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### **Saudi Faculty Perspectives on Accommodations for Students with Visual Impairment**

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### **Abstract**

We explored Saudi university faculty perspectives on accommodations for students with visual impairment by administering a modified version of the Accommodation of University Students with Disabilities Inventory to 78 faculty members housed at five Saudi universities. We investigated faculty assumptions about the challenges of instructing students with visual impairment and faculty satisfaction with professional development offered to facilitate successful instruction for students with visual impairment. Exploratory assessment of responses indicates that Saudi university faculty support and appreciate the rights of students with visual impairment to receive higher education. These faculty also express concern, however, that they have not been afforded appropriate professional development to facilitate successful education for students with visual impairment. This research suggests that effective implementation of inclusive higher education in Saudi Arabia must be supported by a network of trained professionals and an administrative support system for students as well as faculty.

#### Key words:

Inclusive education; Saudi faculty members; students with disabilities; visual impairment

## **Saudi Faculty Perspectives on Accommodations for Students with Visual Impairment Challenges for Students with Visual Impairment**

Students with visual impairment encounter unique social and structural challenges in higher education (Hutchinson, Atkinson, & Orpwood, 1998). Students with visual impairment are less likely to graduate than students without visual impairment (Herbert, Hong, Byun, Welsh, Kurz, & Atkinson, 2014; Richardson & Roy, 2002). This may be attributable, in part, to academic failures associated with challenges posed by lack of appropriate instructional and institutional support and to student withdrawal from university because of insufficient educational guidance (Wagner, Newman, Cameto, Levine, & Marder, 2007).

In addition to insufficient instructional, institutional, and educational support, physical mobility around the university often presents challenges for students with visual impairment (Roy, 2000). Cole-Hamilton and Vale (2000) documented that students with visual impairment encounter impediments in accessing textbooks in an appropriate format (e.g., Braille, audio). Borland and James (1999) reported that students with special educational needs (including visual impairment) sometimes miss lectures or fail to meet assignment deadlines due to the unique challenges they face. As a consequence, both the student and the instructor may perceive absences and academic failures as an inevitable correlate of the student's special needs (Borland & James, 1999). Koutsoklenis, Papadopoulos, Papakonstantinou, and Koustriava (2009) recommend that instructors are afforded professional development to better inform them about students with visual impairment and to facilitate successful instruction of these and other students with disabilities.

## **Faculty Attitudes Toward Students with Disabilities and Inclusive Education**

University faculty attitudes toward students with disabilities and toward inclusive higher education have received recent research attention. This research indicates that faculty

participation and support is crucial for developing appropriate accommodations to facilitate successful inclusive educational practices (e.g., Sánchez, Fernández-Jiménez, & Cabezas, 2018; Zhang, Landmark, Reber, Hsu, Kwok, Oi-man, & Benz, 2010). Accommodations refer to adjustments to instruction and assessment to ensure that students with disabilities can access course content and can demonstrate knowledge of course material (Crawford, 2013; Sánchez, Fernández-Jiménez, & Cabezas, 2018; Zhang et al., 2010). In a rare investigation of non-Western faculty attitudes toward students with disabilities, Dupoux, Hammond, Ingalls, and Wolman (2006) used a self-report survey to assess faculty attitudes toward students with disabilities in Haiti. The results of this research corroborate other research indicating that faculty participation and support is important for developing appropriate accommodations for students with disabilities.

### **Inclusive Higher Education in Saudi Arabia**

Previous research investigating faculty attitudes towards inclusive education of students with visual impairment has been conducted primarily in Western countries. No research has explored these issues in Middle Eastern countries. As in the West, Saudi Arabia has mandated inclusive higher education practices that provide equal opportunities for students with disabilities, including visual impairment (Ministry of Education, 2002; 2015). A specific “Disability Code” was enacted by the Saudi government in 2000 to ensure that persons with disabilities have access to free medical, educational, psychological, rehabilitation, and social services provided by public institutions (Ministry of Education, 2002; 2015).

Such policy directives require that persons with disabilities have equal rights as well as free access to meaningful education as defined in the *Teacher’s Guide for Learning Disabilities* (Ministry of Education, 2015). Although it has been many years since the enactment of these policy directives, they have not yet been fully implemented, especially in

the context of university students with disabilities. As a consequence, there remains a lack of special needs education services for students with disabilities, including students with visual impairment (Alquraini, 2011). Barriers to implementation of special services include faculty misunderstanding or non-support of accommodations for students with disabilities (Moriña, López, & Molina, 2015). It is also plausible that many faculty have not had students with disabilities in their classrooms, and for this reason have not had to be informed about the provision of appropriate services and accommodations (Tincani, 2004).

### **Purpose**

We investigated Saudi university faculty perspectives on and perceptions (or misperceptions) of accommodations for students with visual impairment. We administered a modified version of the Accommodation of University Students with Disabilities Inventory (Wolman, McCrink, Rodriguez, & Harris-Looby, 2004) to faculty members at five Saudi universities. We investigated faculty assumptions about the challenges of instructing students with visual impairment and faculty satisfaction with professional development offered to facilitate successful instruction for students with visual impairment. To the best of our knowledge, this is the first such investigation of Saudi university faculty.

### **Methods**

#### **Participants**

This study was approved by the Ethics Review Committee of King Abdulaziz University. We secured informed consent from all participants. The population of interest was faculty members with a doctoral degree housed at public universities in Saudi Arabia. Table 1 presents a summary of the demographic information we secured from participants. About three-quarters (79.5%) of participants were female. A majority of participants were Saudi nationals (96.2%), young (74.4% ages 20-30 years), early in their career (83.3% Assistant Professors), had not previously taught students with special educational needs

(82.1%), and did not have relatives with special educational needs (93.6%). A majority (64.1%) of participants affiliated with the social sciences rather than the natural sciences. Finally, a majority (56.4%) of participants were housed at one university, and between 7.7% and 12.8% were housed at one of the other four universities.

### **Materials and Procedures**

Following previous research investigating university faculty perspectives on accommodations for students with visual impairment (e.g., Dupoux, Hammond, Ingalls & Wolman, 2006), we administered a self-report survey to university faculty. We sent electronic invitations to participate in an online study about inclusive educational practices to Chairs of departments at five Saudi public universities. Chairs then forwarded invitations to departmental faculty. Seventy-eight faculty members completed the survey. We administered a version of the Accommodation of University Students with Disabilities Inventory (AUSDI; Wolman et al., 2004), modified to focus on visual impairment. Specifically, we modified the AUSDI first by replacing “disability” with “visual impairment.” Second, we omitted two items that were not appropriate for people with visual impairment. We did not add items to the AUSDI. The modified AUSDI includes 18 items organized into three categories: Perspectives on accommodations for students with visual impairment (items 1-8), Assumptions about students with visual impairment (9-12), and Professional development to instruct students with visual impairment (13-18). Response categories for the items are: 1 = “Strongly disagree”, 2 = “Disagree,” 3 = “Neither agree nor disagree,” 4 = “Agree,” and 5 = “Strongly agree.” Table 2 presents the 18 items by category. The AUSDI was translated into Arabic and then pilot-tested on five faculty members at two Saudi universities to eliminate problems of clarity and fluidity.

### **Results**

Following Wolman et al. (2004), we constructed scales for the three categories assessed by the items included in the AUSDI. These scales (and a full-scale, across all items) each achieved acceptable Cronbach's alpha reliability ( $\alpha \geq 0.70$ ). Table 2 presents item-level, category-level, and full-scale descriptive statistics.

For items in the category "Perspectives on accommodations for students with visual impairment," the across-category mean (3.91) indicates that Saudi university faculty participants were positively disposed to accommodating students with visual impairment. The results also indicated that participants were more positively disposed to some accommodations than others. For example, participants were more positively disposed to allowing students with visual impairment to record a lecture, whereas participants were less positively disposed to allowing students with visual impairment to take proctored exams in a supervised location. Participants most strongly agreed with providing additional time to complete exams, and least strongly agreed with extending deadlines for completion of projects or papers.

For items in the category "Assumptions about students with visual impairment," the across-category mean (2.06) indicates that Saudi university faculty participants disagreed with the negative assumptions presented by the items. The results also indicated that participants disagreed more strongly with some of the assumptions than with others. For example, participants more strongly disagreed with the assumption that having a few students with visual impairment in class might jeopardize the quality of instruction, whereas participants disagreed less strongly with the assumption that having a note-taker in class could be distracting for students and/or the instructor. Participants most strongly disagreed with the assumption that students with visual impairment are not able to develop critical thinking skills as well as other students, and least strongly disagreed with the assumption that many students with visual impairment expect special treatment.

Finally, for items in the category, “Professional development to instruct students with visual impairment,” the across-category mean (2.95) indicates that Saudi university faculty participants were ambivalent about the extent to which their institution provided professional development to instruct students with visual impairment. The results also indicated that participants reported some variance in their assessment of the individual items. For example, participants agreed less with the statement that “My institution has provided me with written information about accommodating students with visual impairment,” whereas they agreed more with the statement that, “My institution has a written policy that addresses the needs of students with visual impairment.” Participants agreed least with the statement that their institution has an e-mail bulletin board that provides information about services for students with visual impairment. Participants agreed most with the statement that their institution has an office specifically designed to meet the needs of students with visual impairment.

### **Discussion**

The current study contributes to the literature by beginning to address accommodations for Saudi university students with visual impairment. To the best of our knowledge, the current research is the first such study to investigate Saudi faculty perspectives on accommodations for students with visual impairment. These findings can be used to facilitate and guide the development and provision of support services and professional development programs at Saudi universities. For example, the results indicate that Saudi faculty members are positively disposed to accommodating students with visual impairment. That is, Saudi faculty members accept the idea of providing reasonable accommodations and seem willing to support such accommodations. However, the willingness of faculty members to provide accommodations for students with visual impairment does not mean they will maximize their efforts to do so, since some of the current results also indicate that faculty may hold some mildly negative assumptions about students



with visual impairment (e.g., participant responses indicated that they neither agree nor disagree with the assumption that “Many people with visual impairment expect special treatment”). Indeed, according to the results of this study (specifically, responses to the item, “Professional development to instruct students with visual impairment”—see Results), faculty members may benefit from professional development that includes clear presentation of guidelines that regulate their teaching relationship with students with visual impairment. The results of the current research indicate the Saudi university faculty—like their Western counterparts (e.g., Hitch, Macfarlane, & Nihill, 2015)—are not often trained to deploy instructional techniques designed to maximize learning for students with disabilities. Previous research documents that training faculty to respond effectively to meet the instructional needs of students with disabilities improves student outcomes (e.g., Lovet, Kresier, Camargo, Grubbs, Kin, Burge, & Culver, 2015; Murray, Lombardi, & Wren 2011). Implementing such training programs in Saudi Arabia and elsewhere therefore may enhance the educational experience for students with disabilities, including students with visual impairment.

The results of the current study indicate that Saudi university faculty have positive perspectives about instructional accommodations for students with visual impairment. This is consistent with the results of studies conducted in Western countries investigating faculty attitudes about accommodations for students with disabilities (e.g., Lombardi, Vukovic, & Sala-Bars, 2015; Murray et al., 2008; Wolman et al., 2004). That is, Saudi faculty members, like their Western counterparts, do recognize the moral import and educational value of providing instructional accommodations for students with disabilities. Saudi faculty members typically complete graduate education in Western countries (e.g., US, UK, Canada, Australia). Thus, they likely were exposed to the Western institutional commitment to providing equal educational opportunities for students with disabilities, but these results may

also reflect the Saudi government's recent mandates to provide equal educational opportunities to students with disabilities (e.g., Ministry of Education, 2002, 2015).

In the current research, Saudi faculty reported some disagreement with the statement that, "Disability service staff has assisted me at least once in providing accommodations for students with visual impairment." This suggests either that Saudi faculty have sought support from disability service staff for students with visual impairment but may not have received it, or that Saudi faculty have not sought support for students with visual impairment, perhaps because they have not had these students in their classrooms. Consistent with the latter possibility, the population prevalence estimates of visual impairment and blindness in Saudi Arabia are around 9% and 1%, respectively (Tabbara & Ross-Degnan, 1986; Al Faran, Al-Rajhi, Al-Omar, Al-Ghamdi, & Jabak, 1993; Al-Shaalin, Bakrman, Ibrahim, & Aljoudi, 2011).

Hong (2015) argues that interest in providing inclusive education has been strongest for elementary and middle-school education in the United States, with apparently less interest or concern for inclusive higher education, and this may also be the case for Saudi Arabia, in particular. Furthermore, many university faculty may not have encountered the challenges of instructing students with special educational needs (Tincani, 2004). University faculty therefore may lack understanding of these special needs, and may not have had an opportunity to develop inclusive instructional strategies.

### **Limitations and Directions for Future Research**

The current research explored university faculty perspectives about provision of accommodations for students with visual impairment at Saudi universities. We relied on a relatively small sample of faculty participants housed at five Saudi universities. We encourage replication of this research with a larger sample of faculty participants, and with faculty housed at other Saudi universities. In addition, future research could assess the

perspectives of faculty housed in different types of higher education institutions, such as private universities and technical colleges.

### **Policy and Practice Implications**

The current research was designed to explore faculty perspectives on accommodations for students with visual impairment, but we encourage parallel assessments of university clerical staff and administration. Staff and administrators may have unique opportunities to facilitate appropriate instructional accommodation for students with visual impairment and other disabilities. The current research suggests that it may be useful to create a professional development program for Saudi university faculty to improve their knowledge of students with visual impairment and about accommodations for students with visual impairment. This professional development program might be designed, in part, to encourage faculty to actively welcome students with visual impairment in their classrooms, to actively support their academic success alongside students without visual impairment, but also to provide students with visual impairment with reasonable accommodations, as now mandated by Saudi law.

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Table 1. Demographic information for study participants ( $n = 78$ ).

Variable	Frequency (%)
<u>Gender</u>	
Male	16 (20.5)
Female	62 (79.5)
<u>Age (years)</u>	
20-30	58 (74.4)
31-40	11 (14.0)
41-50	7 (9.0)
51-60	2 (2.6)
<u>Nationality</u>	
Saudi	75 (96.2)
Non-Saudi	3 (3.8)
<u>Academic rank</u>	
Assistant Professor	65 (83.3)
Associate Professor	8 (10.3)
Professor	5 (6.4)
<u>Experience instructing students with special educational needs</u>	
Yes	14 (17.9)
No	64 (82.1)
<u>Relatives with special educational needs</u>	
Yes	5 (6.4)
No	73 (93.6)



Academic field

Natural sciences 28 (35.9)

Social sciences 50 (64.1)

University

Umm Al-Qura 10 (12.8)

King Abdulaziz 44 (56.4)

Taif 8 (10.3)

King Saud 6 (7.7)

Jeddah 10 (12.8)

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Table 2

Item-level, category-level, and full-scale descriptive statistics for the AUSDI ( $n = 78$ ).

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*Category: Perspectives on accommodations for students with visual impairment*

<u>Item</u>	<u>Mean</u>	<u>Standard deviation</u>
I would provide additional time to complete exams for students with visual impairment.	4.24	0.94
I would allow students with visual impairment to take oral exams instead of written exams.	4.04	1.01
I would allow students with visual impairment to take proctored exams in a supervised location.	3.49	1.38
I would extend deadline for completion of projects or papers for students with visual impairment.	3.09	1.33
I would provide copies of lecture notes with Braille language for students with visual impairment.	4.12	0.97
I would allow students with visual impairment to tape record lecture.	4.17	0.83
I would allow students with visual impairments to give oral presentations instead of written projects.	4.10	0.80
I would allow students with visual impairment to have note-takers.	4.04	1.04
<hr style="border-top: 1px dashed black;"/>		
Items across category	3.91	0.65

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*Category: Assumptions about students with visual impairment*

<u>Item</u>	<u>Mean</u>	<u>Standard deviation</u>
Having a few students with visual impairment in my class may jeopardize the quality of instruction.	1.63	0.74
Having a note-taker in my class could be distracting for the other students and/or myself.	2.10	1.06
Students with visual impairment are not able to develop critical thinking skills as well as other students.	1.26	0.47
Many people with visual impairment expect special treatment.	3.27	1.09
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Items across category	2.06	0.49

*Category: Professional development to instruct students with visual impairment*

<u>Item</u>	<u>Mean</u>	<u>Standard deviation</u>
In the last five years, my institution has provided training to faculty or administrators about students with visual impairment.	2.87	1.02
In the last five years, my institution has provided me with written information about accommodating students with visual impairment.	2.82	0.99
My institution has a written policy that addresses the needs of students with visual impairment.	3.08	0.91
My institution has an office specifically designed to meet the	3.35	1.03

needs of students with visual impairment.		
My institution has an e-mail bulletin board that provides information about services for students with visual impairment.	2.79	1.04
Disability service staff has assisted me at least once in providing accommodations for students with visual impairment.	2.80	1.05
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Items across category	2.95	0.81

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*Note:* Response categories for items are: 1 = “Strongly disagree”, 2 = “Disagree,” 3 = “Neither agree nor disagree,” 4 = “Agree,” and 5 = “Strongly agree.”