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The learning, social, and economic challenges facing the deaf and hearing-impaired individuals

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Abstract

The research aimed to identify the education, social, and economic challenges facing deaf and hearing-impaired individuals, the research based on a descriptive approach to suites the research objective. sample of the research consists of (105) from both deaf and hearing-impaired individuals in Al Balqa governorate selected by a convenient method and the results showed that the education, social, and economic challenges facing the deaf and hearing-impaired individuals were in the medium level. The social challenges facing hearing impaired are lack of engagement in social activity, fear to deal with others, and the discrimination feels, and the education challenges are cannot understand science material, the need for sign language translator, and lack of teachers' ability. The research furtherly found there are statistically significant differences at a level of (0.05) in the level of social and economic challenges facing the deaf and hearing-impaired individuals according to gender, age, and qualification.

Keywords: Deaf; Economic challenges; Education challenges; Hearing impaired; Social challenges.

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1. Introduction

Globally hearing impairment is classified as the fourth explanation of impairment (Cunningham & Tucci, 2017). According to the Global Burden of Disease (GBD), hearing impairment categorizes as the fifth cause of impairment based on GBD survey statics in 1990-2017 for 195 countries (James, et al., 2018). WHO's statics indicated that there are 466 hearing imapired individuals in the world, and it predicts that hearing impaired conditions will rise to 630 million, 900 million in 2030, 2050 respectively (WHO, 2018).

Hearing loss or hearing impairment is considered an invisible and reticent disability, and it is one of the global prevalent sensory impairment. Both terms will be used interchangeably. Hearing impairment defined as hearing loss >25-30dB (Mulwafu, Kuper, & Ensink, 2016), while the World Health organization (WHO) defines hearing impairment as hearing loss of 41-80dB (WHO, 2004). It is worth mentioning that it is difficult to compare previous results of studies in hearing impairment due to the variation of hearing thresholds among hearing impairment definitions. In this research the hearing imapired is defined as any individual using hearing aids to hear or using sign language to communicate.

Hearing loss influences the quality of individuals' life composes educational, social, and economic aspects (Jaiyeola & Adeyemo, 2018; Punch, 2016; Emmett & Francis, 2015). Hearing loss in adulthood impacts the individual causing social isolation, loneliness, exposure to violence, emotional and psychological disorders, and relationships' difficulties with partner and children (Frajtag & Jelinic, 2017; Mulwafu, Kuper, & Ensink, 2016). According to a qualitative research addressed hearing impaired individuals aged 44-70 years old, asserted that hearing impaired experience fatigue related to negative feelings regards hearing loss and fatigue related to cognitive and physical efforts; since they exert additional efforts compared to their peers. Besides, hearing loss impacts individuals' relation with others, family, friends and surroundings. Thus, the majority of hearing-impaired exhibited depression due to the reduction of their communication competence. Furthermore, hearing impaired claimed a lack of understanding and empathy from surrounds, relatives, and friends, which causes collateral psychosocial issues (Holman, Drummon, Hughes, & Naylor, 2019).

There is a consensus of the association between hearing loss and low educational attainments (Cunningham & Tucci, 2017; Jung & Bhattacharyya, 2012; Teasdale & Sorensen, 2007). Emmett & Francis (2015) who defined educational achievement as completion of postsecondary studies, asserted that there are relation mong hearing loss and low educational achievement, found that hearing loss increases the likelihood of reducing educational achievement three times compared to likelihood of hearing peers. A longitude research conducted 1984 hearing impaired adults for 6 years, found that hearing loss affects cognitive ability, hearing loss reduces 32-41% of cognitive ability of affected compared to normal hearing peers (Lin, et al., 2013). Consequently, Agyire-Tetty, Cobbina, and hamenoo (2017) interpreted the low educational achievement of hearing impaired due to two main reasons; reasons referred to educational institutions, and reasons referred to personal characteristics of hearing impaired. In the context of educational institutions, the educational procedures include a large number of students in the class, lack usage of sign language by instructors, the limited educational materials and facilities such as a library, the density of educational content and lack of appropriateness of content to hearing impaired. However, the reasons referred to personal characteristic comprise; health problems such as stress, fatigue and weakness, reading skills and habits such as intellectual challenges, lack of spelling and reading competence, and inability of writing, and their expectations toward education in

which majority of them preferred to have trade rather than pursued educational degree. Agreed to Mpofu & Chimhenga (2013) who addressed educational challenges faced by hearing impaired, mentioned lack of teachers' willing to learn sign language, lack of teachers' knowledge of pedagogy techniques for hearing impaired students, speaking competence deficiency of hearing impaired, and difficult to comprehend scientific concepts especially in math.

Moreover, hearing loss impacts the economic aspect of individuals' life, since the hearing impaired considered less employed as well as have lower income compared to their hearing peers. Despite the last encouragement to hire hearing impaired individuals, but they still have lower employment rate and income, as the professional opportunities are limited and it requires an extra effort from them compared to their hearing peers (Mulwafu, Kuper, & Ensink, 2016; Punch, 2016; Jung & Bhattacharyya, 2012). Emmett and Francis (2015) utilized a data set of a national survey conducted in the United State at (1999-2002) of those aged 20-69 years old, to assess the relation among hearing loss and unemployment, found that the hearing impaired is twice more likely of unemployment compared to their hearing peers. Moreover, Emmett and Francis (2015) found an association between unemployment and the qualification of hearing impaired since the lower qualification increases 1.5 the likely of unemployment; asserted that lower educational attainment interpreted lower employment rate of hearing impaired.

Locally the High Council for Affairs of Individuals with Disability (HCD) states that the hearing impairement is the third prevalent impairment in Jordan notably in those aged 19-24 years, and more than 30 years old (High Council for Affairs of Person with Disability, 2015). However, The hearing impaired individuals in the Balqa'a provenance faced numerous challenges and hindrances that impede their interaction, inclusion, and acquiring educational and professional competences as assumed to raise a qualified and active member in society, held abilities and skills to accommodate the fast changes and developments in all aspect of life such as the rapid changes lately experienced in the communication, interaction, and transportation techniques in the society complies with their rights as stated in law such as the right to learn as equivalent to their hearing peers.

The research gains importance due to the significance of hearing impaired individuals as a part of society (Holman, Drummon, Hughes, & Naylor, 2019; James, et al., 2018; Mulwafu, Kuper, & Ensink, 2016). Hearing loss individuals have all humanities' constituents such as feelings, emotions, intellect, and the ability to learn and promote in all life aspects. Hearing impaired individuals need to determine the problems, challenges, and difficulties that faced them in their life include social, economic, and educational aspects (Jaiyeola & Adeyemo, 2018; Agyire-Tetty, Cobbina, & hamenoo, 2017; Frajtag & Jelinic, 2017). According to the researcher's knowledge, there is a lack of studies addressed challenges faced by hearing impaired in all aspects, the majority of the studies concerned only in the educational aspect such as Agyire-Tetty, Cobbina, and Hamenoo (2017), or some daily activities such as Holman, Drummon, Hughes, and Naylor (2019), without tackling the main three dimension; economic, educational and social challenges faced by hearing impaired, as the current research expected to conduct.

The main research question is; what is the level of the challenges faced by hearing impaired in the social, educational and financial economic aspects? Consequently, the following questions are driven:

- 1. Are there statistically significant differences at level of (0.05) the education, social and economic challenges facing the deaf and hearing impaired individuals according to gender?
- 2. Are there statistically significant differences at level of (0.05) the education, social and economic challenges facing the deaf and hearing impaired individuals according to age?
- 3. Are there statistically significant differences at level of (0.05) the education, social and economic challenges facing the deaf and hearing impaired individuals according to Qualification?

2. Methodology

This research is a descriptive since it focuses on investigating challenges faced by hearing impaired individuals that contextualized recently within developing offered services and support for those who have a hearing impairment. In order to get generalizability results, thus the research adopted a quantitative approach.

2.1 The Research Population and Sample

The research targeted all individuals whose age above 12 year-olds, lived or worked in Balqa'a governorate in Jordan, and has a hearing impairment, no matter how severe is the impairment, counted all individuals who are using conventional verbal language, lips-reading, or sign language to communicate. The research sample was selected by convenient method. The researcher disseminated the research tools among 120 participants. The acquisition ratio was 87.5%, which 105 responses were acquired, which were valid for analysis purposes.

The following tables show the demographic background of the participants.

Table 1.Demographic Characteristics of Gender

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Male | 48 | 45.7 |
| Female | 57 | 54.3 |
| Total | 105 | 100.0 |

The sample of the research focused only on (45.7%) deaf and hearing impaired males in addition to (54.3%) females.

Table 2.Demographic Characteristics of Age

| Age | Frequency | Percentage |
|---------------|-----------|------------|
| Below than 20 | 57 | 54.3 |
| 21-25 years | 21 | 20.0 |
| 26-31 years | 12 | 11.4 |
| 32-37 years | 15 | 14.3 |
| Total | 105 | 100.0 |

The participants were (54.3%) below than (20) years, (21-25 years) were (20%), (26-31 years) were (11.4%) and (32-37 years) were (14.3%).

Table 3.Demographic Characteristics to Qualification

| 8 | • | - |
|-------------------|-----------|------------|
| Qualification | Frequency | Percentage |
| Primary | 52 | 49.5 |
| Secondary | 25 | 23.8 |
| Diploma and above | 28 | 26.7 |
| Total | 105 | 100.0 |

The qualifications of the research sample were varied from primary school up to higher education.

2.2 The Research Tool

The responses were from deaf and hearing-impaired individuals in Al Balqa governorate. The research depended on the cumulative collection of the data using the quantitative approach. The Questionnaire was developed in order to serve the research aims; therefore it was formulated in four main parts; the first part was developed to describe participants' background (Gender, Age, and Qualification). While the rest three parts were developed to assess the challenges faced by participates in three main domains distinctly; Social domain, Education domain, and Economic domain, which each of three parts consist of (10) statements. The responses of the questions ranged from 1 to 5.

2.3 Validity and Reliability

To validate the questionnaire, the first version of the questionnaire was introduced to the panel of specialists and experts in special education, deaf education, and the deaf psychology fields. The questionnaire distributed to (10) academic reviewers from Al Balqa Applied University and other universities experts to take their opinions, and re-wording of some statements. The questionnaire was amended per panel's recommendations to strengthen the appropriateness, clearness, and adequacy of formulating questionnaire items. Furthermore, the internal consistency of the questionnaire was calculated using Cronbach alpha for each part of the questionnaire to verify its reliability. Table. (4) shows the calculation result of internal consistency on the three dimensions by its statements and the results generally were higher than (60%) which is acceptable in this research.

Table 4.Cronbach's alpha for the Study Fields

| Variables | Statements | Cronbach Alpha |
|----------------------|------------|----------------|
| Education challenges | 10 | 0.741 |
| Social challenges | 10 | 0.710 |
| Economic challenges | 10 | 0.821 |
| All Questions | 30 | 0.884 |

2.4 Data Analysis Techniques:

The research used (SPSS) program, version (22) to analyze the data, the SPSS stands for Statistical Package for Social Sciences. The following tests were used:

1. Frequencies and percentages to describe demographical variables.

- **2.** Cronbach's Alpha test was used to measure the internal consistency for the responses on the three dimensions and its statements which are related to the strength of the correlation between the questionnaire items.
- 3. Descriptive statistical techniques, which includes the means and standard deviations.
- **4.** One Sample T-test was used to show the variance between (t) calculated and (t) tabulated.
- **5.** Independent Sample T-test and One Way ANOVA test were used to show the variance in the responses rate according to the demographic variables
- **6.** The research type scale included five Likert scale as follows:

| Strongly disagree | Disagree | Neutral | Agree | Strongly Agree |
|-------------------|----------|---------|-------|-------------------|
| 1 | 2 | 3 | 4 | 5 |

And the low degree from 1.00-2.33, the medium degree from 2.34 - 3.67, and the High degree from 3.68 - 5.00.

3. Results

The results are based on the perspective of the research sample regarding education, social, and economic challenges facing the deaf and hearing impaired individuals as following:

The results of the descriptive analysis techniques

A- The challenges as a whole:

The research calculated the frequencies of the statements responses related to the Education, social and economic challenges facing the deaf and hearing impaired individuals.

Table 5. The Education, Social, and Economic Challenges Facing the Deaf and Hearing Impaired Persons

| No | Statements | Mean | Std. Deviation | Item Importance | Importance Level |
|-------|----------------------|------|----------------|-----------------|------------------|
| 3 | Economic challenges | 3.00 | 0.46 | 1 | Medium |
| 1 | Education challenges | 2.39 | 0.27 | 2 | Medium |
| 2 | Social challenges | 2.02 | 0.52 | 3 | Low |
| Total | | 2.47 | 0.26 | | Medium |

The results show that the Education, social and economic challenges facing the deaf and hearing impaired individuals were at medium level, where the economic challenges scored first with medium level and it is earned (3.00 out of 5.00), the second was the education challenges with medium level, and it is earned (2.39 out of 5.00). At last the social challenges facing the deaf and hearing impaired person and it is earned (2.02 out of 5.00) and it was at

low level. The total value was (2.47 out of 5.00) with medium level at all. That concurs the result of Mulwafu, Kuper, & Ensink, (2016); Punch, (2016); Jung & Bhattacharyya, (2012); Emmett and Francis (2015); which found economic challenges is the most challenges resulted of the educational challenges, as there is a relation between low attainment and low economic status.

The following analysis shows the level of each dimension; that reflected the level of the education, social, and economic challenges facing the deaf and hearing impaired individuals:

Table 6. the Education challenges facing the deaf and hearing impaired persons

| No | Statements | Mean | SD | Item Importance | Importance Level |
|-------|---|------|------|--------------------|---------------------|
| 3 | I need a sign language translator to understand the scientific material | 4.15 | 0.79 | 1 | High |
| 4 | I cannot understand all the lesson dimensions. | 3.50 | 1.50 | 2 | Medium |
| 1 | It is difficult for Deaf and hearing impaired students to understanding Education means without teacher's assistance. | 2.71 | 1.12 | 3 | Medium |
| 5 | I feel weakness in the teacher's ability to use more than one method to communicate with me as a deaf student. | 2.58 | 0.97 | 4 | Medium |
| 7 | I feel weakness in the school/ teacher is not specialized in teaching Deaf and hearing impaired students. | 2.03 | 0.40 | 5 | Low |
| 10 | The variance in hearing loss among deaf students hinders the understanding of the lesson. | 2.03 | 0.74 | 6 | Low |
| 8 | The lack of tools and means of teaching the deaf students. | 1.99 | 0.56 | 7 | Low |
| 2 | The center / school does not have the experience to deal with the me as a deaf | 1.68 | 1.01 | 8 | Low |
| 9 | person I feel that all of my academic education programs are inappropriate | 1.62 | 1.05 | 9 | Low |
| 6 | I feel that the school/center teacher is not specialized in teaching the deaf and hearing impaired. | 1.60 | 0.58 | 10 | Low |
| Total | | 2.39 | 0.27 | | Medium |

Table (6) showed that the Education challenges facing the deaf and hearing impaired individuals was in the medium level and the values for the participants about Education challenges were from (4.15-1.60) which is between High to Medium, Statement (3) (I need a sign language translator to understand the scientific material) ranked first with (4.15 out of 5.00) which is of High, followed by "I cannot understand all the lesson dimensions." And "It is difficult for Deaf and hearing impaired students to understanding Education means without teacher's assistance" which confirmed the result of Lin, et al., (2013) who found that hearing loss reduces the cognitive ability, furthermore, the results accords with Agyire-Tetty, Cobbina, and hamenoo (2017) that hearing impaired students' need assistance from teacher and institutes and as mentioned by Mpofu & Chimhenga (2013) hearing impaired find difficult to comprehend scientific concepts, especially in math. These results can explain the agreement of Cunningham & Tucci, (2017); Jung & Bhattacharyya, (2012); Teasdale & Sorensen, (2007) that relation between hearing loss and low educational attainment. While Statement (6) (I

feel that the school/center teacher is not specialized in teaching the deaf and hearing impaired) ranked last with (1.60 out of 5.00) and it's in the Low level which relatively contradicts the aforementioned by Mpofu & Chimhenga (2013) who asserted educational challenges faced by hearing impaired, mentioned lack of teachers' willing to learn sign language, lack of teachers' knowledge of pedagogy techniques for hearing impaired students, speaking competence deficiency of hearing impaired.

Table 7.the social challenges facing the deaf and hearing impaired persons

| | Table 7-the social chancings facing the dear and hearing imparted persons | | | | | | | |
|-------|---|------|------|--------------------|---------------------|--|--|--|
| No | Statements | Mean | SD | Item Importance | Importance Level | | | |
| 5 | I am not involved in any social activity outside of school | 2.66 | 1.22 | 1 | Medium | | | |
| 7 | I feel afraid of dealing with others | 2.34 | 0.86 | 2 | Medium | | | |
| 3 | I feel discrimination between me as a deaf and my normal brothers | 2.08 | 0.83 | 3 | Low | | | |
| 8 | I feel like an unwanted person | 2.08 | 0.77 | 3 | Low | | | |
| 10 | I suffer from social and psychological problems, and feel the need for a social or psychological assistant. | 1.93 | 0.59 | 5 | Low | | | |
| 9 | I feel like a pathetic person | 1.89 | 0.70 | 6 | Low | | | |
| 1 | I am having difficulty interacting with family members | 1.84 | 0.90 | 7 | Low | | | |
| 4 | In my life, I do not practice social activities inside the school or the stage that followed | 1.84 | 0.48 | 8 | Low | | | |
| 6 | I do not communicate through social media networks with deaf or hearing impaired people. | 1.84 | 0.72 | 8 | Low | | | |
| 2 | I am having difficulty interacting with friends | 1.73 | 0.75 | 10 | Low | | | |
| Total | | 2.02 | 0.52 | | Low | | | |

The values which its shown in table (7) confirm that the social challenges facing the deaf and hearing impaired individuals were in the low level and the values for the participants about social challenges were from (2.66-1.73) which is between medium to low, Statement (5) (I am not involved in any social activity outside of school) ranked first with (2.66 out of 5.00) which is of medium, and Statement (2) (I am having difficulty interacting with friends) ranked last with (1.73out of 5.00) and it is at low level. This can be explained by the results obtained from studies of Holman, Drummon, Hughes, and Naylor, (2019), Frajtag & Jelinic, (2017); Mulwafu, Kuper, & Ensink, (2016) that claimed that hearing loss causes social isolation and difficulties with partner and children, Besides, hearing loss impacts individuals' relation with others, family, friends, and surroundings. However, the statement (7) is at the second coincides with Holman, Drummon, Hughes, and Naylor, (2019), which cited that hearing impaired claimed a lack of understanding and empathy from surrounds, relatives.

Table 8.the Economic challenges facing the deaf and hearing impaired persons

| No | Statements | Mean | SD | Item Importance | Importance Level |
|-------|---|------|------|--------------------|---------------------|
| 3 | I feel that my family is suffering from my expenses as deaf and hearing impaired | 3.55 | 0.85 | 1 | Medium |
| 2 | I have no financial capabilities to join training programs to communicate with the deaf and hearing impaired. | 3.43 | 0.85 | 2 | Medium |
| 10 | Financial expense is not enough for me | 3.41 | 0.90 | 3 | Medium |
| 1 | I am suffering from my inability to buy the appliances & the software I need. | 3.29 | 1.21 | 4 | Medium |
| 9 | I do not have financial capabilities to go in recreational trips. | 3.25 | 1.09 | 5 | Medium |
| 6 | I don't receive any financial assistance from anyone. | 3.23 | 0.84 | 6 | Medium |
| 4 | I am unable to regularly visit a doctor/private hospital due to cost. | 2.80 | 0.93 | 7 | Medium |
| 5 | I do not get involved in sport & social activities that I like because of its financial cost. | 2.61 | 0.98 | 8 | Medium |
| 8 | I do not practice my hobbies because of my financial situation. | 2.26 | 0.69 | 9 | Low |
| 7 | I can't visit some of my deaf friends because of transportation cost. | 2.18 | 0.69 | 10 | Low |
| Total | | 3.00 | 0.46 | | Medium |

Means values in table (8) showed that that the economic challenges facing the deaf and hearing impaired individuals was in the medium level and the participants responses rate were from (3.55 – 2.18) which is between Medium to Low, Statement (3) (I feel that my family is suffering from my expenses as deaf and hearing impaired) ranked first with (3.55 out of 5.00) which is of Medium, and Statement (7) (I can't visit some of my deaf friends because of transportation cost) ranked last with (2.18 out of 5.00) and it is at a low level. That coincides with the impact of hearing loss on the economic state and income rate compared to their peers as emphasized by Mulwafu, Kuper, & Ensink, (2016); Punch, (2016); Jung & Bhattacharyya, (2012); and Emmett and Francis (2015).

And the research used the One Sample T-test to determine whether the deaf and hearing impaired individuals are facing education, social and economic challenges or not:

Table 9.One Sample T-test to determine whether the deaf and hearing impaired persons are facing Education, social and economic challenges (n=105)

| Dimension | Mean | St. | St. T- | | Df | Sig | |
|----------------------|------|-----------|-----------|------------|-----|-------|--|
| Dimension | Mean | Deviation | Tabulated | calculated | Di | Dig | |
| Education challenges | 2.39 | 0.27 | | -23.016 | 104 | 0.00* | |
| Social challenges | 2.02 | 0.52 | 1.96 | -19.420 | 104 | 0.00* | |
| Economic challenges | 3.00 | 0.46 | 1.90 | .000 | 104 | 1.00 | |
| Total | 2.47 | 0.26 | | -20.568 | 104 | 0.00* | |

⁽t) Tabulated = ± 1.96 , (t) value = 3.00, * Significant at level of (0.05)

One Sample T-test in table (9) showed that (t calculated values were (-23.016, -19.420 and -20.568) for the Education challenges, Social Challenges and total challenges facing the deaf and hearing impaired individuals and the means values were (2.39, 2.02, 2.47) and its less than (t) value = (3.00), while these values significant at level of (0.05) that assure the deaf and hearing impaired individuals are facing Education and social challenges with low level, and the results showed that there is no statistically significant differences at level of (0.05) between the (t) calculated and (t) tabulated for economic challenges, that assure the deaf and hearing impaired individuals doesn't facing economic challenges.

1. Are there statistically significant differences at level of (0.05) the education, social and economic challenges facing the deaf and hearing impaired individuals according to Gender?

The research used Independent Sample T-test to show the statistically significant differences at a level of (0.05) The Education, social and economic challenges facing the deaf and hearing impaired individuals according to Gender as shown in table (10).

Table 10. independent Sample T-test

| Source | Gender | Mean | St. Deviation | Df. | T value | Sig. |
|------------|--------|------|---------------|-----|---------|--------|
| Education | Male | 2.34 | 0.24 | 103 | -1.858 | 0.066 |
| challenges | Female | 2.43 | 0.29 | | | |
| Social | Male | 1.91 | 0.56 | 103 | -2.143 | 0.034* |
| challenges | Female | 2.12 | 0.46 | | | |
| Economic | Male | 2.92 | 0.43 | 103 | -1.646 | 0.103 |
| challenges | Female | 3.07 | 0.47 | | | |
| Total | Male | 2.39 | 0.26 | 103 | -3.061 | 0.003* |
| | Female | 2.54 | 0.25 | | | |

^{*:} Significant at level of (0.05)

The results showed that there are statistically significant differences at a level of (0.05) in the level of social challenges and the total degree of challenges facing the deaf and hearing impaired individuals according to gender and the variance in favor of males.

While there are no statistically significant differences at a level of (0.05) in the level of education and economic challenges facing the deaf and hearing impaired individuals according to gender.

2. Are there statistically significant differences at level of (0.05) the education, social and economic challenges facing the deaf and hearing impaired individuals according to Age?

One Way ANOVA test was used to show the statistically significant differences at a level of (0.05) the education, social, and economic challenges facing the deaf and hearing impaired individuals according to Age as shown in table (11).

Table 11.One Way ANOVA

| | | Sum of Squares | df | Mean Square | F | Sig. |
|----------------------|----------------|----------------|-----|-------------|--------|-------|
| Education_challenges | Between Groups | .532 | 3 | .177 | 2.498 | .064 |
| | Within Groups | 7.174 | 101 | .071 | | |
| | Total | 7.706 | 104 | | | |
| Social_challenges | Between Groups | 4.621 | 3 | 1.540 | 6.742 | *000 |
| | Within Groups | 23.078 | 101 | .228 | | |
| | Total | 27.700 | 104 | | | |
| economic_challenges | Between Groups | 2.116 | 3 | .705 | 3.652 | .015* |
| | Within Groups | 19.504 | 101 | .193 | | |
| | Total | 21.620 | 104 | | | |
| Total | Between Groups | 2.011 | 3 | .670 | 12.932 | *000 |
| | Within Groups | 5.235 | 101 | .052 | | |
| | Total | 7.246 | 104 | | | |

^{*:} Significant at level of (0.05)

The results showed that there are statistically significant differences at level of (0.05) in the level of social challenges and economic challenges and the total degree of challenges facing the deaf and hearing impaired individuals according to age and the variance in favor of age category (32-37 years).

While there are no statistically significant differences at level of (0.05) in the level of education and economic challenges facing the deaf and hearing impaired individuals according to age.

3. Are there statistically significant differences at a level of (0.05) the education, social, and economic challenges facing the deaf and hearing impaired individuals according to Qualification?

One Way ANOVA test was used to show the statistically significant differences at a level of (0.05) the education, social, and economic challenges facing the deaf and hearing impaired individuals according to qualification as shown in table (12).

Table 12. One Way ANOVA

| | | Sum of Squares | df | Mean Square | F | Sig. |
|----------------------|----------------|----------------|-----|-------------|--------|-------|
| Education_challenges | Between Groups | .901 | 2 | .451 | 6.753 | .002* |
| | Within Groups | 6.805 | 102 | .067 | | |
| | Total | 7.706 | 104 | | | |
| Social_challenges | Between Groups | 3.465 | 2 | 1.732 | 7.291 | .001* |
| | Within Groups | 24.235 | 102 | .238 | | |
| | Total | 27.700 | 104 | | | |
| economic_challenges | Between Groups | 2.358 | 2 | 1.179 | 6.245 | .003* |
| | Within Groups | 19.262 | 102 | .189 | | |
| | Total | 21.620 | 104 | | | |
| Total | Between Groups | 1.536 | 2 | .768 | 13.720 | *000 |
| | Within Groups | 5.710 | 102 | .056 | | |
| | Total | 7.246 | 104 | | | |

^{*:} Significant at level of (0.05).

The results showed that there are statistically significant differences at a level of (0.05) in the level of education, social, and economic challenges and the total degree of challenges facing

the deaf and hearing impaired individuals according to qualification and the variance in favour of primary category.

4. Conclusion

The hearing impairment is the third prevalent impairment in Jordan notably in those aged 19-24 years, and more than 30 years old. Hearing loss influences the quality of individuals' life composes educational, social and economic aspects, therefore, the research aimed to reveal the level of challenges facing hearing impaired in the educational, social, and economic aspect of their life, and the variation of the challenges level regards demographic variables of gender, age, and qualification. The research depended on the cumulative collection of the data using the quantitative approach, the questionnaire was developed in order to serve the research aims. The questionnaire distributed over 120 deaf and hearing impaired, with an acquisition rate of 87.5%. The questionnaire scored acceptable validity and internal consistency scores. The research found that the challenges level of education and economic are at a medium level, as well, the total score of challenges level was at a medium level. However, social challenges came at low level which can be explained by the increasing of society consciousness of the impairment effects on the individual life., while the educational and economic challenges still at unacceptable level due to the financial requirement to meet hearing impaired students in the educational institutes, and lack of opportunities in the local field. According to results, the main social challenges facing hearing impaired as they claimed are isolation; psychological problems, fear of creating relationships with others, lack of engagement, and lack of understanding and empathy from surrounds. The educational challenges facing hearing impaired are the need for sign language translator, lack of comprehends scientific subject particularly math, and lack of teachers' competencies and knowledge to teach hearing impaired. These educational challenges interpret the low achievement of hearing impaired, as well it is explained by the lack of cognitive ability due to hearing loss. The economic challenge facing hearing impaired are high expenses, lack of financial capabilities of hearing impaired, and lack of financial supports, which associated with the lower employment rate of impaired, and particularly hearing impaired. The results found that there are statistically significant differences in the social challenges and the overall scores of challenges due to gender variable in favour of male, there are statistically significant differences in the social challenges, economic challenges, and the overall scores of challenges due to age in favour to those aged 32-37 years, and there are statistically significant differences in all challenges categories and the overall scores due to qualification in favour to primary category. Consequently, the research drives set of recommendations, which are; increasing the financial supports for both infrastructure of educational institutes, promote teachers' training program to acquire suitable teaching method for hearing impaired, constitute an act to share hearing impaired employment responsibilities among all local institutes and companies, and establish social support groups to increase hearing impaired engagement in the social context. The research suggests further research in the effective supports programs either financial or social.

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