

Impact of the introduction to special education course in improving attitudes among handicapped individuals

Khalid Mohammad Aljundi

Department of Education, Faculty of Education Studies, Arab Open University-Jordan, Amman, Jordan

Article Info

Article history:

Received Feb 13, 2022

Revised Apr 01, 2022

Accepted Aug 31, 2022

Keywords:

Attitudes
Handicapped individuals
Special education course

ABSTRACT

The present descriptive study aimed to survey the Faculty of Education students' attitudes to handicapped individuals in Jordan, in a bid to explore the need for programmes to change negative attitudes to this group. The population of the study consisted of all the 123 students who registered in the introduction to special education course in the summer course in the academic year 2021-2021 or the first semester of the academic year 2021-2022 among bachelor's degree majors of the Faculty of Education at the Arab Open University/Jordan. The sample of the study consisted of 57 students, who were selected at random of the population. The tool applied was that developed by Al-Qureiti for students' attitudes to handicapped individuals, which was adapted for Jordan's environment by Darwish. It consisted of 60 paragraphs of three sections on different aspects. On the other hand, arithmetic mean, standard deviation, T-test and one-way analysis of covariance (ANCOVA) are adopted. It is found that there are statistically significant differences at $0.05 \geq \alpha$ attributed to taking the course. There are similar statistically significant differences related to the gender factor, as female are shown to have more positive attitudes than male.

This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



Corresponding Author:

Khalid Aljundi

Department of Education, Faculty of Education Studies, Arab Open University-Jordan

Arab Open University AOU, Muhammad Ash Shibani 4, Amman, Jordan

Email: k_jundi@ou.edu.jo

1. INTRODUCTION

Attitude to handicapped individuals is a major subject in educational research, especially in the field of special education. It is connected to several factors, such as why such positive or negative attitudes arise and the subsequent effects on the society, in general, and the handicapped individuals, in particular. It is believed that positive attitudes to such people can accomplish the special education objective of granting them a maximum level of independence. On the contrary, negative attitudes may fail such a target—God forbid.

Attitudes act as a state which steers an individual's behaviour to response in a particular way to a particular situation [1], [2]. They are also important for both ordinary people and handicapped individuals. They represent behavioral applications acquired through social upbringing, cultural limitations, and emotional experiences, and they implicitly include assessment criteria for different subjects and persons with the resulting attitudes. Educators tend to focus on observing common attitudes to handicapped individuals in order to change those negative, which may have arisen due to the lack of opportunity to deal with them or to the little or mistaken information about disability. However, it is easier and more important to examine such a kind of change in childhood than later stages [3]–[6].

Over years of academic teaching, especially of the introduction to special education, the researcher has noticed disparate attitudes among students to handicapped individuals before and after the course. University students are supposed to be the tools of change and construction in all the segments of the community, and they will have to engage with handicapped individuals in all aspects of life on and off campus. Therefore, it has become a necessity to learn about such attitudes, mainly of the Faculty of Education students.

School and university education is expected to target a community which enjoys cooperation and solidarity on the basis of human values. This may only be realized by offering academic courses which focus on humans, in general, and handicapped individuals, in specific. College is the major provider for societies and which hosts a good number of this group, with whom ordinary people are required to know how to deal.

As for the population of the study, these students are expected to be future teachers, whether for the primary stage or special education for learning disabilities. The present study is expected to guide them about what they could encounter in the near future as well as their own attitudes to handicapped individuals. This study has a question, namely about the different attitudes of students towards persons with disabilities among their peers before and after the introduction of special education courses. As well as how students' attitudes towards disabled individuals among their peers differ between genders before and after the introduction of special education courses.

Educators tend to focus on exploring common attitudes to handicapped individuals in order to change those negative, which may have arisen due to the lack of opportunity to deal with them or to the little or mistaken information about disability. As college is a significant social institution after school and family in terms of impact on individuals, it is necessary to determine the attitudes of ordinary university students. These will join the marketplace to find handicapped individuals academically, socially and hopefully—professionally integrated in all walks of life, as recent special education approaches recommend. It has become a global but not just a national interest, which requires substantial considerations. On the one hand, handicapped individuals should be completely secured with sufficient education and jobs, so they can enjoy a decent life. On the other hand, the state must make this group productive and interested in the advancement of their countries. The first step in this regard is about changing the attitudes of ordinary people from all segments of the society, whether students, teachers or of any profession, to their colleague handicapped individuals. That would facilitate setting appropriate special programmes [7].

Introduction to special education is a compulsory course in the primary education and special education for learning disabilities specializations. It consists of 10 units addressing a collection of educational experiences. It elaborates on eight different disabilities, in terms of definition, classification, features, diagnosis and special programmes.

Attitudes refer to a state of neurological and psychological readiness organized by an individual's experience. They have a steering and dynamic impact on one's response to all stimulating matters and circumstances [8]. They are defined here as positive or negative personal experiences held by ordinary members of the society to handicapped individuals in terms of cooperation, integration, care and familiarity with their rights. Handicapped individuals are those who suffer from disorders or defects in some of their physical or kinetic abilities, which affects the natural use of their bodies when performing daily tasks. Their limited movements impair their mental, social and emotional growth, which necessitates rendering them special services and educational programmers [9].

The study was conducted in the summer semester of 2020-2021 and the first semester of 2021-2022. It only deals with the primary education and special education students at the Faculty of Education, but not any other public or private university. The study is restricted to Arab Open University/Jordan, but not any other public or private university.

Due to their considerable impact in improving the services offered to handicapped individuals, attitudes are considered a fundamental issue for special education researchers at national, Arab and global levels. In the study of Murch *et al.* investigated the community attitudes to individuals with mental disabilities in the US in light of demographic variables. It was shown that such attitudes differed according to the level of education, age and degree of kinship [10]. Fleming *et al.* in his research compared between mothers of children with autism and mothers of those with mental disabilities. It was found that the former category faced more difficulties in sharing life with the community than the latter [11]. Meanwhile, Morin *et al.* attempted to check the differences between general attitudes to individuals with mental disabilities according to gender, age and income. They were mainly positive in all the emotional, cognitive and behavioral aspects [12].

In the study of Al-Jundi aimed to measure the Faculty of Education students' attitudes to handicapped individuals at Jordanian universities. The sample included 712 students selected at random from seven public universities. The scale, developed by the researcher, indicated that there were statistically significant differences at $0.05 \geq \alpha$ attributed to specialization. More specifically, special education students held positive attitudes to handicapped individuals [9].

Wahsha explored the effectiveness of the introduction to special education course in improving attitudes to handicapped individuals for a sample of Ajlun National University in Jordan. It was found that there were statistically significant differences at $0.05 \geq \alpha$ in the pre-and post-measurements in favour of the latter in all dimensions, but there were no similar differences related to the gender variable [13]. Zaaed *et al.* examined the effect of the socio-economic status on attitudes to individuals with growth disabilities (autism, visual impairment, cerebral palsy, down syndrome and muscular dystrophy). The results showed statistically significant differences related to the socio-economic level variable [14].

In the study of Al-Bataina and Ruweili investigated teachers' attitudes to integrating children with motor disabilities at public schools in Saudi Arabia and their connection to specialization and years of experience. The population of the study consisted of all primary stage teachers in Al-Qurayyat and Tabuk. The attitudes were positive, and there were statistically significant differences related to the experience variable but not to specialization [15].

As for the study of Tashtoush and Al-Khaza'ala, it aimed to identify the attitudes of the students of the College of Arabic Language and Social Studies at Qassim University towards the disabled, and to know the extent to which the students' attitudes affect some variables such as academic specialization, academic level, cumulative average, place of residence, and connection with the disabled or not. The number of study members reached 532 students, the results of the study showed that the attitudes of students towards the disabled were positive, in addition to the presence of statistically significant differences in the attitudes of students due to the variable of academic specialization (in favor of special education students), and the variable of academic level (in favor of the third- and fourth-year students), as indicated by the results of the study. There are no statistically significant differences in the students' attitudes towards the disabled due to the difference in the student's cumulative average, his place of residence and his relation to the disabled [16].

2. RESEARCH METHOD

The descriptive, empirical method was adopted to measure the impact of teaching the introduction to special education course in improving attitudes to handicapped individuals, employing the one-group technique. A pre-test was conducted to determine the group's status before being subject to the variable, and then a post-test was run. The difference between the two tests' results represents the findings of the independent variable impact. Population of the study included all the 123 students of both primary education and special education for learning disabilities specializations who registered introduction to special education in the summer semester of the academic year 2020-2021 or the first semester of the academic year 2021-2022, as is shown in Table 1. The sample consisted of 62 students. They are from primary education and special education for learning disabilities specializations who registered introduction to special education in the summer semester of the academic year 2020-2021, or the first semester of the academic year 2021-2022 who registered introduction to special education, as is shown in Table 2.

Table 1. Distribution of the study population

Semester	The number of the study population		
	The total number	Male	Female
The summer semester of the academic year 2020-2021	54	2	42
First semester of the academic year 2021-2022	69	14	55
The total number	123	6	97

Table 2. Distribution of the study sample members

Semester	Male	Female	The total number of the study sample
The summer semester of the academic year 2020-2021	6	19	25
First semester of the academic year 2021-2022	8	24	32
The total number	14	43	57

In a bid to achieve the objectives of the study, the tool applied was that developed by Al-Qureiti [17] for students' attitudes to handicapped individuals, which was adapted for the Jordanian context by Darwish [18]. It consisted of 60 paragraphs of the three following sections which address different aspects. Characteristics and values of individuals with disabilities, which aims to measure respondents' attitudes towards individuals with disabilities, in terms of property, competence, hobbies, interests, readiness to work, mastery and excel in relevant fields and ability to assume personal, family and social responsibilities. This section consisted of 24 paragraphs (12 positive and 12 negative).

Then, socialize with people with disabilities to measure respondents' attitudes to build personal and family bonds with them, accept, respect, and interact with them in different situations and activities, rather than ignoring them. This section consisted of 21 paragraphs (12 positive and 9 negative). Furthermore, care and education for disabled people, to measure respondents' attitudes towards the various services and facilities that need to be offered to them, as well as their rights to educational, social, medical and media care. This section consisted of 15 paragraphs, 12 positive and 3 negatives. The respondents were requested to choose 1 out of 5 answers to each paragraph.

The tool of the study enjoyed different validity indications related to the Jordanian context, such as content validity and concurrent validity. It was assessed by 10 professors from public and private universities, who agreed that it was appropriate for the purposes of the study. On the other hand, the reliability of the test was checked by the researcher by subjecting a sample of the population to Cronbach Alpha, as is shown in Table 3. The values were (0.71-0.75) with a general reliability level of 0.79.

Table 3. The results of the stability of students' attitudes towards the handicapped

Directions fields	Cronbach Alpha value
Features and value of individuals with disabilities	0.72
Socializing with individuals with disabilities	0.71
Care and education for individuals with disabilities	0.75
Overall scores for trends	0.79

The arithmetic mean, standard deviation, t-test and one-way ANCOVA were adopted to answer the questions of the study. Independent variables are the Registration of the Introduction to Special Education course. It had two levels, they are registered/did not register as well as two levels gender (male/female). The dependent variable is students' attitudes to handicapped individuals.

3. RESULTS AND DISCUSSION

To answer the first question on whether the students' attitudes to handicapped individuals among their colleagues differ before and after the introduction to special education course, the arithmetic means and standard deviations were calculated, as is shown in Table 4. Here, the arithmetic mean for the features and value of handicapped individuals is 88.08 with a significance level of (0.000) for socializing (71.79) with a significance level of (0.000), and for care and education (60.39) with a significance level of (0.000). It is noticeable that all the values of the significance level which accompany the T-test are less than (0.05), indicating statistically significant differences between the pre- and post-tests. The significance favours the post-test according to the arithmetic means.

Table 4. The results of the T-test, the arithmetic averages and standard deviations of their study variable, the course, introduction to special education

No.	Directions fields	Number	Before/after	Arithmetic mean	Standard deviation	Value	Indication level
1	Features and value of individuals with disabilities	57	Before	74.16	6.72	14.96	0.000
		57	After	88.08	9.92		
2	Socializing with individuals with disabilities	57	Before	61.64	7.95	10.26	0.000
		57	After	71.79	10.05		
3	Care and education for individuals with disabilities	57	Before	49.59	5.34	15.93	0.000
		57	After	60.39	7.14		
4	Overall scores for trends	57	Before	181.95	14.20	16.13	0.000

The table is consistent with Batayneh and Al-Ruwaili [15], Murch *et al.* [10], Wahsheh [13] and Al-Jundi [7]. Accordingly, it is argued that most respondents hold positive attitudes to handicapped individuals based on first-hand experience, upbringing factors and studying courses related to this category, as these contribute to establishing a positive attitude. However, the above is not in line with Morin *et al.* [12], Johnson *et al.* [19], Johnston [20].

As for those who hold negative attitudes, it seems that this is attributed to the lack of first-hand experience, unawareness of the benefits of integrating handicapped individuals with ordinary people and the lack of skills to deal with handicapped individuals. To answer the second question on whether the students'

attitudes to handicapped individuals among their colleagues differ between the genders before and after the introduction to special education course, the arithmetic means and standard deviations based on the gender variable were calculated, as is shown in Table 5. That shows the values of the post-arithmetic mean are higher than those of the post arithmetic mean, and there is a difference between the post-values of males and females. In order to know whether the difference is statistically significant, the one-way analysis of covariance (ANCOVA) was employed, as is shown in Table 6.

Table 5. Arithmetic averages and standard deviations of a correlation towards students towards the two sites according to the gender variable

Directions fields	The number	After/Before	Male		Female	
			Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation
Features and value of individuals with disabilities	57	Before	75.06	6.81	76.86	7.13
	57	After	88.98	10.09	93.11	10.87
Socializing with individuals with disabilities	57	Before	61.19	7.85	62.34	8.15
	57	After	71.34	9.95	78.12	12.13
Care and education for individuals with disabilities	57	Before	49.24	5.57	51.11	5.88
	57	After	60.04	7.77	69.45	8.76
Overall scores for trends	57	Before	182.70	14.33	183.67	14.93
	57	After	218.29	19.22	236.17	21.34

Table 6. Results of a one-way analysis of variance for the gender variable

Directions fields	Contrast source	Sum of squares	Degrees of freedom	Mean of squares Standard deviation	Female	
					Value F	Significance level
Features and value of individuals with disabilities	Gender (male/female)	1.982	1	1.982	22.461	0.000
	Between groups	2.121	1	2.121	0.091	0.000
	Within groups	228.64	54	2.287		
Socializing with individuals with disabilities	Total summation		56			
	Gender (male/female)	7.99	1	6.878	18.883	0.000
Care and education for individuals with disabilities	Between groups	3.871	1	7.777	2.342	0.000
	Within groups	396.678	54	3.879		
Overall scores for trends	Total summation	408.539	56			
	Gender (male/female)	0.877	1	0.898	15.111	0.000
Features and value of individuals with disabilities	Between groups	0.789	1	0.673	0.341	0.000
	Within groups	178.811	54	2.671		
Socializing with individuals with disabilities	Total summation	180.477	56	4.242		
	Gender (male/female)		1	13.543	29.593	0.0442
Care and education for individuals with disabilities	Between groups		1	2.651	2.991	0.0232
	Within groups		54	502.818	6.678	
Overall scores for trends	Total summation		56	519.012		

At the level of significance ($0.05 \geq \alpha$)

The table indicates that S with regard to values and features of handicapped individuals is (22.461) with a significance level of 0.000. As for S with regard to socializing, it is 18.883 with a significance level of 0.000. When it comes to care and education, S is (15.111) with a significance level of (0.000). Finally, the total degree for S is (29.593) with a significance level of (0.0442). Accordingly, the entire significance level is less than $0.05 \geq \alpha$, which is statistically significant in favour of females, as the arithmetic mean is higher in all the dimensions.

As for the second question on whether the students' attitudes to handicapped individuals among their colleagues differ between the genders before and after the introduction to special education course, the above is consistent with Batayneh and Ruweili [15], Zaaed *et al.* [14], Fleming *et al.* [11], Morin *et al.* [12]

and Brekke [9]. It is found that females have more positive attitudes than males, which may be attributed to women's general nature and emotion towards children. However, it is not consistent with Wahsheh [13], Al-Jundi [21], Praisner [22], Al-Qahtani [23], Hussein [24], Tashtoush and Khaza'ala [16], Williams [25] which found no statistically significant differences between male and female.

4. CONCLUSION

The current study found that there are statistically significant differences at the level of $(0.05 \geq \alpha)$ attributed to the study of the course and that their attitudes are positive. This is due to the study of the syllabus that talks about nine different disabilities, including mental disability, hearing disability, and autism. It also showed that there were statistically significant differences at the level $(0.05 \geq \alpha)$ due to the gender variable, where the results showed that female students have more positive attitudes than males and may return.

In light of the present study, the researcher urges organizations concerned with handicapped individuals as well as social and media institutions to raise interest of all segments of the society in the issues of this group, so they can find interaction from ordinary people and enjoy a better life. Focus needs to be laid on handicapped individuals in study plans for all university students, by incorporating a relevant compulsory course. There is a global trend to integrate this category, which may not be achieved with them receiving sufficient acceptance. Media outlets need to highlight the positive role of handicapped individuals. If they succeed in showing their issue as a strength rather than a weakness, positive public attitudes will be enhanced. Further studies are necessary to change negative attitudes to handicapped individuals by several segments of the community, by organizing training programmes which make them more socially acceptable.




REFERENCES

- [1] S. Dukmak, "Regular classroom teachers' attitudes towards including students with disabilities in the regular classroom in the United Arab Emirates," *The Journal of Human Resource and Adult Learning*, vol. 9, no. 1, pp. 26–39, 2013.
- [2] J. A. Seccombe, "Attitudes towards disability in an undergraduate nursing curriculum: The effects of a curriculum change," *Nurse Education Today*, vol. 27, no. 5, pp. 445–451, Jul. 2007, doi: 10.1016/j.nedt.2006.08.003.
- [3] F. M. Gresham, "Misguided mainstreaming: The case for social skills training with handicapped children," *Exceptional Children*, vol. 48, no. 5, pp. 422–433, 1982, doi: 10.1177/001440298204800506.
- [4] T. J. Walker, "Attitudes and inclusion: An examination of teacher's attitudes towards inclusion students with disabilities," Dissertation, Loyola University Chicago, 2012.
- [5] F. Al-Rousan, *Issues and problems in special education*. Dar al-fiker, Amman: Jordan, 1998.
- [6] Z. Al-Sartawi, "Attitudes of middle school students towards people with special needs and their relationship to some variables related to disability, the message of education and psychology," *King Saud University*, vol. 2, no. 1, pp. 341–357, 2003.
- [7] K. M. Al Jundi, "Attitudes of college of education students towards individuals with disabilities mobility disability in Jordan," *Journal of the Association of Arab Universities for Research in Higher Education*, vol. 42, no. 1, pp. 57–69, 2022.
- [8] J. R. Eiser, *Social Psychology: Attitudes, Cognitive and Social Behavior*. Cambridge, MA: Cambridge University Press, 1986.
- [9] I. Brekke, E. A. Früh, L. G. Kvarme, and H. Holmstrom, "Long-time sickness absence among parents of pre-school children with cerebral palsy, spina bifida and down syndrome: A longitudinal study," *BMC Pediatrics*, vol. 17, no. 1, 2017, doi: 10.1186/s12887-016-0774-8.
- [10] A. J. Murch, T. Choudhury, M. Wilson, E. Collerton, M. Patel, and K. Scior, "Explicit and implicit attitudes towards people with intellectual disabilities: The role of contact and participant demographics," *Journal of Applied Research in Intellectual Disabilities*, vol. 31, no. 5, pp. 778–784, Sep. 2018, doi: 10.1111/jar.12429.
- [11] P. Fleming, S. McGilloway, and S. Barry, "The successes and challenges of implementing individualised funding and supports for disabled people: an Irish perspective," *Disability and Society*, vol. 31, no. 10, pp. 1369–1384, 2016, doi: 10.1080/09687599.2016.1261692.
- [12] D. Morin, M. Rivard, C. P. Boursier, A. G. Crocker, and J. Caron, "Norms of the attitudes toward intellectual disability questionnaire," *Journal of Intellectual Disability Research*, vol. 59, no. 5, pp. 462–467, 2015, doi: 10.1111/jir.12146.
- [13] N. Wahsheh, "The effectiveness of teaching an introduction to special education course in improving attitudes towards the disabled among a sample of Ajloun National University students," *dirasat nafsiyat wa tarbiyat*, vol. 12, no. 1, pp. 172–171, 2019.
- [14] N. Zaaed, M. M. Mohammad, P. Gleason, K. A. Bahjri, and N. Modeste, "Examining Jordanians' attitudes towards five types of developmental disabilities," *Journal of Refugee & Global Health*, vol. 1, no. 2, 2018, doi: 10.18297/rgh/vol1/iss2/4/.
- [15] O. Batayneh and M. Al-Ruwaili, "Attitudes of teachers towards people with motor disabilities in public schools in the north of the Kingdom of Saudi Arabia," *The Jordanian Journal of Educational Sciences*, vol. 11, no. 2, pp. 135–168, 2015.
- [16] R. Tashtoush and A. Khaza'ala, "Attitudes of the College of Arabic Language and Social Studies at Qassim University towards the disabled," *Gulf University Journal*, vol. 2, no. 3, pp. 215–236, 2010.
- [17] A. M. Al-Quraiti, "Attitude scale towards the handicapped." Anglo-Egyptian Library, Cairo, 2000.
- [18] B. A. Darwish, "The effect of teaching a special needs education course on developing attitudes towards the disabled among some of the students of Al-Hussein Bin Talal University," *The Jordanian Journal of Educational Sciences*, vol. 3, no. 4, 2007.
- [19] W. Horner-Johnson et al., "Staff attitudes towards people with intellectual disabilities in Japan and the United States," *Journal of Intellectual Disability Research*, vol. 59, no. 10, pp. 942–947, 2015, doi: 10.1111/jir.12179.
- [20] C. Johnston and R. Dixo, "Nursing student's attitudes toward people with disabilities: can they be change?" 1998, [Online]. Available: <https://www.aare.edu.au/data/publications/1998/joh98196.pdf>
- [21] K. Al-Jundi, "The effectiveness of a training program in changing ordinary children's attitudes towards people with special needs in resource rooms," in *Benha Conference between Reality and Hope*, 2007, pp. 1165–1197.

- [22] C. L. Praisner, "Attitudes of elementary school principals toward the inclusion of students with disabilities," *Exceptional Children*, vol. 69, no. 2, pp. 135–145, 2003, doi: 10.1177/001440290306900201.
- [23] A. Al-Qahtani, "Attitudes of primary school teachers towards integrating blind students in the primary stage in Riyadh with their ordinary peers," University of Jordan, 2003.
- [24] M. Hussein, "Attitudes of male and female teachers in the education of Irbid towards the physically handicapped," Unpublished master's thesis, Yarmouk University, 1988.
- [25] C. Williams, "Attitudes and perceptions of persons with physical disabilities and their affects on interpersonal Communication," 1994.

BIOGRAPHY OF AUTHOR



Khalid Mohammad Aljundi    is Assistant Professor at Department of Education, Faculty of Education Studies, Arab Open University-Jordan. His research interest is in the field of special education. He can be contacted at email: k_jundi@aou.edu.jo.