

## Factors Affecting Attitudes of Undergraduate Students Toward Disabled Persons

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### **Abstract.**

The purpose of this study was to explore the factors affecting attitude of undergraduate students toward students with disabilities. To achieve this purpose, Attitude Toward Disabled Persons Scale (ATDP) was administered on a sample consisted of 493 undergraduate students which were randomly selected from three Omani universities.

The results of the study revealed that the general overall attitude of the participants were negative. Gender differences were detected. Female students scored significantly higher on the attitudes scale compared to their male counterparts. In addition, senior students attained higher scores compared to freshman, sophomore, and junior students.

**Key Words:** Attitude, Disability, Undergraduate students, Oman.

## العوامل المؤثرة في اتجاهات الطلبة الجامعيين نحو الاشخاص ذوي الإعاقة

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### الملخص:

استهدفت هذه الدراسة استكشاف العوامل المؤثرة في اتجاهات الطلاب الجامعيين نحو الأشخاص ذوي الإعاقة. ولتحقيق هذا الهدف، تم تطبيق مقياس الاتجاهات نحو الأشخاص ذوي الإعاقة (ATDP) على عينة مكونة من 493 طالباً جامعياً تم اختيارهم عشوائياً من ثلاث جامعات عمانية رئيسية.

وأظهرت نتائج الدراسة أن اتجاهات الطلاب بصورة عامة اتسمت بالسلبية وأن هناك اختلافات بين الجنسين، حيث سجلت الطالبات اتجاهات أكثر إيجابية نحو الأشخاص ذوي الإعاقة مقارنة بنظرائهن من الذكور. وبالإضافة إلى ذلك، حصل طلاب السنة الرابعة على أعلى الدرجات على مقياس الاتجاهات نحو الأشخاص ذوي الإعاقة بالمقارنة مع أقرانهم من طلاب السنوات الأدنى.

الكلمات المفتاحية: الاتجاهات، الإعاقة، طلاب الجامعة، عمان

## Introduction

In 1994, the UNESCO announced the Salamanca declaration, which called for equal opportunities of education for all; for both students with disabilities and regularly developing students. This announcement was followed by the United Nations declaration of the rights of persons with disability. Upon the inception of these policies, the idea of teaching students with disabilities in settings segregated from their normal peers was changed (Boer, Pijl, Minaret, 2013; Shama & Chow, 2008).

In the Sultanate of Oman, the passage of the Law of Care and Rehabilitation of Persons with Disabilities No 63\2008 was considered as a starting point in ensuring the rights of persons with disabilities (Al-Lamki, 2002; Glendon, 2001; Degener & Koster-Dreese, 1995). This law has been issued in consideration to the law of education and higher education. (Alfawair & Al Tobi, 2015). This law details the rights of persons with disability in different aspects of life and emphasizes the facilitation of educational opportunities for all persons with disabilities in the country. Consequently, the educational institutions in the Sultanate immediately began to implement an inclusion policy in accordance with the law in all schools and universities (Al Qaryouti, & Al Shukaili, 2014).

Successful inclusion is usually affected by the attitudes of principals, teachers, and students towards the persons with disabilities in the educational environment. Therefore, it's important to study attitudes towards people with disabilities (Hahn, 2001). Many studies in this field have shed light on the attitudes towards persons with disabilities. These studies have revealed that people's attitudes towards persons with disability are the best indicator for successful integration (Al Ghazwo, Dodeen & Al Qaryouti, 2003; Geordiadi, Kalyve, kourkoutas, & Tskiris, 2012; Papaioanou, Evaggelinou, & Block, 2014; Sharma & Chow, 2008). Boer, Pijl & Minaret (2012) define an 'attitude' as a person's opinion and disposition towards things, either people or ideas, and it has three components: cognitive, affective and behavioral (Boer, Pijl, & Minaret, 2012).

In the educational environment, groups of variables have been studied concerning the factors that could have an influence on people's attitudes towards persons with disabilities. Gender, principals' beliefs and previous experience, teachers' background, degree of contact with persons with disabilities, disability type and age are examples of these variables (Sharma & Chow, 2008; Hodge & Jansma, 2000). For example,

Parashar, Chan, & Leierer (2008) studied factors influencing Asian Indian graduate students' attitudes towards people with disabilities. They studied the

influence of disability type, age, gender, education, and employment status on attitudes towards persons with disabilities. Their study revealed that all of these factors contribute considerably to the attitude that Asian Indian graduate students hold towards persons with disability. However, the disability type was the main factor that has an impact on their attitude.

Al-Qaryouti, and Al Shukaili (2014) studied the attitudes of students at Sultan Qaboos University towards the inclusion of their disabled peers. To achieve the objective of the study, researchers used students' attitudes toward inclusion scale, to measure students' attitudes toward the inclusion of their disabled peers. The final version of the scale consists of 34 items after verification of validity and reliability.

The results showed no significant statistical difference between students from the colleges of science and humanity in their attitudes towards the inclusion of their disabled peers. However, the results revealed that there are statistically significant differences in attitudes towards the inclusion of students with disabilities in terms of gender. Female students showed better attitudes towards the inclusion of students with disabilities on the scale after the second and the total sum of the domains of the tool. The results of the study also showed that there are differences in attitudes towards the inclusion of students with disabilities in the college of science. Female students scored better on all domains of the scale concerning the interaction between gender and the academic level of the student. However, the results of the study did not show any statistically significant differences in attitude between male and female students of the College of Humanities on the domains of the scale. The exception was in the behavioral domain, for which female students scored better than male students did.

Hussein and Al-Qaryouti (2015) studied students' attitudes towards inclusive education in Oman. Their sample consisted of 404 Omani school students. They found that participants' attitudes were positive in general at the three levels of attitudes; behavioral, affective, and cognitive. The study also indicated that age and gender have an impact on attitudes of Omani school-aged students towards their peers with disability.

Another study conducted by Al Ghazwo, Dodeen, & Al -Qaryouti (2003) reported that there were significant gender differences in attitudes towards inclusion. They found that males have more negative attitudes towards inclusion than females. Moreover, in the same regard, Nweicki and Sandiest (2002) ascertained that school-age children's attitudes toward their peers with physical or intellectual disabilities were negative. This result matched those

of Nweicki & Sandiest (2002) which revealed that female students have a more positive attitude towards inclusion than males' students do.

Belief and previous experience are other factors that have been studied by Praisner (2012) and Horrocks, White & Roberts (2008). Both studies examined the role of belief and previous experience in the principals' attitudes towards persons with autism. These studies found that principals and other decision makers who believe that children with autism can be included in the regular classroom have a more positive attitude towards them.

Overall, the attitude that people have towards peers with disabilities is geared by many factors. Age, gender, background, belief, and experience are the most common factors that have been examined by researchers. Almost all of the previous studies found that females have a more positive attitude towards inclusion compared to males. In addition, there are contradictory study results in regards to the principals' experience, which as discussed above.

Taking into account the few pieces of research that investigated the attitudes of undergraduate students toward their peers with disability, the present study aims at investigating the attitudes of undergraduate Omani students, from different specializations and three Omani universities, towards persons with disabilities. In addition, this study aims to look at the effect of gender, level of education, and the type of institution in developing such attitudes.

## **Methodology**

### **Participants**

Four hundred and ninety-three students from three universities in Oman (Sultan Qaboos University, Nizwa University and Al-Buraimi University) participated in the study. All students were enrolled in a Bachelor degree (four-year course) with various specializations. Table 1 shows the distribution of students in all three universities.

**Table 1:***Respondents Demographics*

University	Male	Female
Sultan Qaboos university	64	90
Nizwa University	17	126
Al-Buraimi University	132	64
Total	213	280

**Instrument:**

The Attitude Toward Disabled Persons (ATDP) Scale (Yuker, Block & Young, 1970) is used in this study. This scale has been widely used to measure people's attitudes towards persons with disabilities and has been translated into many languages. This scale was developed to measure the attitudes that people hold towards peers with disability. It is considered as an objective and consistent tool that provides valid responses of participants and can be used by people with or without disability (Miller, 2010Alghazo, 2002). The (ATDP) Scale consists of twenty items. The participants' extent of agreement with each item is measured by a 6-point Likert Scale (+3=1 strongly agree to -3=1 strongly disagree). The ATDP was originally written in English and was translated into Arabic using the back translator technique for the purpose of this study. The participants in this study were asked to identify their gender, level of education, and the type of institution they were enrolled in.

**Validity:**

The tool was given to three faculty members in English Department and Language Center at Sultan Qaboos University to review the translation of the scale to Arabic language.

The items' content validity was examined by four experts; two experts in measurement and psychometric theory, and the other two are experts in special education. All experts agreed that the twenty items are written in clear language as well as measuring the components intended to be measured. These results indicate that the ATDP has adequate level of internal consistency and temporal stability.

**Reliability:**

Internal consistency is established by computing the Cronbach’s alpha for (493) participants’ scores on the 20 items. The Cronbach’s alpha reliability coefficient is (0.75).

**Data Analysis:**

Data is analyzed using SPSS Statistic 20, descriptive Statistics, multivariate analysis of variance and Paired Sample t-test.

**Results**

Students’ attitudes towards persons with disabilities: the mean of the attitudes towards persons with disability for the entire sample is (N=493) was 58.29 (SD=16.25). Table 2 shows the results of the attitudes of the participants.

**Table 2:**  
*Mean and Standard Deviation of the Sample*

	N	Mean	Std. Deviation
Q1	487	1.96	1.61
Q2	491	-1.24	1.94
Q3	486	-.11	1.97
Q4	488	.59	1.79
Q5	475	-1.37	2.03
Q6	472	1.42	2.18
Q7	486	-.38	2.42
Q8	484	.53	2.18
Q9	472	.39	1.86
Q10	488	.46	2.11

	N	Mean	Std. Deviation
Q11	492	-1.06	1.79
Q12	486	.76	2.14
Q13	489	-.70	2.11
Q14	482	-.54	2.06
Q15	474	.16	1.96
Q16	470	.37	1.96
Q17	473	-1.16	2.03
Q18	491	.11	1.89
Q19	488	1.89	1.62
Q20	492	-.35	2.03
General attitudes	493	58.29	16.25

The value represents a negative attitude towards persons with disability.

**Gender:** The sample of the study consisted of 213 male and 280 female students. The mean score for the comparison between male and female attitudes towards persons with disability is 55.15 (SD= 15.4) for males; however, it is 60.68 (SD=16.5) for females. The difference between the two values indicates that there is a difference in their attitudes. T-test' results supports the results of the difference. The value of t-test is significant ( $t = -3.80$ ,  $df = 491$ ),  $P < .05$ ).

The results indicate significant ( $P < .05$ ) gender differences in attitudes towards persons with disability. Females score significantly ( $P < .05$ ) higher than males.

**University type:** students' attitudes towards persons with disability at the three universities is reported by comparing the overall attitude of participants from the three universities. Results are summarized in table 3.



**Table 3:**

*Descriptive statistics of attitudes toward persons with disabilities based on participants*

University	N	Mean	SD
Sultan Qaboos University	154	65.09	15.76
Nizwa University	143	57.56	15.79
Al-Buraimi University	196	53.46	15.14

Results in table 3 show that there are differences in the mean between the three universities. To statically check these results, ANOVA is used and the results indicate a significant difference in the attitudes towards persons with disability ( $F = 24.14, df = 2, 490 < .05$ ).

The results also show that the attitudes of Sultan Qaboos University students is more positive than that of students in Nizwa and Al-Buraimi Universities. Moreover, the attitudes of Nizwa University students is better than that of Al-Buraimi University students.

**Educational level:** the impact of the educational level of students upon their attitude toward persons with disability is estimated by comparing the overall attitudes of the participants from four educational levels. Results are presented in table 4.

**Table 4:**

*Mean and Standard deviation scores of the students on the attitudes toward person with disability*

Year	N	Mean	SD
1	117	54.27	16.34
2	126	55.96	16.56
3	115	57.64	14.93
4	157	61.87	16.95

The results show that there are differences in the attitudes between students in first, second, third and fourth year. To statistically check these results, Anova was used and the results indicate a significant difference in the

students' attitudes towards persons with disability at the four educational levels. ( $F= 5.65$ ,  $df= 3.513$ ,  $P<.01$ ).

Turkey is used to examine the significance of the differences. The results are presented in table 5.

**Table 5:**

*Results of the Post Hoc Test on the impact of the educational level on the attitude toward persons with disability*

(I) Year	(J) Year	Mean Difference (I-J)	Std. Error
1.00	2.00	-1.68743	2.08313
	3.00	-3.36997	2.13862
	4.00	-7.59911*	1.98914
2.00	1.00	1.68743	2.08313
	3.00	-1.68254	2.09258
	4.00	-5.91167*	1.93954
3.00	1.00	3.36997	2.13862
	2.00	1.68254	2.09258
	4.00	-4.22913	1.99902
4.00	1.00	7.59911*	1.98914
	2.00	5.91167*	1.93954
	3.00	4.22913	1.99902

The results in table 5 show that there is a significant difference ( $P<.05$ ) between senior students and freshman students in favor of senior students. The results also show that there was a significant difference ( $P<.05$ ) between senior students and sophomore students in favor of senior students.

### Discussion

The current study aimed to investigate the attitudes of undergraduate Omani students towards persons with disabilities. It also aimed to investigate the effect of gender, level of education, and type of institution on developing such attitudes. The results of this study revealed that:

Undergraduate Omani students who have participated in this study possess negative attitudes toward persons with disabilities based on the means of the participants' responses on the ATDP scale. These results were inconsistent with the findings of other studies at the lower educational level (e.g. Hussain & Al-Qaryouti, 2015).

The study also revealed that there are gender differences in the attitudes towards persons of disability among the participants. The results showed that females scored significantly ( $P < .05$ ) higher than the males counterparts. These results are consistent with other studies (Al Ghazwo, Dodeen & Al-Qaryouti, 2003; Nowicki, & Sandiest, 2002, Al-Qaryouti & Alshukaili, 2014). Miller, in her study, *Attitudes toward Individuals with Disabilities: Does Empathy Explain the Difference in Scores between Men and Women?* (2010), pointed out that possible reason behind the differences in scores between men and women may refer to the fact that women are more empathic with others than men. She concluded that women usually attain higher scores because they tend to put themselves in other's situations, and she suggested studying deeply the gender-role orientation to help explaining the differences.

This study also examined if the university type has an influence on undergraduate students' attitudes towards peers with disabilities. The results revealed that Sultan Qaboos University students possess more positive attitudes towards peers with disability compared with students in the other two universities. This result suggests that university programs should prepare students to accept peers with disabilities and to provide them with the necessary skills to deal effectively with those students.

The educational level of the participants is another factor that was studied in this study. Students in the fourth year level had more positive attitude towards persons with disabilities compared to their counterparts at other educational levels. This could be interpreted due to the advanced level of their programs; senior students might be having more experience in dealing with people with disabilities comparing with junior, sophomore, and freshman students. In addition, senior students have already spent more time at the university and are therefore more open to accepting peers with special needs. Another reason could be referred to the fact that senior students are more

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knowledgeable regarding individuals' differences; thus, they tend to possess positive attitudes towards persons with disabilities.

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