The effectiveness of a realistic counselling programme to develop taking-responsibility among hearing-impaired students

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Abstract

This study aimed at identifying the effectiveness of a realistic counselling programme for developing taking responsibility among a sample of hearing-impaired students. The sample consisted of 26 hearing-impaired students. To verify the effectiveness of the programme, the participants were randomised equally into two groups: the experimental group 13 male and female students who underwent the realistic programme and 13 students within the control group who were not subjected to the counselling programme. The researchers developed a valid and reliable scale to measure taking responsibility to achieve the purposes of this study. The findings indicated that the level of taking responsibility for the hearing-impaired students expected to graduate from the Jordanian universities was moderate, and there were significant differences between the post-test performance mean scores of the participants in the experimental and control groups in taking responsibility in favour of the experimental group due to the counselling programme.

Keywords: Counselling programme, hearing impaired, realistic therapy, taking responsibility, Jordan.
1. Introduction

Caring for people with special needs (including those with hearing disabilities) is one of the most attractive and visible fields in our time, whether at the research or the pedagogical level, and it has even become one of the most important requirements of the times (Wolf et al., 2015).

Since every individual is essentially dependent on his/her senses in dealing with the environment in which he/she lives, the hearing impaired, as a result of the hearing loss he/she suffers from, has many behavioural and psychological problems, which are in dire need of overcoming and treating (Mason and Reid, 2017). The issue of disability is one of the issues having social and economic dimensions that have become important to different societies (Mizunoya et al., 2018).

University education has become “one of the main important elements in supporting human development all over the world” (Willems et al., 2019, p. 9), as “university education not only provides the individual with the basic skills needed for the labour market but also provides the necessary training for all individuals, as all these individuals who have been trained can develop and improve capabilities and analytical skills, which will advance the local economy and support civil society” (Hirokane et al., 2020, p. 10).

As evidenced by previous research studies, the income of families supported by individuals holding a bachelor’s degree is “greater than the income of families supported by individuals who hold a high school diploma only, and every dollar is spent to obtain a university education” (Hassan and Hassan, 2019). It is producing approximately $34.85 in increment of income each year, which means that it is a beneficial investment (Hui, 2020).

The university student is the base of the educational and learning process, and the large number of pressures facing students, whether academic pressures and high expectations from the family for a high cumulative rate, especially among students with hearing impairments, led to frustration from not achieving these expectations, or social and relational pressures within the university and taking responsibility for these relationships, which led to the lack of clarity in the values of the meaning of life for them, especially for hearing-impaired. This category is now in dire need of guidance and counselling programs, especially as they are entering an obscure stage of their lives.

The study of Hossain et al (2018) addressed the problem of unemployment among university graduates, and showed that males suffer more than females in this aspect, rural graduates more than urban graduates, graduates of students with hearing impairment suffer more from unemployment than other students, and that the most common problems are psychological problems, followed by a value, then social and physical ones. When a person behaves in a way that makes him/her feel important to him/herself and others, his/her behaviour is correct or controversial, and this can be achieved by changing behaviour in a way that can satisfy the need for love and the need for significance, and the process of satisfying needs by changing behaviour can be achieved by doing what represents responsibility.

In a large part of its inception, social responsibility is one of the social products, and it is acquired and learned by the individual due to the educational and social factors and conditions that accompany the individual during the successive stages of his/her life.

Through direct contact with students, especially those with disabilities who are about to graduate, and especially those who are hearing-impaired, the researchers observed that they have anxiety in the next stage and their career and professional future, and their need for training and preparation for later life. In addition, through conducting an initial survey on (50) university students about the level of
responsibility-bearing, the researchers found that most of them lack motivation, and they do not have clear plans for what they will do, but when the final period of graduation approaches, the level of pressure they have severely increase. Therefore, there is a need to help them increase their sense of the importance of training to take responsibility. Hence, the problem of the present research revolves around the following question: What is the effectiveness of a realistic counselling program in improving the level of responsibility-bearing for students expected to graduate from Jordanian universities in general.

1.1 Theoretical framework

Disability is not only a burden on a person with a disability or his/her family, but its effects extend to a large segment of society, if not the whole society (Shakespeare, 2017). On the other hand, normal life is a right for every disabled person, and every person has the right to enjoy his/her humanity and live a decent life (Vornholt et al., 2018). Any individual, whether he/she is a normal person or a disabled person, has his/her special preparations, abilities and capabilities and they can be exploited and utilised to the best of their ability (Ton et al., 2019).

Provided that appropriate psychological and social services and care are provided to him/her, to become a participating member of society like his/her normal hearing peers. Hearing impairment in the individual with its functions, or “reduce the individual’s ability to hear different sounds, and the hearing disability ranges in severity from simple and medium degrees that result in hearing impairment to very severe degrees that result in deafness” (Shakespeare, 2017, p.3).

If the human element is the one who leads the process of performance development and improvement in public and private institutions, then this human element is the real wealth, and the most important variable in the development process, and that appropriate and continuous training is one of the main domains to improve this element until it becomes greater knowledge, readiness, and ability to perform the tasks required of him/her in an appropriate manner (Al Shobaki et al., 2017).

Among the most prominent effects that result from unemployment among young graduates, as identified by Ramya (2018), psychological problems, value problems, social problems and financial problems.

McLellan (2017) concluded that work contributes to achieving psychological security for the worker and reveals his/her abilities and potentials, satisfies him/her with self-realisation and appreciation and supports him/her with a sense of strength, competence and self-confidence, while unemployment deepens feelings of frustration, depression, sadness, failure, pessimism and despair and reinforces feelings of rebellion, lack of belonging, loyalty and loss of hope for an insecure future.

Professional career guidance programmes for university students are of the significant services that students need, which contribute to helping them choose the appropriate future professions suitable for their abilities and discuss any problems that may hinder the work process. Therefore, it is important to activate it as an important service in the student centre in the future (Afanasiev et al., 2018).

To prepare today's students for future career success, all colleges and universities should provide enough comprehensive learning opportunities, and this is a national justification for launching global educational programmes based on the assumption that higher education institutions are capable of qualifying future generations (Teng et al., 2019).

Acknowledging the individual’s responsibility and his/her freedom to care for and fulfil his/her private and public needs is essential to achieve, and given that the first years of an individual’s life have a decisive and dangerous impact on the formation of his/her personality because what is formed in this
period of habits, attitudes and beliefs is difficult to change and modify later. So, the main feature of the personality is due in its composition and origins to this dangerous and important period in human life (Tkacova et al., 2021).

The individual’s attainment of the stage of independence is a gradual process that helps in assuming responsibility and requires allowing each individual to move forward according to his/her ability. Parents should not push the individual to reach a level of independence that others of the same age can achieve nor should they obstruct this process of maturation by providing extra protection. (Tkacova et al., 2021). Responsibility is defined as a behaviour that takes into account personal needs, perceptions and assessments rather than responding to the demands of the environment. The person who takes responsibility has more influence on others (Afanasiev et al., 2018).

On the other hand, it is believed that the feature of destruction and creativity is present in human nature, but what causes the emergence of this or that characteristic is the society that surrounds the individual through patterns of socialisation. While Sullivan believes that man is a conscious creature and that the basis of a person's idea of him/herself is based on his/her relationship with others, he/she affects them and is affected by them and that isolation from them is caused by insecurity, which is one of the indicators of a lack of social responsibility.

In the humanistic theory, Rogers dealt with the relationship between the individual and society, through its trust in the individual, his/her motives, abilities and sense of responsibility to understand him/herself and the society that surrounds him/her and that the goal of psychological growth, development and the social production of an integrated individual psychological functions.

One of the significant theories that addressed the concept of responsibility as one of its most important concepts is the choice theory, which sees that we as individuals are motivated to satisfy our five necessary needs, which are survival, belonging, fun, freedom and strength, and in practical terms. Satisfying such needs puts the individual in a contradiction between his/her need for love and belonging, and his/her need for freedom, and this puts the individual in conflict with his/her need for freedom. For the individual to belong to the group and be accepted and respected, he/she must abide by its standards, values, customs and traditions (Rahimi & Rahimi, 2021).

1.2. Related Research

The study of Al-Smadi and Al-baqawi (2015) entitled ‘The effect of group counselling using the realistic treatment method in developing social responsibility among a special sample of orphaned students’. A sample of 30 children participated from the King Hussein Charitable Foundation in Irbid, and the study participants were randomly “distributed into two equal groups: the experimental group 15 and the control group 15”. The experimental group received a group counselling programme based on the theory of reality therapy, while the controlled group had not received any interventional procedure. The programme consisted of fourteen counselling sessions. The results showed an impact of the collective counselling programme “based on the theory of reality therapy in developing social responsibility among the members of the experimental group”.

As for the study of Qassem (2008), where the study aimed to investigate the effectiveness of a counselling programme for the development of social responsibility among secondary school students, the study sample consisted of 36 students, all of whom had low scores in the pre-measurement on the social responsibility scale, and the sample was split into 2 equal groups: “experimental and control” as each of them consisted of 18 students. The researcher used the social responsibility scale. The results proved that “there are statistically significant differences between the mean scores of the experimental
group and the control group in the level of social responsibility after applying the programme in favour of the experimental group”.

Al-Enazi’s (2015) study also aimed to build and implement a counselling programme for the development of social responsibility and citizenship among a sample of Saudi youth, where the scale of social responsibility and citizenship was applied to two equal groups (experimental and control) of Tabuk University students 30 students. The experimental group was subjected to the counselling programme (independent variable). The results of the research showed that there were differences in social responsibility between the experimental and control group in favour of the experimental group after applying the programme, and the results showed that there were differences in the social responsibility and citizenship of the experimental group after direct implementation of the programme and the follow-up measurement (1 month, 1 months and 1 months) in favour of the follow-up measurement after 3 months.

The study of Al-Hawarna (2016) aimed to identify the ‘social responsibility and psychological maturity of the individual’. The study stated that our society these days is going through one of the most dangerous stages, which is the stage of self-reliance and self-sufficiency in various areas of life, in addition to the political and economic challenges that threaten the fate of the nation and its entity, all due to long-term planning and material credits and others. The study concluded with many recommendations, including first, the necessity of encouraging and urging students at different educational levels to participate in various activities so that they are trained to take responsibility in all its forms. Second, emphasising the importance of studying social responsibility and time management, because they are considered a meeting point between theory and practice, as well as a meeting point for personality, society and education.

The study of Al-Mahwis and Al-Jaroudi (2016) aimed to identify the role of the academic guidance programmes at the deanship of the preparatory year in preparing new female students at King Saud University, and the obstacles that hinder the implementation of these programmes. The sample of the study consisted of 59 female students. The study resulted in a set of results, most notably: there is agreement among the study participants about the role of academic guidance programmes with a mean score of 3.62, and the most prominent of those roles were knowledge of many university regulations such as the student assessment system, student activities, taking responsibility and university problems faced by the student. The participants of the study agreed that some obstacles hinder the implementation of academic guidance programmes with a mean score of 3.76, the most prominent of which are lack of awareness of the academic advising process and its role in the university student’s life, lack of interest in training the human cadres responsible for academic advising and lack of survey studies exploring the views of the students to learn about the conditions of academic advising to help bring about development.

1.3. Purpose of the study

The current study aimed at achieving these aims:

- Identify the level of responsibility for students with hearing impairments expected to graduate from the Jordanian universities.
- Investigate any significant statistical differences between the means of performance of the experimental and control groups in taking responsibility due to the counselling programme.
Detect any significant differences between the means of the experimental group in the post-administration and follow-up of the taking responsibility scale due to the continuity of the impact of the counselling programme.

2. Method and Materials

2.1. Study Design and setting

This was a quasi-experimental study. The study population was represented by all the students expected to graduate from universities in the central governorates of the Hashemite Kingdom of Jordan. The study population consisted of 14,230 students, and the number of students expected to graduate from the university was 4,862, according to the statistics of the Admission and Registration Department in each of the universities included in the study for the academic year 2020/2021.

2.2. Participants

A number of samples were recruited for the study and included the students who are expected to graduate, as they were selected according to their objective, as follows:

- A pilot sample for assessing the psychometric properties of the data collection tool, which consisted of 50 male and female students who are expected to graduate.
- A sample for the descriptive study: to answer the first question, they were randomly selected from the faculties of the university and consisted of 320 male and female students.
- A sample for the experimental study: they were chosen in a purposive sampling method. It consisted of 55 male and female students that got low scores on the responsibility bearing scale. The idea and time of the study were presented to the participants in this study sample. A total of 26 male and female students agreed to participate in the counselling programme, and they were divided equally into an experimental group and a control group. Table 1 shows the distribution of the participating students in both study groups.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Humanitarian faculties</th>
<th>Scientific faculties</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>6</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>5</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>12</td>
<td>26</td>
</tr>
</tbody>
</table>

2.3. Data Collection Tools

2.3.1 Responsibility-taking scale

The responsibility-taking scale aims to identify the level of responsibility-taking among students expected to graduate. The responsibility-taking scale has been developed by relying on the theoretical framework and previous studies (Al-Samadi & Al-Baqawi, 2015; Fahmy, 2001; Qassem, 2008). The scale has three domains and consisted of 37 items.

Scale’s validity and reliability indicators

Validity
1- Facial validity: The facial validity of the study scale was verified by submitting the scale in its initial form, which consisted of 37 items to 10 referees who are specialised in the field of psychological counselling, in Jordanian universities. They were asked to judge the accuracy and integrity of the language, the clarity of the statements and its relevance to the ultimate goal of developing the scale. An agreement was approved of 80% among referees, as the referees suggested amending 9 statements and no paragraph was deleted.

2- Internal consistency validity: The indications of the scale’s internal consistency validity were calculated by applying it to a pilot sample of 50 male and female students expected to graduate, who were chosen from the study population and from outside the original study sample (Table 2).

Table 2. The values of the correlation coefficients for each item of the responsibility bearing scale with the total degree and domains of the scale

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Correlation with domain</th>
<th>Correlation with a total score</th>
<th>Item No.</th>
<th>Correlation with domain</th>
<th>Correlation with a total score</th>
<th>Item No.</th>
<th>Correlation with domain</th>
<th>Correlation with a total score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.44</td>
<td>0.38</td>
<td>13</td>
<td>0.64</td>
<td>0.60</td>
<td>26</td>
<td>0.58</td>
<td>0.64</td>
</tr>
<tr>
<td>2</td>
<td>0.54</td>
<td>0.47</td>
<td>14</td>
<td>0.32</td>
<td>0.69</td>
<td>27</td>
<td>0.58</td>
<td>0.80</td>
</tr>
<tr>
<td>3</td>
<td>0.64</td>
<td>0.58</td>
<td>15</td>
<td>0.21</td>
<td>0.10</td>
<td>28</td>
<td>0.38</td>
<td>0.29</td>
</tr>
<tr>
<td>4</td>
<td>0.57</td>
<td>0.69</td>
<td>16</td>
<td>0.11</td>
<td>0.08</td>
<td>29</td>
<td>0.29</td>
<td>0.28</td>
</tr>
<tr>
<td>5</td>
<td>0.31</td>
<td>0.30</td>
<td>17</td>
<td>0.54</td>
<td>0.50</td>
<td>30</td>
<td>0.38</td>
<td>0.39</td>
</tr>
<tr>
<td>6</td>
<td>0.45</td>
<td>0.76</td>
<td>18</td>
<td>0.39</td>
<td>0.30</td>
<td>31</td>
<td>0.47</td>
<td>0.49</td>
</tr>
<tr>
<td>7</td>
<td>0.40</td>
<td>0.64</td>
<td>19</td>
<td>0.47</td>
<td>0.40</td>
<td>32</td>
<td>0.40</td>
<td>0.49</td>
</tr>
<tr>
<td>8</td>
<td>0.64</td>
<td>0.58</td>
<td>20</td>
<td>0.64</td>
<td>0.69</td>
<td>33</td>
<td>0.58</td>
<td>0.64</td>
</tr>
<tr>
<td>9</td>
<td>0.60</td>
<td>0.64</td>
<td>21</td>
<td>0.60</td>
<td>0.70</td>
<td>34</td>
<td>0.69</td>
<td>0.70</td>
</tr>
<tr>
<td>10</td>
<td>0.69</td>
<td>0.64</td>
<td>22</td>
<td>0.69</td>
<td>0.75</td>
<td>35</td>
<td>0.70</td>
<td>0.68</td>
</tr>
<tr>
<td>11</td>
<td>0.74</td>
<td>0.50</td>
<td>23</td>
<td>0.71</td>
<td>0.75</td>
<td>36</td>
<td>0.38</td>
<td>0.30</td>
</tr>
<tr>
<td>12</td>
<td>0.54</td>
<td>0.69</td>
<td>24</td>
<td>0.80</td>
<td>0.79</td>
<td>37</td>
<td>0.32</td>
<td>0.34</td>
</tr>
</tbody>
</table>

*Significant at $\alpha = 0.05$. **Significant at $\alpha = 0.01$.

It is clear from Table 2 that the values of the correlation coefficients between the items of the scale with the domains ranged between 0.29 and 0.74 and exceeded 0.25. They are all statistically significant values at the level of $\alpha \leq 0.05$ and are good indicators to judge the validity of the tool, except for the paragraphs 15 and 16 that were not statistically significant, and therefore were deleted. In addition, the values of the correlation coefficients between the items of the scale with the total score ranged between 0.28 and 0.80 exceeded 0.25. They are all statistically significant values at the level of $\alpha \leq 0.05$ and are good indicators to judge the validity of the tool, except for the two items 15 and 16, which were deleted from the scale and the scale became composed of 35 items.

Reliability

Indicators of scale reliability were extracted using the following methods: internal consistency using Cronbach’s alpha equation, test–retest and split-half; then administering the scale to the pilot sample; administering the scale; and readministering it to the same sample at an interval of 2 weeks (Table 3).
Table 3. Internal consistency, test–retest and half-split coefficients of the responsibility bearing scale

<table>
<thead>
<tr>
<th>Domain</th>
<th>Number of items</th>
<th>Test–retest</th>
<th>Internal consistency</th>
<th>Split-half</th>
</tr>
</thead>
<tbody>
<tr>
<td>National responsibility</td>
<td>12</td>
<td><strong>0.91</strong></td>
<td>0.85</td>
<td><strong>0.94</strong></td>
</tr>
<tr>
<td>Personal responsibility</td>
<td>11</td>
<td><strong>0.85</strong></td>
<td>0.88</td>
<td><strong>0.89</strong></td>
</tr>
<tr>
<td>Social responsibility</td>
<td>12</td>
<td><strong>0.90</strong></td>
<td>0.89</td>
<td><strong>0.90</strong></td>
</tr>
<tr>
<td>Total score</td>
<td>35</td>
<td><strong>0.92</strong></td>
<td>0.90</td>
<td><strong>0.95</strong></td>
</tr>
</tbody>
</table>

The results of Table 3 show that the coefficients of test and retest reliability between the two administrations of the scale of responsibility for the overall measurement amounted to 0.92, and the domains ranged between 0.85 and 0.91, while the values of internal consistency for the scale as a whole reached a Cronbach’s alpha coefficient value of 0.90 and the domains ranged from 0.85 to 0.89. The split-half coefficient of the scale in the total degree was 0.95 and the domains ranged between 0.89 and 0.94, which confirms that the responsibility-taking scale has an appropriate degree of reliability, and it is suitable for the current study.

2.3.2. Counselling programme

The counselling programme was built based on realistic treatment to develop responsibility for a sample of students expected to graduate from Jordanian universities, based on a set of theoretical literature and previous studies (Ahmed, 2013; Al-Dosari, 2011; Al-Smadi & Al-Baqawi, 2015; Qassem, 2008), through the methods and activities of realistic therapy and its guiding techniques such as building the plan, taking responsibility, humour, confrontation and questions (Corey, 2013)). In light of the realistic treatment theory, the programme is based on the following foundations: human behaviour is purposeful; individuals have the full capacity for creativity, environmental factors affect our judgments and behaviour and are not the main cause; each of us has five needs; each of us achieves these needs in distinct and unique ways; and the needs are survival, love, belonging, strength, freedom, fun, positive view of the human being, trusting people’s ability to match their experience and help make good decisions.

Given the characteristics of the research sample and the content of the sessions in the programme, the current programme consists of 10 sessions. Each session is presented in the counselling room at 2 sessions per week, and the application of the programme takes 5 weeks and the period of one session is 60 minutes.

2.5. Ensuring the programme content is appropriate for the study sample participants

This was carried out after the validity of the programme, as the programme was presented to five faculty members in Jordanian universities. They were asked to state the following:

- The validity of the counselling programme for application to the current research sample.
- The extent to which the objectives of the sessions are related to the training content.
- The appropriateness of the strategies, activities and tasks used in each session to the level of characteristics of the research sample.
- The suitability of the time specified for each session of the programme.
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- The suitability of the evaluation to the objectives of the session.

Based on their opinions, many modifications were made before applying the counselling programme to the study sample.

2.4 Data Collection Process

1. Reviewing the literature and research studies addressing similar study variables.
2. Developing the scale and verifying its validity and reliability.
3. Preparing the counselling programme and presenting it to the referees and producing it in the final form.
4. Determining the members of the study sample among the students expected to graduate, applying the study to an initial survey sample, then selecting the students who received a low score on the responsibility bearing scale and presenting the idea of the study to them. A total of 26 male and female students expressed their consent to participate in the study, and the study was completed. They were randomly divided into 13 male and female students in an experimental group, and 13 male and female students in a control group.
5. Check for group homogeneity (conditions for quasi-experimental control).

The homogeneity of the two groups was checked in each of the following variables using the t-test as presented in Table 4.

Table 4. The results of the Mann—Whitney test to identify the significance of the differences in the pre-measurement on the responsibility bearing scale between the experimental and control groups

<table>
<thead>
<tr>
<th>Domain</th>
<th>Group</th>
<th>N</th>
<th>Mean of ranks</th>
<th>Sum of ranks</th>
<th>Mann-Whitney U test</th>
<th>Z</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>National responsibility</td>
<td>Experimental</td>
<td>13</td>
<td>15.08</td>
<td>196.00</td>
<td>64.00</td>
<td>−1.05</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>11.92</td>
<td>155.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal responsibility</td>
<td>Experimental</td>
<td>13</td>
<td>13.23</td>
<td>172.00</td>
<td>81.00</td>
<td>−0.18</td>
<td>0.88</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>13.77</td>
<td>179.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social responsibility</td>
<td>Experimental</td>
<td>13</td>
<td>16.23</td>
<td>211.00</td>
<td>49.00</td>
<td>−1.86</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>10.77</td>
<td>140.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The total score of the</td>
<td>Experimental</td>
<td>13</td>
<td>14.42</td>
<td>187.00</td>
<td>72.50</td>
<td>−0.64</td>
<td>0.55</td>
</tr>
<tr>
<td>responsibility bearing scale</td>
<td>Control</td>
<td>13</td>
<td>12.58</td>
<td>163.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is noted from Table 4 that there are no significant statistical differences between the scores of the participants of the controlled and experimental groups for the responsibility-taking scale where
the value of $Z$ reached 1.39 and 0.64, respectively, which indicates the homogeneity of the two groups before applying the programme.

6. Starting to apply the programme to the experimental group, which contains the activities of the counselling programme sessions.

7. Applying the follow-up test to the participants of the experimental group 1 month after the application.

3. Results

To answer the first question, the Kolmogorov–Smirnov test was used to examine the normal distribution of the study sample ($n = 26$) on the responsibility-taking scale as shown in Table 5.

Table 5. Results of the Kolmogorov–Smirnov test to identify the normal distribution of the participants’ scores on the responsibility bearing

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.18</td>
<td>22</td>
<td>0.13</td>
</tr>
<tr>
<td>0.39</td>
<td>22</td>
<td>0.98</td>
</tr>
</tbody>
</table>

The results of the analysis presented in Table 4 indicate that the responses of the study sample members on the scale of responsibility for the total score did not achieve the assumption of a normal distribution; so, non-parametric tests were used to answer the study questions.

3.1. Results related to the first question: What is the level of taking responsibility for the study sample participants on the scale of taking responsibility?

To answer the first question, the means and standard deviations of the scale were extracted and Table 6 shows the results.

Table 6. Means and standard deviations of the performance of the two groups in the descriptive sample on the scale of taking responsibility for the total degree and domains ($n = 320$)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Level</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>National responsibility</td>
<td>3.54</td>
<td>1.01</td>
<td>Moderate</td>
<td>1</td>
</tr>
<tr>
<td>Personal responsibility</td>
<td>3.01</td>
<td>1.11</td>
<td>Moderate</td>
<td>3</td>
</tr>
<tr>
<td>Social responsibility</td>
<td>3.23</td>
<td>1.07</td>
<td>Moderate</td>
<td>2</td>
</tr>
<tr>
<td>Total score</td>
<td>3.27</td>
<td>0.69</td>
<td>Moderate</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows that the level of responsibility for the total degree was moderate, where the mean score of responsibility was 3.27, with a standard deviation of 0.69 and the mean of responsibility was moderate.

This shows that students with hearing impairments who are expected to graduate from Jordanian universities have an average level of responsibility.

3.2. Results related to the second study question: Are there statistically significant differences at the significance level of 0.05 between the mean scores of the experimental and control groups in taking responsibility scale due to the counselling programme?

To answer the current question, and given that the sample is not normally distributed, the non-parametric Mann–Whitney U test was used to clarify the significance and direction of the differences between the ranks of the mean scores of the experimental group and the ranks of the mean scores of
the control group in the post-measurement on the taking responsibility scale on the total score and domains (Table 7).

Table 7. Results of the “Mann–Whitney U-test to identify the significance of the differences between the experimental and control groups” on the responsibility bearing scale post-measurement

<table>
<thead>
<tr>
<th>Domain</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Mean of ranks</th>
<th>Sum of ranks</th>
<th>Mann–Whitney U-test</th>
<th>Z</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>National responsibility</td>
<td>Experimental</td>
<td>13</td>
<td>3.08</td>
<td>0.82</td>
<td>17.54</td>
<td>228.00</td>
<td>32.00</td>
<td>2.70</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>2.13</td>
<td>0.53</td>
<td>9.46</td>
<td>123.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal responsibility</td>
<td>Experimental</td>
<td>13</td>
<td>4.03</td>
<td>0.80</td>
<td>19.77</td>
<td>257.00</td>
<td>3.00</td>
<td>4.19</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>2.03</td>
<td>0.39</td>
<td>7.23</td>
<td>94.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social responsibility</td>
<td>Experimental</td>
<td>13</td>
<td>3.27</td>
<td>0.43</td>
<td>19.69</td>
<td>256.00</td>
<td>4.00</td>
<td>4.14</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>1.87</td>
<td>0.56</td>
<td>7.31</td>
<td>95.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>Experimental</td>
<td>13</td>
<td>3.46</td>
<td>0.62</td>
<td>19.69</td>
<td>256.00</td>
<td>4.00</td>
<td>4.13</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13</td>
<td>2.01</td>
<td>0.29</td>
<td>7.31</td>
<td>95.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Statistically significant at the significance level of \( \alpha \leq 0.05 \).

It is noted from Table 6 that there are significant statistical variation at the level of significance \( \alpha \leq 0.05 \) between the mean ranks of the experimental and controlled groups on the scale of responsibility, where the value of \( Z \) is 4.13, which is a statistically significant value, and there were differences in the domains of responsibility for the post-test differences in favour of the experimental group.

3.3. Results related to the third study question: Are there statistically significant differences at the significance level of 0.05 between the mean of the experimental group in the post-application and follow-up of the responsibility bearing scale due to the continuity of the impact of the counselling programme?

The scale of taking responsibility was applied immediately after implementing the programme and 1 month after its implementation to the experimental group. To answer the study question related to that application, Wilcoxon’s pairs signed test was used (Table 8).

Table 8. Wilcoxon’s method pairs signed test to examine the differences in the post and follow-up applications of the experimental group members on the responsibility bearing scale

<table>
<thead>
<tr>
<th>Distribution of ranks</th>
<th>Number of ranks</th>
<th>Mean of ranks</th>
<th>Total of ranks</th>
<th>Z-value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>9</td>
<td>7.44</td>
<td>67.00</td>
<td>−1.50</td>
<td>0.13</td>
</tr>
<tr>
<td>Positive</td>
<td>4</td>
<td>6.00</td>
<td>24.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results presented in Table 7 show that there are no statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the post and follow-up applications on taking responsibility scale, which indicates the continued improvement of the performance of the experimental group members with the effect of the counselling programme 1 month after its implementation.

4. Discussion

As for developing a sense of responsibility, and for that we prepare today’s students to succeed in work in the future, and universities should provide enough comprehensive learning opportunities, and this is a national justification for launching the undergraduate global educational programmes based on the assumption that higher education institutions are capable of qualifying future generations. Responsibility is a type of social upbringing carried out by formal and informal educational institutions.

This is consistent with what the findings reported in Al-Hawarna’s (2016) study that indicated about highlighting a topic entitled ‘Social Responsibility and the Psychological Maturity of the Individual’, which showed the need to encourage and urge students at different educational levels to participate in various activities so that they are trained to take responsibility in all its forms. Second, emphasising the importance of studying social responsibility and time management because they are considered a meeting point between theory and practice, as well as the meeting point of personality, society and education.

It also agrees with the results of Fahmy’s (2001) study about a proposed conception of the role of community service in the development of social responsibility, which was one of the most important results of the study that the degree of university youth’s interest in participating in community service came to a medium degree and it agrees with the results of the study of Al-Mahous and Al-Jaroudi (2016) about identifying the role of academic advising programmes in preparing students for university life, which indicated that there was agreement among the study participants about the role of academic advising programmes at a moderate level, where the mean score was 3.62, and the most prominent of those roles were knowing many university regulations, such as the student assessment system and student activities; taking responsibility; and solving university problems faced by the student.

While the results of the current question differ from the results of the study of Awad and Hijazi (2013), which aimed to know the reality of social responsibility among the students of Al-Quds Open University. Significantly, some of the differences with some studies may be due to the difference in the study context, society and participants of the study sample. It also differs from the results of the study of Habada (2017) on the knowledge of the level of sense of responsibility among secondary school students, which indicated that there is a high sense of responsibility among students.

This also confirms what Rogers' humanistic theory indicated, wherein he addressed the theory of relationship between the individual and society, through its trust in the individual, his/her motives, abilities and sense of responsibility to understand him/herself and the society that surrounds him/her and that the goal of psychological growth and social development is to produce an integrated and psychologically functional individual, where students developed a more understanding of themselves and their motivation is increased.

The results of the current study agree with the results of the study of Al-Smadi and Al-Baqawi (2007) on the impact of group counselling by the method of realistic therapy in the development of social responsibility, which concluded that there is an effect of group counselling programme based on the theory of reality therapy in the development of social responsibility among the members of the
The effectiveness of a realistic counselling programme to develop taking responsibility among undergraduate hearing-impaired students. Cypriot Journal of Educational Science. 17(4), 1090-1105. https://doi.org/10.18844/cjes.v17i4.7120

experimental group, and it also agrees with the results of Qassem’s (2008) study on the effectiveness of a counselling programme for the development of social responsibility among secondary school students. The results of the study also agree with the results of Al-Enazi’s (2015) study on the construction and implementation of a counselling programme for the development of social responsibility and citizenship among a sample of young people, which showed that there are differences in social responsibility between the experimental and control groups in favour of the experimental group after applying the programme. This result can also be explained based on the sample members’ interaction. The improvement also appears due to the students’ readiness and motivation, and to the programme’s arrangements and the use of logic in presenting the sessions. The sessions of the programme were presented in a logical sequence, starting with getting to know and presenting themselves, and then they were discussed in some situations in which they felt successful to enhance their sense of success, develop their strengths and then positively dealing with their difficulties and not focusing on them as much as focusing on their strengths, especially concerning taking responsibility.

The results of the current study agree with the results of Al-Enazi’s (2015) study on the construction and implementation of a counselling programme for the development of social responsibility and citizenship among a sample of young people. The results showed that there are differences in the social responsibility and citizenship of the experimental group immediately after applying the programme and the follow-up measurement (1 month, 2 months and 3 months) in favour of the follow-up measurement after 3 months. This means that the programme is effective in improving social responsibility and long-term citizenship. The results of the current question are explained since the activities used in the programme were interactive activities for the participants, and the students learned through them skills that they continued to have, which indicates that they continued to take responsibility for a long time.

5. Conclusion

The study concluded that realistic counselling programs are effective in developing taking responsibility among students expected to graduate from the Jordanian universities. In addition, the study concluded that there is a continued effectiveness of the program in taking responsibility in the post and follow-up measurements after a month for the experimental group participants.

6. Recommendations

In light of the obtained results, the current study recommends the following:

1. Benefiting from the current programme to help female students who are expected to graduate to reach their desired responsibility bearing level.

2. The necessity of paying attention to the design of counselling programmes for female students and graduating them from the university so that they can take responsibility to help them succeed in the future.

3. Conducting similar empirical studies to examine the efficiency of group counselling interventions in universities, to develop responsibility bearing for other samples.

4. Activating the role of counselling programmes in universities.
References


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