicated by Stein, et.al, 2012); (Morrissey, et.al, 2010), in terms of the existence of many problems in the process of portraying sign language through technology and its impact on the quality of translation and clarity of the signals used. The table also shows the low

dispersion in the responses of the study individuals about the use of technology in remote translation in the circumstances of the Corona pandemic with its paragraphs, which reflects the convergence in the conditions surrounding sign language interpreters, and in general it indicates that the level of vulnerability to the use of technology in remote translation among the deaf sign language interpreters The Arab participants, from the translators' point of view, were average.

Results related to the second question: "Do the impact of the Coronavirus pandemic on "nature of work, economic conditions, social relationships, and using technology" of sign language interpreters differ according to the variables of "gender, years of experience, academic qualification, nature of work, and the presence of deaf relatives of the translator?"

In order to answer this question, the arithmetic averages and standard deviations of the study sample responses to its domains were calculated according to their variables, and a (t) test was conducted for independent samples to examine the differences in the averages of the study sample responses to the areas of the questionnaire according to the variables of the translator's sex and the variable of the presence of deaf relatives of the translators. The one-size-fits-all to examine the differences in the averages of the study sample responses to the domains of the questionnaire according to the variables of the translator's years of experience and his academic qualification as shown in the tables (7, 8, 9, 10).

First: the gender of the translator

Table No. (7) Test results (T) to examine the differences in the averages of the study sample on the fields of study (change in the nature of work, economic conditions, social relations, and difficulties with remote translation) according to the gender variable

Areas	Gender/Averages					
	Males $(n = 43)$	Females $(n = 72)$	value of (T)	statistical sig.		
Change in the nature of work	3.54	3.52	.171	.864		

Economic conditions	3.75	3.79	238	.812
Social relations	3.07	3.16	476	.635
The use of technology in	3.29	3.35	297	.767
remote translation	3.29			

Table No. (7) shows that there are no statistically significant differences at the level of ($\alpha \le 0.05$) in the effects of the Corona pandemic on the nature of work, economic conditions, social relations and remote translation difficulties depending on the gender variable, as the values of (T) reached (0.171, 0.238, 0.476). , 0.297) and it is not statistically significant at ($\alpha \le 0.05$) level. This indicates the convergence of levels of the impact of the Corona pandemic on changing the nature

of work, economic conditions, social relations, and difficulties in remote translation) for both male and female translators. This result can be explained by the fact that the effect of the Corona pandemic in general has the same effect on both sexes, and that this effect on both genders is similar in all areas of life studied in this study.

Second: Years of experience in translating into sign language

Table No. (8) Results of the single-variance analysis to examine the differences in the averages of the study sample on the fields of study (change in the nature of work, economic conditions, social relations, and difficulties with remote translation) according to the variable of the number of years of experience in translation into sign language

Areas	Years of exp./A	verages					
	Less than 5	5-10 years	11-15 years	16-20 years	20 years and	F	Statistical
	years $(n = 26)$	(n = 28)	(n = 13)	(n = 14)	over (n = 34)	value	sig.
Change in the nature of work	3.61	3.48	3.34	3.22	3.68	1.439	.226
Economic conditions	3.75	3.70	3.78	3.48	3.98	.886	.475
Social relations	3.04	3.20	2.84	3.30	3.17	.543	.704
The use of	3.53	3.04	3.47	3.24	3.40	.971	.426
technology in remote translation							

Table No. (8) Shows that there are no statistically significant differences at the level of ($\alpha \le 0.05$) in the effects of the Corona pandemic on the nature of work, economic conditions, social relations, and remote translation difficulties depending on the variable of the number of years of experience of a sign language interpreter, where the values of "P" reached (1.439, 0.886, 0.543, 0.971) and this indicates no difference The impact of the

Corona pandemic on changing the nature of work, economic conditions, social relations and difficulties with remote translation; In light of the different levels of experience of sign language interpreters.

This may be due to the fact that the translation profession in general possesses the same professional characteristics and work protocols regardless of years of experience, and since the change in the nature of work, especially the shift to the full use of technology at work, has affected all translators in all fields and fields of work, it is natural that it is all translators were affected to the same degree regardless of their work experience.

Third: Academic qualification

Table (9) Results of a single-variance analysis to examine the differences in the averages of the study sample on the fields of study (change in the nature of work, economic conditions, social relations, and difficulties with remote translation) according to the scientific qualification variable of the translator

Areas	Qulification./Averages							
	Secondary and	Intermediate	BA (n =	MA(n =	Ph.D. $(n =$	F	Statistical	
	less years (n = 14)	diploma (n = 19)	44)	32)	6)	value	sig.	
Change in the nature of work	3.45	3.39	3.51	3.55	4.10	1.22	.307	
Economic conditions	3.94	3.49	3.82	3.82	3.73	.65	.628	
Social relations	3.00	2.96	3.21	3.05	3.76	1.09	.362	
The use of technology in remote translation	3.37	3.36	3.35	3.21	3.66	.28	.886	

Table No. (9) shows that there are no statistically significant differences at the level of ($\alpha \le 0.05$) in the effects of the Corona pandemic on the nature of work, economic conditions, social relations and remote translation difficulties according to the scientific qualification variable of the sign language interpreter, as the values of "q" reached (1.22, 0.65, 1.09, .28) and this indicates no difference in the impact of the Corona pandemic on changing the nature of work, economic conditions, social relations and difficulties with remote translation; In light of the scientific

qualification of the sign language interpreter. This result can be explained by the fact that the profession of sign language does not depend on the academic degree, but on the experience in sign language and its proficiency, so that the work requirements will not be affected by the scientific degree and its degree, and with this, the effect of Corona on translators is close regardless of scientific qualification.

Fourth: Presence of a deaf relative for the translator

Table (10) Test results (T) to examine the differences in the averages of the study sample on the fields of study (change in the nature of work, economic conditions, social relations, and difficulties with remote translation) according to the variable of the presence of a deaf relative to the translator

Areas	Deaf relativ	Deaf relative./Averages						
	No(n-73)	Yes (n -	T value	Statistical sig.				
		42)						
Change in the nature of work	3.53	3.51	.203	.840				
Economic conditions	3.72	3.88	933	.353				
Social relations	3.12	3.15	178	.859				

The use of technology in remote translation

3.33

3.33

.005 .996

Table No. (10) shows that there are no statistically significant differences at the level of $(\alpha \le 0.05)$ in the effects of the Corona pandemic on the nature of work, economic conditions, social relations and remote translation difficulties according to the variable of the presence of a deaf relative to the translator, where the values of (T) reached (0.203) 0.933, 0.178, 0.005), which is not statistically significant at ($\alpha \le 0.05$). This indicates the convergence of levels of the impact of the Corona pandemic on changing the nature of work, economic conditions, social relations, and difficulties in remote translation among translators who have deaf relatives or not. This result can be explained by the fact that the sign language translator cares about his profession and concludes with it regardless of the existence of kinship with a deaf person or not, as this profession depends entirely on the desire and love of the profession so that the translators make great efforts to reach the best service that may be provided despite all the challenges and problems Facing them, including the Corona pandemic.

Recommendations:

After reviewing the results, the researcher recommends that:

- Providing moral, material and psychological support to sign language interpreters after the Corona pandemic.
- Educating the listener's community about the translation profession, its importance and challenges.
- Study and delve into understanding translation requirements in crises and draw up a plan to deal with similar problems in the future.
- Study the impact of the Corona pandemic on the profession of sign language translation

after the end of the crisis, to find out and understand the long-term impact.

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