International Journal of Nutrology
(Official Journal of the ABRAN - Brazilian Association of Nutrology)

ORIGINAL ARTICLE

DOI: 10.54448/ijn26S105

Quality of life and psychological aspects for disabled people: an observational cross-sectional study

Zainab Fadhil Kzar[1,*], Ali Ahmed Kadhim[2]

[1] University of Babylon. Babylon Health Directorate, Babylon, Iraq.
[2] University of Babylon. Doctor of Psychiatric and Mental Health Nursing, College of Nursing, Iraq.

*Corresponding author: Zainab Fadhil Kzar.
University of Babylon. Babylon Health Directorate, Babylon, Iraq.
E-mail: gty613472@gmail.com,
nur676.zainab.fadhil@student.uobabylon.edu.iq
DOI: https://doi.org/10.54448/ijn26S105
Received: 01-08-2026; Revised: 03-09-2026; Accepted: 03-10-2026; Published: 03-11-2026; IJN-id: e26S105

Editor: Dr Hind Mamoun Beheiry, MD, MPH.

Abstract

Introduction: Disability is used to describe a broad range of disabilities, activity constraints, or participation limitations, disability arises from the combine of health conditions with contextual factors–environmental and personal factors. **Objective:** This study aimed to assess Quality of life and psychological aspects for disabled people, and Find Out the Relationship between Quality of Life and Psychological Aspects with Demographical Characteristic and Find-Out the Correlation between Psychological Aspects with Quality of Life for disabled People. **Methods:** A descriptive correlational study was conducted in two Rehabilitation Centers for Disabled and Physiotherapy at Hilla City/Babylon Province (Babylon Specialized center for medical rehabilitation, Babylon Center for Artificial Limbs and Medical Supports) during the period from September, 12, 2024 to April, 20, 2025. The study sample consisted of 155 physical disabled people who were selected according to the non-probability (convenience) sampling method. Data from interviews method were examined through both descriptive and inferential methods. statistics. **Results:** The research's findings are significant, revealing that 68.7% of participants' quality of life was moderate. with mean with mean 46.25 (Min-Max 23-69), and 56% had moderate psychological aspects (depression, anxiety and stress) with mean=57.56 (Min- Max 21 - 84). These findings underscore the importance of this research. Also, it was found highly significant statistical negative direction correlations between Psychological Aspects with Quality of Life for physical disabled People at $p<0.05$. Quality of life were also significantly associated with demographic variables such as age, income and type of disability at $p<0.05$. Psychological aspects (depression, anxiety and stress) were linked to age, Occupation status and income at $p<0.05$. **Conclusion:** The quality of life for individuals with disabilities was found to be moderate. The Depression Anxiety Stress (Psychological Aspects) with disabilities was found to be moderate. There were statistically significant negative direction relationships between Psychological Aspects with Quality of Life for physical disabled People. Accordingly, the study recommended to improve accessibility and support for individuals with physical disabilities by establish dedicated psychological therapy clinics within healthcare centers, specifically designed to provide mental health services to individuals with disabilities. Efforts should also be made to raise public awareness and foster greater acceptance and social inclusion of individuals with impairments.

Keywords: Quality of Life. Disabled people. Psychological aspects.

Introduction

Disability is used to describe a broad range of disabilities, activity constraints, or participation limitations, disability arises from the combine of health conditions with contextual factors–environmental and personal factors. Environmental factors mentioned by WHO included goods and technology, the physical and natural environments, relationships and support, and

beliefs (e.g., negative imagery and language, stereotypes and stigma) and services, systems, and policies, while personal factors included factors, such as motivation and self-esteem, that could influence how much a person participates in society [1].

Over one billion individuals worldwide are currently living with disabilities [2]. In addition to functional limitations, people with disabilities are more likely to experience mental health issues than people without impairments [3]. According to Cree et al. (2020) [4], 17.4 million adults with disabilities were expected to have frequent psychological problems, which were more linked to consequences like increasing limits in daily living, health issues, habits, and greater use of health facilities. According to other research, there is a constant downward trend in mental health among those with physical disabilities. Anger, impatience, fear, and despair over their physical limitations and the suffering brought on by their condition are other ways that complex emotions are expressed [5,6].

The Centers for Disease Control and Prevention in the United States (U.S.) indicates that about 25% of American adults have a handicap, and that the prevalence of disabilities rises with age. In particular, for adults who are older than About 40% of people over 65 have been diagnosed with a disability [7]. In addition, the U.S. Census Bureau predicts that by 2030, the population of Americans over 65 will surpass that of children for the first time in the country's history [8,9].

The two collections of statistics about Iraq's disabled population are provided by the Ministry of Planning. According to a 2012 study, 1,178,811 families had a family member with a disability. In 2016, they stated that there are 580,342 women and 776,721 men with impairments; this data was only calculated for 16 governorates, not including those controlled by ISIS [10].

This study aimed to assess Quality of life and psychological aspects for disabled people, and Find Out the Relationship between Quality of Life and Psychological Aspects with Demographical Characteristic and Find-Out the Correlation between Psychological Aspects with Quality of Life for disabled people.

Methods

Study Design

An observational cross-sectional study was conducted, following the STROBE (Strengthening the Reporting of Observational Studies in Epidemiology) rules. Available at: https://www.strobe-statement.org/checklists/. Accessed on: 01/20/2025. to attain the stated objectives, during the period from September, 12, 2024 to April, 20, 2025.

Ethical Considerations of the Study

The ethical aspect of quantitative research is one of the most important elements of the study, which involves human participants, ensuring their protection and well-being and ensuring all ethical considerations for all participants. Therefore, verbal and written consent was obtained verbal and written consent of the participants after the researcher introduced herself to them and explain the purposes of the study to them and telling them that the data are used only for research and it clear that their participation was voluntary and they are free to accept or refuse the participation in this study and All participant information was treated with strict confidentiality, ensuring the privacy and anonymity of all participants involved. Also Phrasing the questions is easily understandable according to the educational level of participants and cultural background.

Study Setting

This study was conducted in the Rehabilitation Centers for Disabled and Physiotherapy at Hilla City/Babylon Province, which includes the following:

1- Babylon Specialized center for medical rehabilitation. This center affiliated with the Babylon Health Department, the Physiotherapy Department at Babylon Rehabilitation Centers for the Disabled, which is affiliated with the department. It receives It receives various types of disabilities these include mental disability, physical disability, deaf and mute and others injury.

2-Babylon Center for Artificial Limbs and Medical Supports. This center affiliated with the Babylon Health Department. It receives amputees and people who needs to medical support.

Sampling Method

The study sample comprised 150 disabled people (Physical disability) and included from (Paralysis of all kinds , Amputation of all kinds and other injuries that contain to Foot drop, Chircot's disease, scoliosis, bow legs, spinal muscular atrophy , Duchenne muscular dystrophy) selected through non-probability (convenience) sampling method due accessibility and the exploratory nature of the study, but convenience sampling may introduce selection bias, as participants who are more readily available may not accurately represent the broader population of physical disabled people in the Babylon Governorate.

Study Instrument

To achieve the study's objective, a specific questionnaire was standard after an extensive evaluation of related literature in the topic of interest phenomena. The questionnaire was divided into three parts:

Part I: Demographic Characteristics

This part is concerned with the collection of basic socio-demographical characteristics of Participants that constitutes from 11 elements that includes: (age, gender, level of education, marital status, occupation status, income, residence, type of disability, basic materials or needs available for disabled people, cause of disability and duration of disability).

Part II: Quality of life scale (WHOQOL- BREEF)

This part includes the Quality-of-life (QoL) scale .This scale was originally developed by WHO in 1996 to measure Quality of life as a short tool for assessing quality of life it is an abbreviated version of the original WHOQOL-100 scale and then translated into Arabic (Appendix: c) It contains 23 items that divided into (4) domain: Physical health (7) items, Psychological health (6) items, Environmental health (7) items and Social relationship domain (3) items after modifications by experts.

Part III: Dass scale

Similarly, this section comprises 21 items focusing on psychological aspects for disabled people that divided into (3) domain: depression domain (7) items, anxiety domain (7) items and Stress domain (7) items After modifications by experts.

Validity

The validity of the questionnaire was obtained by reviewing the questionnaire by (14) experts to estimate the clarity and relevance of the questionnaire about psychological aspects and quality of life for physical disabled people. Multidisciplinary field experts with more than (10) years of experience. The feedback from these 14 experts was instrumental in shaping the final questionnaire, ensuring that it was both comprehensive and focused on relevant aspects.

Pilot Study

This study carried out from February, 8, 2025 to February, 15, 2025. After confirming the study tool's apparent validity, the researcher used it in a randomly selected exploratory sample of (15) disabled people) physical disability), or roughly 10% of the total sample. Later, the participants in this sample were not included in the original sample used to conduct the final study. This study carried out from February, 8, 2025 to February, 15, 2025. After confirming the study tool's apparent validity, the researcher used it in a randomly selected exploratory sample of (15) disabled people) physical disability) , or roughly 10% of the total sample. Later, the participants in this sample were not included in the original sample used to conduct the final study. The reliability of the questionnaire was measured by using Cronbach's Alpha (a statistical method used to assess the internal consistency of the items within each section). The coefficients were as follows :

- WHOQLE-BREEF: Cronbach's Alpha = 0.861
- DASS :Cronbach's Alpha =0.869

These values indicate a good level of internal consistency.

Data Collection Method

The data were collected from the date February, 8, 2025 to April, 1, 2025 by using reconstructed questionnaire (Arabic version) to collect data as interview with disabled people (Physical disability) responses were documented. After taking the formal approval from Director of the Babylon Health Department and the directors of the two previously mentioned centers and according to the permission and agreement of participation. The investigator obtained information from the participants. To obtain oral agreement, the researcher introduced herself to the participants and explained the goal of the study. The time to answer the instrument's questions with each participant took approximately (15-20) minutes.

Statistical Data analysis

The data was analyzed and examined using SPSS V. 27. Descriptive statistics such as frequency counts and percentages, as well as measures of central tendency and variability be employed. Additionally, inferential statistics that are suitable for the distribution of the data be utilized.

Results

This section displays the current study's findings in tables and demonstrates how they align with the study's goals.

The findings in Table 1 displayed the age 150 physical disabled people at most (24%) more than 64 years (older adults) with a mean 49.93 years. Regarding the gender, the majority (76%) were male. The results showed the participants at most (28.7%) were graduate from primary school. According to the marital status, most (67.7%) were married and at most (34.7%) were retired and the most (61.3%) with sufficient to some extent. According to the residence, most (70.7%) from urban.

Regarding the disability, the most (21.3%) have lower limbs paralysis, the most (66.7%) with more

than four years and limbs paralysis, the majority (89.3%) not have the basic materials or needs available for disabled people (regular and electric wheelchairs, prosthetic limbs, prosthetic socks, quad crutches).

Table 1. Participants' distribution based on socio demographic data.

Demographic Characteristics	Subgroup	f.	%
Age group	Young adult (18 – 24) years	17	11.3
	Adult (25 - 34 years)	19	12.7
	Middle age adult (35 - 44 years)	16	10.7
	Early middle aged (45 - 54 years)	28	18.7
	Late middle aged (55 - 64 years)	34	22.7
	Older adults (≥ 65 years)	36	**24.0**
	Total	150	100.0
	Mean ± SD 49.93 ± 17.149 Min- Max 18 - 78 years		
Gender	Male	114	**76.0**
	Female	36	24.0
	Total	150	100.0
Level of education	Not read or write	24	16.0
	Read and write	30	20.0
	Primary school	43	**28.7**
	Intermediate school	24	16.0
	Preparatory school	12	8.0
	Institutes graduator	7	4.7
	College graduator or above	10	6.7
	Total	150	100.0
Marital Status	Single	39	26.0
	Married	97	**64.7**
	Separated	4	2.7
	Divorce	2	1.3
	Widowed	8	5.3
	Total	150	100.0
Occupation status	Governmental employee	18	12.0
	Free job	11	7.3
	Retired	52	**34.7**
	Unemployed	40	26.7
	Housewife	24	16.0
	Student	5	3.3
	Total	150	100.0
Income	Sufficient	25	16.7
	Sufficient to some extent	92	**61.3**
	Insufficient	33	22.0
	Total	150	100.0
Residence	Rural	44	29.3
	Urban	106	**70.7**
	Total	150	100.0
Type of disability	Quadriplegia	12	8.0
	Right sided paralysis	13	8.7
	Left sided paralysis	15	10.0
	Lower limbs paralysis	32	**21.3**
	Lower right limb amputation	21	14.0
	Lower left limb amputation	19	12.7
	Lower both limb amputation	6	4.0
	Upper right limb amputation	4	2.7
	Upper left limb amputation	8	5.3
	Upper both limb amputation	5	3.3
	Others injuries	15	10.0
	Total	150	100.0
Duration of disability	≥ 1 year	24	16.0
	2 - 3 years	26	17.3
	≤ 4 years	100	**66.7**
	Total	150	100.0
Cause of disability	Congenital	18	12.0
	Traumatic	85	**56.7**
	Chronic disease	47	31.3
	Total	150	100.0
Are the basic materials or needs available for disabled people	Yes	16	10.7
	No	134	**89.3**
	Total	150	100.0

Source: Own authorship

The results in Table 2 showed that the assessment of the Quality of Life for disabled people was moderate, with a mean of 2.01 (Min - Max 1 - 3). The higher percentage that showed in the social relationship domain, with a mean of 2.56 and the lower percentage showed in the physical health domain, with a mean of 1.72.

Table 2. Assess the Quality of Life for Disabled People.

Items	%				Mean	Ass.
	Always	Sometimes	Never	Total		
1. **Physical pain preventing you from getting your work done** ((R	56	30.7	13.3	100	1.57	L
2. **To what extent need for any medical treatment to function in your daily life** ((R	65.3	21.3	13.3	100	1.48	L
3. **I have enough energy for everyday life**	33.3	42	24.7	100	2.09	M
4. **To what extent do difficulties in movement affect your way of life** ((R	68	26.7	5.3	100	1.37	L
5. **I feel satisfied with my sleep**	36	30	34	100	2.02	M
6. **I have the ability to perform my daily living activities**	24.7	36	39.3	100	1.85	M
7. **I feel satisfied with my capacity for work**	19.3	24	56.7	100	1.63	L
Physical health domain: 7 items					1.72	**M**
1. **To what extent do you enjoy life?**	18.7	46	35.3	100	1.83	M
2. **I have ability to concentrate**	26.7	38.7	34.7	100	1.92	M
3. **I have not ability to accept my bodily appearance** ((R	31.3	34	34.7	100	2.03	M
4. **I feel satisfied with my self**	49.3	32	18.7	100	2.31	M
5. **How often do you have negative feelings such as blue mood, despair, anxiety, depression?** ((R	50.7	39.3	10	100	1.59	L
6. **I feel satisfaction about my health.**	24	31.3	44.7	100	1.79	M
Psychological health domain: 6 items					1.91	**M**
1. **How safe do you feel in your daily life?**	55.3	33.3	11.3	100	2.44	H
2. **I have physical environment is healthy**	71.3	20	8.7	100	2.63	H
3. **How much available information do you need in your daily life**	25.3	29.3	45.3	100	1.80	M
4. **I have the opportunity for leisure activities**	34	35.3	30.7	100	2.03	M
5. **I feel satisfied with the condition of my living place**	70	20	10	100	2.60	H
6. **I feel satisfied with my access to health services**	27.3	22	50.7	100	1.77	M
7. **I feel satisfied with my transportation.**	27.3	25.3	47.3	100	1.80	M
Environmental health domain: 7 items					2.15	**M**
1. **My personal relationships appropriate**	69.3	21.3	9.3	100	2.60	H
2. **I have support from my family**	78	14.7	7.3	100	2.71	H
3. **I feel satisfied with the support you get from your friends**	54.7	28.7	16.7	100	2.38	H
Social relationship domain: 3 items					2.56	**H**
Overall Quality of Life					2.01	**M**

Source: Own authorship

The findings in Table 3 demonstrated that the assessment of the Depression Anxiety Stress (Psychological Aspects) for disabled people was moderate, with a mean of 2.74 (Min - Max 1 - 4). The higher percentage that showed in the Stress domain (worse), with a mean of 2.88 and the lower percentage showed in the anxiety domain, with a mean of 2.58.

Table 3. Assess the Depression Anxiety Stress (Psychological Aspects) for disabled people.

Items	%					Mean	Ass.
	Never	Little	Sometimes	Always	Total		
1. **I couldn't seem to experience any positive feeling at all**	15.3	22	42.7	20	100	2.67	M
2. **I find it difficult to work up the initiative to do things**	6.7	24	41.3	28	100	2.91	M
3. **I feel as though I have nothing to look for.**	22	23.3	30	24.7	100	2.57	M
4. **I feel depressed and hopeless.**	8	2.7	40.7	48.7	100	3.30	H
5. **I unable to become enthusiastic about anything**	14	25.3	34.7	26	100	2.73	M
6. **I feel like I don't worth anything positive in my life**	32	31.3	29.3	7.3	100	2.12	M
7. **I feel that life is meaningless**	9.3	10	44	36.7	100	3.08	H
Depression: 7 items						2.77	**M**
1. **I aware of dryness of my mouth**	21.3	18	14.7	46	100	2.85	M
2. **I am experiencing breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)**	32	22	19.3	26.7	100	2.41	M
3. **I am experiencing trembling (e.g. in the hands)**	38	15.3	21.3	25.3	100	2.34	M
4. **I feel worried about situations in which I might panic and make a fool of myself**	22.7	18.7	31.3	27.3	100	2.63	M
5. **I think I'm on the verge of panic**	23.3	26.7	28	22	100	2.49	M

6. 2. Even when I am not physically exerting myself, I am conscious of my heart's activity (e.g., sense of heart rate increase))	19.3	18.7	26	36	100	2.79	M
7. I feel scared without any good reason	27.3	20.7	24	28	100	2.53	M
Anxiety: 7 items						2.58	**M**
1. I find it hard to wind down (Difficulty calming down after a state of activity, tension or stress)	14.7	30.7	31.3	23.3	100	2.63	M
2. I tend to over-react to situations	16	14.7	34.7	34.7	100	2.88	M
3. I felt that I was using a lot of nervous energy	9.3	14.7	26	50	100	3.17	H
4. I find myself getting agitated	8	15.3	29.3	47.3	100	3.16	H
5. I find it difficult to relax(Difficulty relaxing regardless of whether you were previously active or in a calm environment without stressful stimuli)	13.3	28.7	34	24	100	2.69	M
6. I am intolerant of anything that kept me from getting on with what I do	20.7	30	34.7	14.7	100	2.43	M
7. I feel that I am rather touchy	8	13.3	30.7	48	100	3.19	H
Stress: 7 items						2.88	**M**
Overall Depression Anxiety Stress						2.74	**M**

Source: Own authorship.

Table 4`s findings indicate that there were significant statistical variations among Quality of Life for disabled people with their income and type of disability at p<0.05 .The results also shown there were significant statistical negative correlation between Quality of Life for disabled people with their age at p<0.05.

Table 4. The relationship between Quality of Life for disabled people with their demographical characteristic.

Demographic	Subgroup	Quality of Life		
		Mean	Analysis	P. value
Age group	Young adult (18 – 24) years	2.05	Cc= -.202-	.013[a]
	Adult (25 - 34 years)	2.12		
	Middle age adult (35 - 44 years)	2.13		
	Early middle aged (45 - 54 years)	1.95		
	Late middle aged (55 - 64 years)	2.06		
	Older adults (≥ 65 years)	1.88		
Gender	Male	2.00	T= -.740-	.460[b]
	Female	2.04		
Level of education	Not read or write	1.97	F= 1.142	.341[c]
	Read and write	2.05		
	Primary school	1.95		
	Intermediate school	2.05		
	Preparatory school	2.01		
	Institutes graduator	1.97		
	College graduator or above	2.20		
Marital Status	Single	2.07	F= 1.802	.132[c]
	Married	2.01		
	Separated	1.93		
	Divorce	1.59		
	Widowed	1.87		
Occupation status	Governmental employee	2.17	F= 2.078	.072[c]
	Free job	2.00		
	Retired	2.04		
	Unemployed	1.93		
	Housewife	1.94		
	Student	2.17		
Income	Sufficient	2.19	F= 7.961	.000[c]
	Sufficient to some extent	1.94		
	Insufficient	2.08		
Residence	Rural	2.05	T= 1.017	.311[b]
	Urban	1.99		
Type of disability	Quadriplegia	1.97	F= 2.321	.015[c]
	Right sided paralysis	1.96		
	Left sided paralysis	1.95		
	Lower limbs paralysis	2.02		
	Lower right limb amputation	2.08		
	Lower left limb amputation	2.05		
	Lower both limb amputation	1.77		
	Upper right limb amputation	2.18		
	Upper left limb amputation	1.96		
	Upper both limb amputation	1.58		
	Other injuries	2.19		
Duration of disability	≥ 1 year	2.06	Cc= -.001-	.991[a]
	2 - 3 years	1.92		
	≤ 4 years	2.02		
Cause of disability	Congenital	2.05	F= .414	.662[c]
	Traumatic	2.02		
	Chronic disease	1.98		
Are the basic materials or needs available	Yes	1.98	T= -.471-	.638[b]
	No	2.01		

Source: Own authorship.

Table 5 findings indicate that there were significant statistical variations among psychological aspect for disabled people with their Occupation status, and income at p<0.05. The results also shown there were significant statistical positive correlation between psychological aspect for disabled people with their age at p<0.05.

Table 5. The relationship between psychological aspect for disabled people with their demographical characteristic.

Demographic	Subgroup	Quality of Life		
		Mean	Analysis	P. value
Age group	Young adult (18 – 24) years	2.71	Cc= .171	.037[a]
	Adult (25 - 34 years)	2.45		
	Middle age adult (35 - 44 years)	2.61		
	Early middle aged (45 - 54 years)	2.85		
	Late middle aged (55 - 64 years)	2.72		
	Older adults (≥ 65 years)	2.91		
Gender	Male	2.79	Z= -1.915-	.055[b]
	Female	2.58		
Level of education	Not read or write	2.84	H= 12.369	.054[c]
	Read and write	2.56		
	Primary school	2.87		
	Intermediate school	2.69		
	Preparatory school	2.80		
	Institutes graduator	3.07		
	College graduator or above	2.33		
Marital Status	Single	2.59	H= 6.823	.146[c]
	Married	2.77		
	Separated	2.56		
	Divorce	3.07		
	Widowed	3.08		
Occupation status	Governmental employee	2.30	H= 20.638	.000[c]
	Free job	2.63		
	Retired	2.75		
	Unemployed	2.99		
	Housewife	2.71		
	Student	2.58		
Income	Sufficient	2.37	H= 12.985	.002[c]
	Sufficient to some extent	2.85		
	Insufficient	2.71		
Residence	Rural	2.77	Z= -.384-	.711[b]
	Urban	2.73		
Type of disability	Quadriplegia	2.88	H= 14.258	.162[c]
	Right sided paralysis	2.82		
	Left sided paralysis	2.83		
	Lower limbs paralysis	2.60		
	Lower right limb amputation	2.68		
	Lower left limb amputation	2.73		
	Lower both limb amputation	2.78		
	Upper right limb amputation	2.74		
	Upper left limb amputation	2.87		
	Upper both limb amputation	3.47		
	Other injuries	2.57		
Duration of disability	≥ 1 year	2.83	Cc= -.075-	.363[a]
	2 - 3 years	2.74		
	≤ 4 years	2.72		
Cause of disability	Congenital	2.53	H= 4.099	.129[c]
	Traumatic	2.73		
	Chronic disease	2.84		
Are the basic materials or needs available	Yes	2.71	Z= -.107-	.915[b]
	No	2.74		

Source: Own authorship.

In Table 6, the outcome shown there were highly significant statistical negative direction correlation between Psychological Aspects and Quality of Life for Disabled People at p<0.05.

Table 6. The Correlation between Physical and Psychological Aspects with Quality of Life for disabled people.

N =150	Quality of Life	
	Cc	Sig.
Psychological Aspects	-.666-	.000

Source: Own authorship.

Discussion

Discussion of Socio-Demographic Characteristics for the participants (Table 1)

The findings revealed that the research's mean ages of the study sample are 49.93 (± 17.149), and the age of more than 64 years (older adults) was recorded as the highest percentage (n=36; 24.0%) from the entire sample (150) physical disabled people. The findings of this investigation were equal to those of the study carried out by Crocker et al. (2021) **[11]** in Australia, in which results showed that the age of participants was between (60-69 years) old that constituted (n= 91; 22.20%) and more than 70 years (n=87; 21.22%) with mean age is 53.6 (18.5) from the whole sample. The large proportion of people in the study who were over 64 years old (i.e., the elderly category) may be due to several factors related to age and physical disability. For example, as people age, they become more susceptible to injuries or diseases that can lead to physical disabilities, such as stroke, heart disease, diabetes, and neurological diseases. Regarding the gender of the participants, there were males (n=114; 76.0%) compared with those who were females (n=36; 24.0%), the result of a study conducted in Bulgaria by Vankova & Manchev (2015) **[12]** agreed with the results of this research and demonstrated that the greatest percentage of the study sample was males (n=161; 52.80% %) compared with those who were females (n=144; 47.20 %). This can be justified by several reasons, as highlighted in the researcher's justification. Iraq has experienced long wars and violent conflicts, such as the Iran-Iraq War, the Gulf War, the US occupation, and the war against ISIS. Most of the participants in these wars were men, leading to a high rate of disability among them due to direct injuries sustained in battle and explosions. Concerning the educational level, 43% of participants had graduated from primary school (n=43; 28.7%). These findings agree with the study done by Khlaif & Mohammed (2017) **[13]** in Iraq (Thi Qar), in which results showed that the greatest percentage of the research sample of primary school graduates (n=30; 30.0%). Because of the conflict and instability, Iraqi schools generally lack adequate facilities. This implies that students with physical limitations might not be able to attend school. Girls with disabilities are more likely to be denied an appropriate education, given that girls make up only 33% of the pupils enrolled in schools. Because schools are frequently hazardous, all pupils typically receive lower-quality instruction **[14]**.

According to marital status, were highly (n=97; 64.7%) compared with those who were single, divorced, Widow and separated. Also, these results agreed with the study conducted by Fallahi et al. (2021) **[15]** in Iran (Tehran), in which the results showed that the majority of the participants were also married (n=187; 46.8 %) compared to single, divorced, and widows. In regard to the Occupation, participants were retired (n=52; 34.7%) of the whole sample.

The current study results were congruent with the study Rodrigues et al. (2019) **[16]** in Brazil, which concluded they were Only (n= 17; 10.4% of these individuals are included in the labor market with paid employment. The remaining are retired (n=46 ;28.0%); engaged in household activities (n=42; 25.6%); receive disability benefits (n=40; 24.4%); and unemployed (n=19; 11.6%). The presence of a majority of retirees in the Iraq physical disability study sample may be due to several social, economic, and health factors specific to Iraq. Justification of the researcher highlights that among these factors is that Iraq has experienced wars and conflicts over the years. Many retirees may suffer from physical disabilities as a result of injuries sustained during their military or civilian service, making them a significant portion of the research sample. Concerning the income level, the majority of the study sample were Sufficient to some extent (n=92; 61.3%). These results agreed with the study by Saad. (2020) **[17]** in Egypt (Mansoura), in which results showed that the majority of the participants were Average monthly income (n=5; 33.3%), Suitable monthly income (n=4; 26.7%), Low monthly income (n=4; 26.7%). Compared to those without disabilities, people with disabilities are more likely to live in poverty, have fewer economic prospects, and have worse health **[14]**.

Regarding the Residence, the highest percentage of study subjects are living in an urban area (n=106; 70.7%). These findings concurred with the research by Khlaif & Mohammed (2017) **[13]** in Iraq (Thi Qar), in which results showed that the majority of the participants were living in an urban area(n=67;67.0%). This study is due to the nature of urban society compared to rural society, which is prone to accidents, health and social problems, and high levels of pollution, which can increase the rates of motor disability **[17]**.

In terms of the type of disability, the lower-limb paralysis of participants (n=32; 21.3%). Regarding the

type of disability, (n=58% of participants presented plegia (Lower limbs paralysis); 26.2%, paresis (Left and Right paralysis); and 15.8%, amputations In Brazil (Itajaí/SC) **[16]**, this is also consistent with the results of the current study. The high proportion of people with lower limb paralysis in the study sample may be due to a combination of factors related to trauma from war, traffic accidents, physical injuries from physical work, or diseases affecting the central nervous system. According to the duration of disability, the highest percentage of study participants is (n=100; 66.7) with more than four years. This study was supported by Gaber Ahmed et al. (2024) **[18]**, who conducted a study in Egypt Which showed that the highest percentage of the study is (n=102; 51.0%) with more than two years. Regarding the causes of disability, the majority of the study sample was affected by traumatic injuries (n = 85; 56.7%). The researcher believes that traumatic causes include disabilities resulting from wars, work-related accidents, and road traffic accidents. This result may be due to the security situation in Iraq, terrorist attacks, and the numerous wars that Iraq has experienced over the past 30 years, in addition to work-related accidents and road traffic accidents. This result is consistent with the study by Khalif and Mohammed (2017) conducted in Iraq (Thi Qar) **[13]**. In terms of basic materials or needs of the participants, the highest percentage of the study sample did not have the basic materials or needs available for disabled people (n=134; 89.3%). However, Iraq's healthcare system lacks infrastructure, equipment, and security due to issues including war, neglect, economic sanctions, and the degradation of medical facilities **[14]**.

Discussion of the Quality of Life for Disabled People (Table 2)

Through Table 2 regarding the quality of life for disabled people, the results of the current study showed that there is a moderate level in general in all questions related to quality of life for disabled people, with a mean of 2.01 (Min - Max 1-3). The higher percentage was shown in the social relationship domain, with a mean of 2.56, and the lower percentage was shown in the physical health domain, with a mean of 1.72. how a moderate level among those with physical disabilities. A study conducted by Vankova & Manchev (2015) **[12]** in Bulgaria concluded that the QoL of the respondents varies between the low and middle levels. These findings corroborate those of the current study, which found that Eastern Europe appears to have one of the highest burdens of health repercussions following the shift. The significant shifts in health, higher education, and social security Alongside healthcare facilities, have led to hitherto unseen issues, such as poverty, joblessness, the demographic crisis, and an overall decrease in quality of life. These procedures resulted in the breakdown of interpersonal relationships, social capital, and mutual trust - all of which are essential for the well-being of both individuals and societies.

Discussion of the Psychological Aspects (Depression, Anxiety, Stress) for Disabled People (Table 3)

Through Table 3 regarding the psychological aspects for Disabled People, the results of the current study showed that there is a moderate level in general in all questions related to psychological aspects for disabled people, with a mean of 2.74 (Min - Max 1 - 4). The higher percentage was shown in the Stress domain (worse), with a mean of 2.88, and the lower percentage was shown in the anxiety domain, with a mean of 2.58. According to some current results by Kanwal & Mustafa (2016) **[19]**, people with physical disabilities had worse psychological health than people without disabilities. Furthermore, people who are physically disabled have a low degree of psychological health and quality of life as a result of a lack of employment prospects, frailty, and deprivation in comparison to non-disabled people. People with disabilities suffer from various forms of discrimination in various areas, including health care. They suffer from a lack of medical services appropriate to the extent and type of disability they suffer from, due to the limited availability of specialized departments in hospitals and health centers to provide them with medical care, given their need for care compared to others **[20]**. Therefore, the weakness of health services provided to the disabled in Iraqi society is one of the main factors that lead to the poor mental health of the disabled.

Discussion of the Relationship between Quality of Life and Demographic Characteristics (Table 4)

In Table 4, the results showed there were significant statistical differences between Quality of Life for disabled people with their income and type of disability at $p<0.05$. The results also showed there were significant statistical negative correlation between Quality of Life for disabled people and their age at $p<0.05$. The results of this study were agreed to the study conducted by Pandit (2016) **[21]** in India , in which results showed that males showed a decrease in Quality of Life for disabled people scores as age increased, and it was statistically significant across the

age groups ($p<0.05$). The results of this study were disagreed to the study conducted by Hassan (2020) **[22]** in Egypt, in which results showed there were no significant differences ($p<0.05$) between the demographical variables (age, family income, type of education level, physically disabled type) and the total life quality of physically disabled individuals.

Discussion of the relationship between the psychological aspect for disabled people and their Demographical Characteristic (Table 5)

In Table 5, the results shown there were significant statistical differences between psychological aspects for disabled people with their Occupation status, and income at $p<0.05$. The results also showed there were significant statistical positive correlation between psychological aspects for disabled people and their age at $p<0.05$. This study agrees with a study that was conducted in Saudi Arabia, which reached a set of results, including a relationship between psychological stress and gender and age. The study recommends activating the university's Psychological Counseling Center and incorporating the concept of quality of life into some academic curricula **[23]**.

The way people with disabilities react emotionally to cruel or stigmatizing personal experiences may also be impacted by age-related changes in emotion regulation. Elderly people are less emotionally volatile. reactions to stress, as well as a stronger ability to see the "good" even in bad circumstances, in comparison to their younger peers. This ability to focus on the good while ignoring or downplaying the bad is particularly prevalent in social interactions **[4]**. Honey, Emerson, and Llewellyn noted in their research that people with disabilities are more likely to live in poverty, lack access to higher education, have difficulties in employment, and even commit crimes due to certain conditions **[24]**.

Discussion of The Correlation between Physical and Psychological Aspects and Quality of Life for Disabled People (Table 6)

In Table 6, the results shown there were highly significant statistical negative direction correlations between Psychological Aspects with Quality of Life for Disabled People at $p<0.05$. Their study, conducted in Pakistan, agrees with this study, showing a significant positive correlation between psychological well-being (a combination of feeling good and functioning effectively) and quality of life and a negative relationship with disability of employees **[19]**. The rationale of the researcher suggests that people with psychological challenges, such as depression or anxiety, may struggle to adjust to their disability, negatively impacting their quality of life. Feeling isolated or frustrated can reduce their overall enjoyment of life **[25,26]**.

Limitation and Recommendation

It is recommended that specialized programs be established aimed at raising awareness about individuals with disabilities and their significant roles in society. These programs should emphasize that people with disabilities are just like anyone else and deserve to be treated with respect and dignity. Such initiatives should focus on educating the public that having a disability is not a stigma, but rather a part of human diversity, thus contributing to their psychological and social support and increasing the availability and accessibility of rehabilitation centers for disabled people by establishing more facilities in each district or city of Hilla. This will make it easier for individuals with disabilities to access essential healthcare services without spending a significant portion of their monthly income. Also, establish dedicated psychological therapy clinics within healthcare centers, specifically designed to provide mental health services to individuals with disabilities. These clinics should offer a range of psychological support services, including individual counseling and group therapy sessions.

Conclusion

The largest percentage of the study sample was more than 64 years (older adults), and almost the majority of the study sample were male. In addition, most of them were married, and the highest percentage of the study sample had a primary school education. Most of them were retired from their occupation and had a sufficient, to some extent, monthly income. In addition, most of them lived in urban areas. The majority of them were lower limb paralysis, with a disability duration of over four years, and the primary cause of the disability was traumatic injury. The majority of the study sample did not have the basic materials or needs available for disabled people (regular and electric wheelchairs, prosthetic limbs, prosthetic socks, quad crutches). The quality of life for individuals with disabilities was found to be moderate, and Depression Anxiety Stress (Psychological Aspects) was found to be moderate. There were highly significant statistical negative direction correlations between Psychological Aspects and Quality of Life for physically disabled people. There were significant statistical differences between the quality of Life for physically disabled people, with some demographic data of participants such as age, income,

and type of disability. There were significant statistical differences between psychological aspect for physically disabled people, with some demographic data of participants such as age, occupation status, and income.

CRediT

Author contributions: **Conceptualization -** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Reda. **Data curation-** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Reda; **Formal Analysis-** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Reda; **Investigation-** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Reda; **Methodology-** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Reda; **Project administration-** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Reda; **Supervision:** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Reda; **Writing - original draft-** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Reda; **Writing- review & editing-** Zainab A. Al- Mayyahi, Entissar Abdul latif Abdul Redaf.

Acknowledgment

Not applicable.

Ethical Approval

This study was approved by the Research Ethics Committee from the ethical board of College of Medicine.

Informed Consent

It was applicable.

Funding

Not applicable.

Data Sharing Statement

All referenced sources are accessible through the respective journals or public repositories.

Conflict of Interest

The authors declare no conflict of interest.

Similarity Check

It was applied by Ithenticate[@].

Application of Artificial Intelligence (AI)

Not applicable.

Peer Review Process

It was performed.

References

1. Gutterman AS. Definitions and Models of Disability. The Formation of Character in Education. 2023.
2. Detsyk OD, Yukish HY, Tsikhon ZO, Kovalchuk RY, Karpinets IM. Quality of life determinants in persons with disability after muskulosceletal injuries. Wiadomosci Lekarskie. 2021; 74(5):1093-8.
3. Milner A, Kavanagh A, McAllister A, Aitken Z. The impact of the disability support pension on mental health: evidence from 14 years of an Australian cohort. Australian and New Zealand Journal of Public Health. 2020; 44(4):307-12.
4. Cree RA. Frequent mental distress among adults, by disability status, disability type, and selected characteristics—United States, 2018. MMWR. Morbidity and mortality weekly report.2020; 69.
5. Al Syifa W, Hadi EN. Determinants of quality of life on persons with physical disability: literature review. Journal of Social Research. 2023;2(6):1786-95.
6. Raheem LQ, Kadhim AA. Psychosocial and Behavioral Problems among Orphans Students in the School Environment. International Journal of Body, Mind & Culture (162-169). 2024;11(6).
7. Okoro CA. Prevalence of disabilities and health care access by disability status and type among adults—United States, 2016. MMWR Morbidity and mortality weekly report. 2018;67.
8. Taylor DM. Americans with disabilities: 2014. US Census Bureau. 2018;32.
9. ALHatab AA, Mohammed SH. Psychological Factors Associated with Relapse in Psychotic Patients attending Teaching Hospitals in AL_Furat Al-Awsat Governorates. Indian Journal of Forensic Medicine & Toxicology. 2020;14(3):1617-22.
10. Handicap International, Iraq Alliance for Disability Organizations (IADO). The recent disability legislation in Iraq: The first amendment of Law No. 38 (Law No. 11 of 2024) [Internet]. 2024 [cited 2026 Mar 8]. Available from: https://www.hi.org/sn_uploads/document/The-Recent-Disability-Legislation-in-Iraq. The-first-amendment-of-law-38-No.11-of-2024.pdf
11. Crocker M, Hutchinson C, Mpundu-Kaambwa C,

Walker R, Chen G, Ratcliffe J. Assessing the relative importance of key quality of life dimensions for people with and without a disability: an empirical ranking comparison study. Health and Quality of Life Outcomes. 2021;19(1):264.

12. Vankova D, Mancheva P. Quality of life of individuals with disabilities-concepts and concerns. Scripta Scientifica Salutis Publicae. 2015;1(1):21-8.
13. Khlaif AA, Mohammed QQ. Quality of life of physically disabled adults at Thi Qar Rehabilitation Center in Al-Nasiriyah City. Int J Sci Res (IJSR). 2017;6(10).
14. Nationalities Service Center, Pennsylvania Developmental Disabilities Council. Caring for the health of refugees and immigrants with disabilities [Internet]. 2019 [cited 2026 Mar 8].
15. Fallahi Gilan R, Parvin S, Kaldi A. Quality of Life of the Disabled in Tehran. Iranian Journal of War and Public Health. 2021;13(3):209-19.
16. Rodrigues CVC, Leffer A, Chesani FH, Mezadri T, Lacerda LLVd. Functional independence profile of people with physical disabilities. Fisioterapia em Movimento. 2019; 32:e003226.
17. Saad AAM. The effectiveness of the professional intervention program from the perspective of general practice in social work and relieving life stresses for the physically disabled. The journal Future of Social Sciences. 2020;1(2):95-140.
18. Gaber Ahmed F, Ibrahim Ahmed H, Fathy Miky S. Effect of Physical Disabilities on Quality of life for Soldiers. Egyptian Journal of Health Care. 2024;15(2):214-27.
19. Kanwal H, Mustafa N. Psychological well-being and quality of life among physically disabled and normal employees. Pakistan Armed Forces Medical Journal. 2016;66(5).
20. Mohammed AJ, Rashid MJ. Discrimination against persons with disabilities in Iraqi society: Sociological reading. Middle East Research Journal. 2021;59.
21. Pandit CV. Effect of impairment and disability on health related quality of life of elderly. International Archives of International Medicine ISSN. 2016:2394-0026.
22. Hassan SM. Social welfare Services and improving the quality of life for physically disabled. Egyptian Journal of Social Work. 2020;10(1):127-46.
23. Al-Juwai'i MS. The relationship between psychological stress and quality of life among male and female students at Imam Muhammad bin Saud University in Riyadh. Scientific Journal of the College of Specific Education. 2017:9.
24. Namkung EH, Carr D. The psychological consequences of disability over the life course: Assessing the mediating role of perceived interpersonal discrimination. Journal of health and social behavior. 2020;61(2):190-207.
25. Huang X, editor Investigating Mental Well-being Levels of Physically Disabled People Compared to People without Disabilities. 2022 5th International Conference on Humanities Education and Social Sciences (ICHESS 2022); 2022: Atlantis Press.
26. Shaker AF, Kadhim AA. Psychological and Social Risk Factors Contributing to Substance Use at Babylon Governorate, Iraq. International Journal of Body, Mind & Culture (568-79). 2024 Nov 1;11(5).