

FACULTY ATTITUDES AND KNOWLEDGE REGARDING INCLUSION AND ACCOMMODATIONS OF SPECIAL EDUCATIONAL NEEDS AND DISABILITIES STUDENTS: A UNITED ARAB EMIRATES CASE STUDY.

Abstract: University students with Special Educational Needs and Disabilities (SEND) might have lower attendance and graduation rates and lower academic performance when faculty show negative attitudes toward their inclusion at university. Limited research examines faculty's attitudes and willingness to provide students with disabilities reasonable accommodations for their successful inclusion in university in the UAE. The goal of this study was to investigate factors associated with faculty's attitudes and willingness for university students with disabilities' inclusion and accommodations. The impact of teaching experience, prior contact with students with disabilities, and severity of disability on the faculty attitudes and willingness were studied. One hundred twenty-five faculty members were recruited at a public university in Abu Dhabi to participate into a one-year quantitative study that explored their attitudes and willingness. Findings showed that the faculty had positive attitudes and willingness to provide students with disabilities with accommodations under three conditions: (1) their inclusion was fair and beneficial, academically and socially; (2) learning environment, curriculum and teaching, enhance their inclusion when faculty have less teaching load and more time; and (3) more faculty training is needed for using accommodations in classroom. Policy and practice implications concerning the students' inclusion and reasonable accommodations are discussed.

Keywords: University, SEND, inclusion, attitudes, willingness, accommodations.

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INTRODUCTION

The United Arab Emirates (UAE) embraced the movement of inclusion of students with Special Educational Needs and Disabilities (SEND) in elementary, secondary and post-secondary education. The UAE Federal Law (2009), attempted to protect students with special needs and disabilities' rights to education at all levels. Several Arab countries have adopted a comparable stance to the inclusion movement, including students with SEND in primary, secondary and post-secondary education. The Salamanca Declaration (UNESCO, 1994) established equal educational opportunities for students with SEND (Leyser and Greenberger, 2008) passing a law, which reaffirms the commitment to education for all, and recognizes the necessity and urgency of providing education for children, youth and adults with SPED within the regular education system (UNESCO, 1994, p.7). The United Nations Convention on the Rights of Persons with Disabilities in 2006 was ratified. The Article 24 states that students with SEND should be supported to facilitate their effective education (Morley and Croft, 2011). The changed passage on the students with SEND through elementary schools into secondary schools infers transition to university.

Fichten (1988) argued that university education is equally important for students with and without SEND as it helps them realize their potential, personal goals and competitiveness in the job (Dowrick, Anderson, Heyer and Acosta 2005; Johnson 2006 as cited in Abu-Hamour 2013). According to Leyser and Greenberger (2008), one third of the university faculty noted they were not contacted by university students with SEND to discuss their needs, possibly because the university students with SEND were not sure if the university faculty had positive attitudes towards them or were willing to help them. Therefore, it is interesting to identify the factors that influence the university faculty attitudes towards the inclusion of university students with SEND in university in the UAE.

market. However, individuals with disabilities seem to have lower levels of university attendance than those without disabilities. Students with disabilities were less likely than other students to attain a Bachelor within two years after high school. By the eighth year after high school, only 17% of those with disabilities obtained any higher education credential, compared to 36% of their peers, and they were much less likely to have obtained a Bachelor's degree. Rao (2004) stressed that there was minimal research in the area of inclusion at university and emphasized that few studies since 1981 studied faculty attitudes toward the academic success of university students with special needs.

Previous research indicated that the success of inclusion of university students with SEND in university depended on physical accommodations provided by university, efforts of university students with SEND to be included, university faculty attitudes and their willingness to provide educational accommodations (Abu-Hamour, 2013). Educational accommodations refer to access to lecture theatres, laboratories, libraries and auxiliary aids (e.g., hearing loops, information in accessible formats or the provision of non-medical assistance support, i.e., note-taking.

(<https://www.disability.admin.cam.ac.uk/thinking-about-disability/law-and-higher-education-sector-guidance>).

Other research indicated that negative attitudes of university faculty may prevent university students with SEND from requesting the accommodations to which they are entitled to.

Several researchers (e.g., Abu-Hamour 2003; Alghazo, 2008; Baggett, 1994; Brouke, Strehorn and Silver, 2000) have reported that university faculty members hold positive attitudes toward the inclusion of university students with SEND in university, by expressing their willingness to teach and make course-related accommodations. Leyser and Greenberger (2008) stated that previous studies showed that faculty hold positive attitudes toward the inclusion of university students with special needs.

Table 1. Studies on University Faculty's Positive and Negative Attitudes to Inclusion.

University faculty's positive attitudes toward inclusion	University faculty's negative attitudes toward inclusion
Leyser and Greenberger, 2008	Gaad and Almotairi, 2013

Abu-Hamour, 2003	Dowrick, Anderson, Heyer, and Acosta, 2005
Alghazo, 2008	Minner and Prater, 1984
Baggett, 1994	Mc Lean et al., 1998
Brouke, Strehorn and Silver, 2000	Ryan and Stuhs, 2004
Fichten, 1988	Fekete, 2013
Leyser, 1989	Minner and Prater, 1984
Rao, 2004	
Rao and Gratin, 2003	
Van Loan, 2013	
McWaine, 2011	
Vogel, Leyser, Wyland and Brulle, 1999	
Hindes and Mather, 2007	
Foss, 2002	

In the field of inclusion, few studies in Jordan, Lebanon and Oman investigated faculty attitudes towards including university students with SEND (e.g., Abu-Hamour, 2013; Van Loan, 2013; Alqaryouti, 2010). Abu-Hamour (2013) and Van loan (2013) investigated the attitudes of faculty in relation to gender and type of disability. Moreover, Gaad and Almotairi (2013) and Alqaryouti (2010) tackled inclusion in university in the UAE and Oman. Alqaryouti's (2010) study investigated the problems that Omani university students with special needs encounter. The study consisted of 28 students, - 16 males and 12 females-. Eleven students were visually impaired and 17 students were with physical disabilities and the results revealed that the students with disabilities face difficulties' due to the type of disability as well as the gender of the students with disabilities (Alqaryouti, 2010). The aim of this study is also to investigate how the attitudes, previous contact, experience, and willingness of the university faculty affect the inclusion of university students and of their provision of educational accommodations. For this reason, the Theory of Planned Behavior (TPB) (Ajzen, 1991) was used as it examines the relationship between attitude and behavior. Moreover, Fitchen (1988) stated that the university faculty attitudes could be a vital ingredient in the success or failure of the university students with SEND. Also, Konur (2006) mentioned that examining the factor of the university faculty attitudes as being very important.

Abu-Hamour's study (2013) in Jordan, which included 170 university faculty investigated the university faculty attitudes toward including university students with SEND in HE. The results of this study revealed that the majority of the university faculty held positive attitudes toward including university students with SEND, despite the lack of training to teach such students and their unfamiliarity with disability legislation in Jordan. Moreover, a study conducted by Alghazo (2008) at two mid-sized post-secondary institutions, the University of Mu'tah in Jordan and Southern Illinois University at Carbondale (SIUC) in the United States to examine the influence of selected faculty demographic variables such as previous contact with persons with SEND. A stratified/systematic random sampling procedure was used to select 252 faculty members from each university. Findings of this study indicated that faculty at SIUC University expressed more positive attitudes toward students with SEND than faculty members at Mu'tah University. Moreover, many other studies found that university faculty expressed positive attitudes toward university students with SEND (Rao and Gratin, 2003; McWaine, 2011; Vogel, Leyser, Wyland and Brulle, 1999; Hindes and Mather, 2007; Foss, 2002).

On the other hand, many studies that investigated university' faculty attitudes toward including university students with disabilities found that the faculty's attitudes were negative (Gaad and Almotairi, 2013; Mc Lean et al.,1998; Ryan and Stuhs, 2004 as cited in Abu-Hamour, 2013). For example, Alghazo (2008) argued that negative

stereotypes from the university faculty about university students with SEND may become an obstacle for those students to succeed in their studies. Alghazo (2008) explained the origin of the negative attitudes held by university faculty could be due to the limited knowledge and understanding of the specific or special needs of university students with SEND. Alghazo (2008) added that having students with SEND in the HE classes may result in negative attitudes of university faculty thus preventing successful inclusion in the educational setting and the accommodation of those students in university life. Similarly, Minner and Prater (1984) mentioned that university faculty are exposed to stereotypes about university students with SEND and their primary negative expectations could help to decrease the chances of university students with SEND succeeding in higher studies. Fekete (2013) found that university faculty attitudes toward the educational needs of university students with SEND were negative. This study indicated that the university faculty justified their negative attitudes toward the university students because they lack the prerequisite skills needed to succeed at the university level, and believed they might have communication problems, might bother other students and require much more attention. Minner and Prater (1984) examined 210 university faculty attitudes toward university students with SEND and found that university faculty held negative attitudes toward university students with SEND and were not optimistic about their academic abilities or their ability to work with them.

Many other studies emphasized the relation between beliefs and behavior of university faculty towards including disabled students in university, such as a study by Zhang, Landmark, Reber, Hsu, Kwok and Benz (2010) that revealed university faculty personal beliefs regarding teaching university students with SEND have the most direct influence on providing reasonable

accommodations to university students with SEND.

FACULTY WILLINGNESS TOWARD EDUCATIONAL ACCOMMODATIONS TO UNIVERSITY STUDENTS WITH SEND

A number of studies were conducted to investigate university faculty willingness to provide appropriate accommodations to meet the needs of university students with SEND. Leyser, Greenberger, Sharoni and Vogel (2011) conducted two studies: one in 2006-2007 and the other one in 2016-2017 and, over ten years, investigated the university faculty attitudes and willingness to provide university students with SEND with accommodations. The results of these studies show that the university faculty attitudes and willingness to make accommodations have remained positive over that time. Another study by Leyser and Greenberger (2008), which examined 188 faculty in seven universities, revealed that university faculty were helpful in providing assessment accommodation both during the assessment of competencies students needed to enter the program and during field experience. Beilke and Yssel (1999) interviewed ten students with SEND at a Midwestern university to investigate university students with SEND's perceptions of university faculty attitudes. The students reported that the university faculty were willing to make instructional accommodations, but faced a less than positive classroom climate. Dowrick et al. (2005) conducted focus groups with university students with SEND in ten states in order to identify potential educational barriers. The study showed that there was still difficulty in gaining accommodations and support for university students with SEND.

Table 2. Studies on Faculty Willingness to Provide Accommodations

Faculty willing to provide accommodations	Faculty not willing to provide accommodations
Leyser, Greenberger, Sharoni, and Vogel, 2011	Dowrick, Anderson, Heyer, and Acosta, 2005
Leyser and Greenberger, 2008	
Beilke and Yssel, 1999	

MATERIALS AND METHODS

DESIGN

This study is non-experimental where attribute variables are not manipulated and instead are studied as they are, such as experience, gender and any other personal characteristics or traits (Belli, 2009). It examines the cause and effect relationships between faculty attitudes and the experience of teaching university students with SEND in the UAE and the faculty's willingness to provide accommodations.

INSTRUMENTS

The study used a cross-sectional survey design in which the data were collected from selected individuals at a single point in time. This design is effective in providing a snapshot of current behaviors and attitudes in a population (REF). It also has the advantage of providing data relatively quickly and there is no need to wait for lengthy periods (Gay, Mills and Airasian, 2012). The researcher developed an instrument that included two surveys. The first survey instrument is entitled University Faculty Attitudes towards Inclusion Scale (FATIS). This scale intends to measure the university faculty attitudes towards including

university students with SEND in higher education. The second scale was the University Faculty Willingness toward Providing University Students with Disabilities with Educational Accommodation Scale (FWTA). This scale was designed by the researcher after reviewing several studies (e.g., Alghazo, 2008; Fakete, 2013; Lorio, 2011; Southern, 2010) and various attitudinal surveys on inclusion (e.g., Antonak and Livneh, 2000; Lorio, 2011; Rao, 2002; Upton, 2000) for measuring the degree of faculty willingness to provide educational accommodations to university students with SEND.

SAMPLE

One hundred twenty five university faculty members from different colleges at a federal university in the UAE participated in the study. The number of the university faculty per university ranged from (3-34) university faculty. The percentage of the response rate was 19%. This can be considered as a low rate of participation with regard to the total number of the university faculty in the UAE University, which is more than 600 university faculty.

Table 3. Frequencies and Percentages of the University Faculty Age

Age	Frequency	Percentage
30 or less	2	1.6
31-40 years old	24	19.2
41-50 years old	48	38.4
51+ years old	51	40.8
Total	125	100.0

The participants of this study consisted of 25 (20%) female university faculty and 98 (78 %) male university faculty. Thus, the majority of the sample was male university faculty, representative of the

gender ratio among university faculty at the university (see Table 3).

Table 4. Frequencies and Percentages of the University Faculty Gender

Gender	Frequency	Percentage
Female	25	20.0
Male	98	78.4
Total	123	98.4
Missing System	2	1.6
Total	125	100.0

With regards to the university faculty rank, 21 (16.8%) participants reported they were full professors, 41 (32.8%) associate professors, 28 (22.4%) assistant professors, 34 (27.2%)

instructors/ lecturers and only one university faculty member did not specify his/her rank (see Table 4).

Table 5. Frequencies and Percentages of the University Faculty Rank

Rank	Frequency	Percent
Full Professor	21	16.8
Associate Professor	41	32.8
Assistant Professor	28	22.4
Instructor/ Lecturer	34	27.2
No rank stated	1	.8
Total	125	100.0

In terms of subject discipline, the majority of participants were from the University of Science with 34 (27.2 %), followed by the University of Business and Economics 16 (12.8%), the University of Engineering 14 (11.2%), the University of Education 12

(9.6%), the University of Law 10(8%), the University of Medicine and Health Sciences 4 (3.2%) and finally, the university of Information Technology 3 (2.4%) (see Table 5).

Table 6. Frequencies and Percentages of the University Faculty Colleges

Colleges	Frequency	Percentage
College of Business and Economics	16	12.8
College of Education	12	9.6
College of Engineering	14	11.2
College of Food and Agriculture	9	7.2
College of Humanities and Social Sciences	14	11.2
College of Information Technology	3	2.4
College of Law	10	8.0
College of Medicine and Health Sciences	4	3.2
College of Science	34	27.2
University College	7	5.6
Total	125	100.0

The participants of the study varied in their years of teaching experience. The highest percentage was of participants with experience of 20 years and above: 37 (29.6), followed by 27 (21.6%) who had 6-10 years of teaching experience, and the same percentage 21 (16.8%) of participants who had 11-15 years and 16-20 years of teaching experience

and 18 (14.4%) reported they had 1-5 years of teaching experience (see Table 6).

VALIDITY AND RELIABILITY OF THE STUDY

To establish the content validity of the two questionnaires and check their relevancy, the

researcher asked four university professors in the field of special education to judge the content of the survey and provide feedback to the researcher. The four experts made comments on a few items and suggested deleting some items to avoid unnecessary overlap. In addition, some items were revised because they presented possible ambiguity. All suggested changes by the experts were taken into consideration in the final version of each instrument. The four experts assured the validity of the content of the instrument of this study.

To examine the internal consistency of the two questionnaires the researcher administered the instrument to thirty participants, who agreed to participate in the pilot study. The sample of the pilot study was compatible with the research sample. The Cronbach's Coefficient Alpha reliability was computed. The FATIS scale had a Cronbach's Alpha internal consistency coefficient of 0.86 ($n = 30$). The FAWTA scale had a

Cronbach's Alpha internal consistency coefficient of 0.86 ($n = 30$).

RESULTS

The results of the study are discussed with reference to the research questions posed.

RQ#1: What are the faculty attitudes toward including students with SEND in the university in the UAE?

With regards to the faculty attitudes towards including students with SEND in the university, the results, as shown in Table 7, indicated that university faculty attitudes were positive (overall mean= 4.77). The means of their attitudes ranged from a high of 5.80 to a low of 3.76 (high positive attitudes to moderate positive attitudes).

Table 7 Descriptive Statistics for the University Faculty's Attitudes towards Students with SEND's Inclusion

Statements	N	Mean
2. College students with SEND don't impede the learning of the students without SEND.	122	5.80
1. College students with SEND should be given the opportunity to complete their studies in HE	124	5.68
16. College students with mild SEND should be included in higher education classes.	124	5.3710
18. Students with mild disabilities can succeed in higher education classes.	122	5.3607
5. College students with SEND benefit socially in HE classes	125	5.2880
12. Students with moderate/severe disabilities can succeed in higher education classes	122	5.27
4. College students with SEND benefit academically in HE classes	125	5.1200
21. College students with mild disabilities can benefit from higher education classes like students without SEND.	123	5.0691
19. College students with mild disabilities are socially well adjusted in the higher education classes.	122	4.9754
22. College students with mild disabilities have a positive impact upon the learning environment in higher education classes.	124	4.8387
6. I like having college students with SEND in my classes.	125	4.6320

3. College students with SEND enhance the learning of students without SEND when they ask for more explanation during the lecture	123	4.5984
15. College students with moderate /severe disabilities can benefit from higher education classes like students without SEND.	124	4.57
20. The college students with mild disabilities in the class have no impact on the University faculty teaching effectiveness during the lecture.	123	4.4797
7. If I had a choice, I would teach classes that included college students with SEND.	125	4.47
8. Higher education syllabi are not too advanced for college students with SEND.	120	4.41
11. The presence of college students with moderate /severe disabilities in higher education classroom required from the university faculty to differentiate the curriculum during the academic year.	123	4.33
13. Students with moderate /severe disabilities are socially well adjusted in the higher education classes.	121	4.31
9. College students with moderate/ severe disabilities should be included in higher education classes.	123	4.27
10. College students with moderate/ severe disabilities have a positive impact upon the learning environment in higher education classes.	121	4.24
17. Students with mild disabilities classroom required from the university faculty to differentiate the curriculum during the academic year.	121	4.0413
14. The college students with moderate /severe disabilities in the class have no impact on the University faculty teaching effectiveness during the lecture.	119	3.76
Overall Mean		4.77

RQ#2: Are the faculty willing to accommodate students with SEND in the university in the UAE?

With reference to the second research question, it was explored the faculty willingness to provide accommodations for university students with SEND in the UAE. Based on the results as it is shown in Table 7, it is clear that the university faculty are willing to provide accommodation to university students with SEND (overall mean= 3.41). By ordering the items descending based on

the mean, it showed that the score mean of the first 8 items ranged between (3.61-3.39) by the participants ($n \geq 123$) of this study which indicated that the university faculty were strongly willing to provide accommodations. Whereas, the score mean of the remainder items were rated as follows: 3.22 and 2.98 which indicated that the university faculty were willing to provide educational accommodation to university students with SEND (see Table 8).

Table 8. Descriptive Analysis of University Faculty Willingness to Provide Students with SEND with Accommodations.

Accommodations	N	M (mean)

Provide testing accommodation such as: time extension, alternative test formats to college students with SEND.	124	3.61
Allow note takers to assist college students with SEND during the lecture.	124	3.59
Provide other educational accommodation when necessary to college students with SEND.	122	3.53
Allow the college students with SEND to tape record the lectures when needed.	124	3.52
Allow the transcriber to write the answers during the test from certain college students with SEND (such as visually impaired students or students with motor skills difficulties).	123	3.50
Provide the college student with SEND with extra time to complete their tests and exams.	124	3.44
Allow the college students with SEND to redo missed exams without penalty when absent due to disability reasons.	123	3.40
Extend deadlines for completion of class projects, papers, assignments... etc. to college students with SEND when needed.	123	3.39
Allow the college students with SEND to use calculators during the tests.	121	3.22
Allow the college students with SEND to take an alternative form of tests such as true or false or multiple choice questions instead of essay questions.	122	2.98
Overall mean	124	3.41

RQ#3: Is there any relationship between the faculty attitudes and their willingness toward providing educational accommodations to the university students with SEND in the UAE?

With reference to the third question it was investigated whether there is any relationship between the university faculty attitudes and their willingness toward providing educational accommodations to the university students with SEND in the UAE. A correlation analysis was

conducted to see whether there is correlation between university faculty attitudes and willingness to provide educational accommodation to university students with SEND (see Table 9). There was a significant relationship between faculty attitudes toward including university students with SEND and faculty willingness to provide accommodations to university students with SEND in their classroom ($r = 2.61$). However, the level of this correlation is low.

Table 9. Pearson Correlation between University Faculty Attitudes towards Including College Students with SEND and University Faculty Willingness to Provide Accommodations

Correlations		
	Attitudes	Accommodation

	Pearson Correlation	Sig. (2- tailed)	N	Pearson Correlation	Sig. (2-tailed)	N
Attitudes	1		125	.261**	.003	124
Accommodation	.261**	.003	124	1		124

** Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

The results of the study indicated that the faculty attitudes towards including university students with SEND are positive. This finding is consistent with the findings of several previous studies (e.g., Abu-Hamour 2003; Alghazo, 2002; Baggett, 1994; Clark, 2017; Brouke, Hindes and Mather, 2007; Foss, 2002; McWaine, 2011; Rao, 2002; Rao and Gratin, 2003; Vogel, Leyser, Strehorn and silver, 2000; Van Loan, 2013; Wyland and Brulle, 1999), which indicated that university faculty hold positive attitudes towards including university students with SEND in general. The findings revealed that the university faculty were more supportive to the inclusion of university students with SEND because they believed that their inclusion in the university is fair and beneficial, academically and socially. However, they were not highly supportive of inclusion when it comes to the environment, curriculum and teaching. And this may be due to the lack of specific professional training in how to deal with and teach university students with SEND (Gaad and Almotairi, 2013). Therefore, adapting the curriculum and classroom environment are critical factors for fostering integration and higher learning. Moreover, the university faculty had a large teaching load and limited time to provide university students with SEND with the appropriate accommodation regarding the environment, teaching and curriculum. Satcher (1992) stated that the main concern of the university faculty was the load of work and the limited time to provide the university students with the required accommodations. So, university administrators may need to support university faculty to ensure that they can provide necessary accommodation to university students with SEND. With regards to the faculty willingness to provide educational accommodations for university students with SEND, the finding is consistent with previous research (Alghazo, 2008; Fakete, 2013; Leyser, Greenberger, Sharoni and Vogel, 2011), which reported that the university

faculty were willing to provide educational accommodations for university students with SEND. The present study was based on the Theory of Planned Behavior (TPB) in examining the university faculty attitudes towards including university students with SEND and their willingness to provide them with educational accommodations. It was found that there is a significant correlation between attitudes and behavior. So, the positive attitudes of university faculty towards including university students with SEND may have led to their willingness towards providing accommodations to university students with SEND.

This finding was consistent with Alghero's (2008) study which stressed the significant relationship between the faculty attitudes toward including university students with SEND and their willingness towards providing educational accommodations to university students with SEND at Mu'tah University. Moreover, MacFarlane and Woolfson (2013) confirmed, as did Chubon (1992), that there is a relationship between attitudes and actions (behavior) towards students with SEND.

RECOMMENDATIONS

The reviewed literature revealed that university faculty attitudes towards including university students with SEND is a vital factor in the inclusion of these students in university (Abu-Hamour, 2013; Alghazo, 2008; Praisner, 2003; Rao, 2002). To have successful inclusion, university faculty should hold positive attitudes and should be willing to provide university students with SEND with the suitable educational accommodations depending on the type of disability. The ultimate influence on the educational and social outcomes of students with Special Educational Needs is the behavior and practices of their teachers (Efthymiou and Kington, 2017). The study's findings indicated that the

university faculty in the UAE institution held positive attitudes towards including university students with SEND in the university as they realized that these could enhance their social and academic integration. The data revealed that the majority of the university faculty were willing to provide educational accommodations to university students with SEND. Thus, what is required is only more training to provide the university faculty with the appropriate skills and knowledge that will help them to provide the required educational accommodations to university students with disabilities with regards to the type and severity of disabilities.

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