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FACULTY FAMILIARITY WITH INCLUSIVE PRACTICES FOR STUDENTS WITH LEARNING DISABILITIES AT NAJRAN UNIVERSITY

ABSTRACT

Inclusive practices are essential determinants of academic success for students with learning disabilities (LD) in university education. The current study examined the familiarity of faculty members with inclusive practices for students with LD in a university in the Kingdom of Saudi Arabia. A quantitative survey design was employed with 264 faculty members who had inadequate familiarity with inclusive practices for students with LD. Differences were noted in the inclusive practices provided to the students as Saudi faculty members were inadequately familiar with instructional, classroom and assignment practices. The study also showed that Saudi faculty members were unfamiliar with examination practices provided to students with LD. Demographic variables showed statistically insignificant differences in Saudi university education. Implications and suggestions for future research were also highlighted.

Keywords: *Inclusive practices; learning disabilities; university; students; higher education; familiarity; Saudi Arabia.*

1. INTRODUCTION

The inclusive experiences of students with learning disabilities (LD) in higher education vary among universities worldwide (Abed & Shackelford, 2019, Lombardi *et al.,* 2015). This variation is attributed to many factors, including the effectiveness of transition planning, which the students are provided within secondary school and the familiarity of faculty members with inclusive educational practices (Trainor *et al.,* 2016). Therefore, a summary of performance portfolio can help enhance transition planning programmes and faculty members› familiarity for students with learning disabilities (Davis & Southward, 2021).

This study proposed that understanding the factors contributing to university students' satisfaction and academic success with LD may positively contribute to enhancing their learning experiences in the university environment (Stage & Milne, 1996). These factors were

divided into three categories: institutional, dispositional and coping strategies (Stage & Milne, 1996). Institutional factors included facilities and services provided by the university, which can facilitate or impede the development of goals of post-secondary students with learning disabilities (Stage & Milne, 1996). Equipping the students with beneficial strategies, such as self-accommodation and providing them with coaching programmes focused on developing organisational, time management and self-advocacy skills can positively reinforce their university experience (Lightfoot *et al.,* 2018).

Additionally, dispositional factors including attitudinal or behavioural traits of the students also influence their academic progress and were found to be the most significant contributors to the academic success of post-secondary students with learning disabilities (Ekelman *et al.,* 2013; Greenbaum *et al.,* 1995; Perry & Franklin, 2006; Lightfoot *et al.,* 2018).

Furthermore, coping strategies included management techniques that the students developed to deal with inadequacy in skill areas and specific subjects that were impacted by their learning disabilities (Stage & Milne, 1996, Gustems-Carnicer *et al.,* 2019). Decision-makers in universities should stress the importance of disability service providers in educating students with learning disabilities and equipping them with an adequate understanding of their disability, which will help them identify their accommodation requirements and strengths (Lightfoot *et al.,* 2018, Hadley, 2019).

2. CONCEPTUAL FRAMEWORK

2.1 The concept of familiarity

The term familiarity has different meanings depending on the contexts in which it is used. In this study, it is defined as the knowledge of someone or something or having exposure to someone or something (Pozzulo *et al.,* 2019). Encouraging familiarity with inclusive practices significantly influences the academic progress of students with learning disabilities. A prime reason for increasing faculty members' familiarity with learning disabilities is that it can help reduce the stigmatisation of students with learning disabilities in communities and schools (Pelleboer-Gunnink *et al.,* 2020). In addition, it can also promote the inclusion and belonging of students with learning disabilities within their societies (Pelleboer-Gunnink *et al.,* 2020).

2.2 The concept of inclusive practices

Inclusive practices refer to arrangements that teachers or faculty members follow to attain presence, involvement and achievement for all learners, particularly those who are at risk (Marchesi *et al.,* 2009). Increasing involvement in classrooms accepts differences as a fact, including many learners participating together with various learning styles, prior information and abilities (Finkelstein *et al.,* 2021). Furthermore, in order to ensure effective inclusive practices delivered to students, a series of factors has to be represented that can influence the higher education system. These factors are grouped into three classifications; including, alterations in the system, operations of inclusive schools and applications of inclusive practices in classrooms (Guasp *et al.,* 2016).

3. LITRETURE REVIEW

The majority of the students with LD expressed positive attitudes towards taking alternative courses and obtaining academic accommodations and emphasised the importance of

self-advocacy skills in their academic success (Sigafoos, 2019, Skinner, 2004). When students with LD progress to college, more focus should be on the self-disclosure process, including legal accommodations, self-determination and self-advocacy skills (Newman *et al.,* 2019). Thus, the preparatory curriculum of high schools and colleges for post-secondary students with LD should help build students› self-advocacy skills and ensure competency in using academic strategies. In addition, it should reinforce the students' social skills to help them confidently interact with their instructors and peers without learning disabilities and educate students about disability laws (Skinner, 2004, Barton, 2018).

Moreover, increasing the awareness of students with LD on the university campus may help educate students without learning disabilities about the characteristics of students with learning disabilities and promote positive attitudes towards them (Hadley, 2019). Students with LD are hesitant to request their academic accommodations due to the apprehension among their peers without learning disabilities (Barga, 1996). Students without learning disabilities often understand the academic accommodation process, but they cannot understand the reasons behind it (Meyer *et al.,* 2012, Slee, 2018). Therefore, Alqarni *et al.* (2019) suggested that it is vital to educate students without learning disabilities about the types and characteristics of learning disabilities as it may help them partake in positive and non-judgemental interactions with their peers without learning disabilities. It is essential to emphasise the importance of disability service providers in raising awareness to counter misunderstandings among students without learning disabilities about the perceived "unfairness" in requesting accommodations for students with LD (Meyer *et al.,* 2012). Consequently, it is essential to investigate university students' attitudes without learning disabilities in integrating with students with learning disabilities. Moreover, examining the attitudes of the faculty members towards providing accommodation services is critical to facilitate inclusive practices for students with LD in higher education (Hansen *et al.,* 2017).

3.1 Faculty members› attitudes towards university students with learning disabilities

Generally, faculty members have positive attitudes towards the inclusion of students with learning disabilities, but they have inadequate knowledge of disability inclusion in terms of legislation and providing appropriate accommodations (Abu-Hamour, 2013; Rao & Gartin, 2003; Khansa, 2015; Lombardi *et al.,* 2015; Jensen *et al.,* 2004; Khouri *et al.,* 2019). However, faculty members have recently expanded their knowledge of disability in higher education compared to past years and categorically exhibited positive perceptions of integrating individuals with learning disabilities in universities (Leyser & Greenberger, 2008).

The level of confidence in teaching and perceptions of students with learning disabilities vary among faculty members (Rao & Gartin, 2003). When faculty members are confident and positive about educating students with learning disabilities in higher education, the students can be better included within the university environment and receive the most appropriate accommodations (Abu-Hamour, 2013). To facilitate successful inclusion of students with LD, instructors are required to change their attitudes towards students with learning disabilities and provide them with appropriate accommodations (Khansa, 2015). However, prior research has shown that faculty members and staff who provide accommodating services to students are uncertain about their ability to efficiently meet accommodation requests of students with learning disabilities (Murray *et al.,* 2011; Taylor *et al.,* 2009).

Some faculty members avoid or are hesitant to accommodate students with learning disabilities. They believe that providing accommodations might burden them with additional duties and cause them further stress. Skinner (2007) pointed out that some faculty members are unwilling to use extra credit as a reasonable accommodation for students with learning disabilities because it presents an unfair advantage and should not be used for a specific group of students while excluding the others. This type of accommodation was least likely to be provided by faculty members in universities, particularly in engineering and law departments (Rao & Gartin, 2003).

However, most faculty members are generally willing to provide accommodations for students with learning disabilities assigned by universities (Murray *et al.,* 2008; Khouri *et al.,* 2019; Jensen *et al.,* 2004; Murray *et al.,* 2011; Leyser *et al.,* 2011; Abu-Hamour, 2013; Rao & Gartin, 2003; Khansa, 2015; Lombardi *et al.,* 2015; Skinner, 2007; Hindes & Mather, 2007; Bourke *et al.,* 2000). Khouri *et al.* (2019) mentioned that a high willingness to provide accommodations to students with LD is associated with substantial knowledge of the importance of assisting students with LD. It was presumed that such knowledge might help students with LD pursuing post-secondary education to get accepted in media (Ben-Yehudah & Brann, 2019), along with increasing the awareness of university deans towards the necessity of educating faculty members about accommodating practices provided to students with LD (Khouri *et al.,* 2019).

Awareness of the characteristics of students with LD is not sufficient to exhibit a willingness to accommodate those students in the university; faculty members are required to be willing to advocate for students with LD to receive the most appropriate accommodating practices in higher education (Murray *et al.,* 2008; Harris & Lee, 2019). Murray *et al.* (2008) believed that faculty members could effectively advocate for students with LD if they had opportunities to improve their skills in helping the students. These skills can be acquired through disability-focused training, which has a positive relationship with the faculty members› willingness to support and advocate for students with LD (Murray *et al.,* 2011).

Skinner (2007) conducted a study focusing on examining the faculty›s willingness to provide accommodations and alternative courses for students with LD. In a survey delivered to institutions in the south-eastern United States, 253 faculty members participated. The results indicated a variation in the faculty's willingness to provide accommodations and alternative courses based on some variables, including schools, academic ranks and types of accommodations requested (Skinner, 2007). In conclusion, faculty members were either very willing to provide four of the eight accommodations, including calculators, alternative locations, extended time and computers or laptops to accommodate students with LD (Skinner, 2007; Shea *et al.,* 2019).

The favourability of providing accommodation types can also vary among faculty members within universities (Lipka *et al.,* 2020). Faculty members are highly willing to use accommodations for extended time on tests and extended deadlines on class assignments (Khansa, 2015). The use of alternative exams and providing extended time on examinations are substantially considered by instructors because of the ease in understanding and implementing them (Bourke *et al.,* 2000). In some instances, faculty members prefer assisting in copying lecture outlines and preparing drafts of projects (Leyser *et al.,* 2011). A study conducted by Rao and Gartin (2003) showed that most faculty members preferred to allow students with learning disabilities extra time on examinations. As can be noted from previous

studies, providing extended time is a preferred accommodation (Khansa, 2015; Bourke *et al.,* 2000). Although students normally do their assignments with little to no assistance, faculty members are required to change their attitudes and beliefs of post-secondary students with LD by discussing their involvement in teaching those students (Jensen *et al.,* 2004; Moriña Díez *et al.,* 2015; López Gavira & Moriña, 2015).

Similar studies that have been conducted across different cultures present varying aspects of faculty members' practices of inclusive instructions for post-secondary students with LD in global universities (Agrawal *et al.,* 2019; Shecter-Lerner *et al.,* 2019). For instance, an interesting study conducted among faculty members in the United States, Canada and Spain, investigated the differences in faculty members' attitudes towards disability-related topics and inclusive instructions using the inclusive teaching strategies inventory (ITSI). The ITSI measures attitudes and actions across seven subscales: (a) inclusive teaching practices, (b) accommodations, (c) inclusive classrooms and lectures, (d) inclusive assessment, (e) disability laws and concepts, (f) course modifications and (g) accessible course materials (Lombardi *et al.,* 2015). A questionnaire was prepared and interactive workshops were organised in which 102 faculty members from the three countries participated. The findings of the study indicated that participants had different attitudes and actions across the seven subscales. Concerning attitudes, the US faculty members' responses were the highest across the seven subscales, except for their knowledge of disability laws and concepts. In contrast, the attitudes of Spanish faculty members were consistently the lowest compared to the two other countries (Lombardi *et al.,* 2015).

3.2 Learning disabilities in Saudi higher education

Factually, Saudi Arabia started educating students with disabilities in 1985 with deaf and blind students in schools known as scientific institutions (Al-Mousa, 2010). After that special education services and support in Saudi Arabia improved with the development of special education programmes all over the world, especially in the United States of America (Alquraini, 2013). During the years 1962 and 1992, a significant development was noticed in the field of special education in Saudi Arabia, which resulted in mainstreaming in the primary schools and institutions (Al-Mousa, 2010). This development was apparent as establishing special schools and institutions for individuals with disabilities, especially for those with visible disabilities (Battal, 2016). However, these institutions were commonly built in cities more than rural areas of Saudi Arabia (Al-Jadid, 2013)

The main contributor to the development of Saudi special education, especially learning disabilities, was the law of individuals with disabilities education act (IDEA, 2014) (Aldabas, 2015). After this law emerged, invisible disabilities (e.g., learning disabilities) were recognised and stated in the disability law of Saudi Arabia (Aldabas, 2015). Students with mild learning disabilities were educated in the general education classroom with resource room support, whereas students with moderate, profound and severe learning disabilities in special day schools (Aldabas, 2015). However, those students were integrated in 1987 by the legislation of disability in Saudi Arabia (Al-Jadid, 2013). The legislation of disability supported the equal rights of individuals with learning disabilities by assuring access to «free and appropriate medical, psychological, social, educational, and rehabilitation services through public agencies» (Al-Jadid, 2013:458).

Consequently, students with learning disabilities have only been slightly included in Saudi higher education due to many reasons. Firstly, they are not engaged in effective transition

planning during their high or post-secondary schools, which creates more learning challenges for them in colleges (Almalki, 2017). Secondly, even though faculty members were aware about the nature, characteristics and needs of students with learning disabilities within universities, they lack awareness of endorsement programmes and learning environment provided to students with LD in Saudi higher education (Aldhuibi, 2009). Therefore, training can not only support faculty members› knowledge, but also it can change their attitudes towards the inclusion of students with LD in higher education (Alhaznawi & Alanazi, 2021). Moreover, faculty members working in Saudi emerging universities, believed that these universities had a low degree in the availability of quality standards for the programmes and services of students with learning disabilities (Hijab & Arab, 2017).Therefore, there was a lack of appropriate special education services provided to students with learning disabilities that had to be reformed by special education departments at some universities under the United States› special education legislations including, the IDEA (Alquraini, 2013).

Due to the educational inclusion of students with LD in general education schools, high numbers of students with LD graduated from secondary schools which led the policymakers in the government to take action to the education future of those students (Maajeeny *et al.,* 2009). Therefore, the Saudi government passed a decree in 1999, empowering students with LD and other disabilities to continue their learning at Saudi universities and colleges.

Students with learning disabilities and other disabilities faced admittance issues at Saudi universities. These issues were summarised by Maajeeny *et al.* (2009) including (1) lack of legislations, ensuring the rights of students with learning disabilities at Saudi universities and receiving the specialised care (Alquraini, 2013, Maajeeny *et al.,* 2009). (2) Students with learning disabilities could not reach the admittance requirements and entry of Saudi universities, especially in specialisations with high requirements such as sciences and medicine. (3) Admitted students with learning disabilities encountered unavailable and inappropriate accommodations due to the lack of faculty awareness about the necessary accommodations for those students (Alhossein, 2016; Maajeeny *et al.,* 2009). (4) The attitudes of leaders at Saudi universities and higher education increased the acceptance of students without disabilities due to the excessive numbers of those from secondary schools (Almalki, 2017). (5) The inability of students with learning disabilities to adapt to the differences of instructions between the university and high schools. (6) Finally, the lack of collaboration between decision-makers and faculty in providing the appropriate accommodation to students with learning disabilities at universities (Maajeeny *et al.,* 2009).

Increasingly, Saudi universities realised the issues surrounding post-secondary students with learning disabilities and stated some suggestions to overcome them by establishing disability units directed by the deanship of student affairs in the majority of universities (Almalki, 2017). These universities attempted to supply the necessary accommodations to facilitate post-secondary students with disabilities, especially for students with visible and learning disabilities. Saudi universities such as King Saud University, Majmaah University and King Faisal University were continuously contributing to the education of post-secondary students with learning disabilities (Mohammed & Arafa, 2015). However, King Saud University was the leading university that included different resources to develop the engagement of students with disabilities on the university campus (Aldabas, 2015).

Moreover, due to the increase in the number of students with disabilities entering the King Saud University (KSU), the university administration of KSU implemented global standards of

all support services for students with disabilities (Aldabas, 2015). Therefore, a development project of services established and included programmes, adaptation of assistive technology, academic and educational development, professional development and universal access programme (Mohammed & Arafa, 2015). Additionally, Alhossein (2016) suggested that more studies need to be conducted about Saudi faculty members› awareness related to accommodating practices provided to students with ADHD or LD in Saudi universities. The need of the current study is that few studies are focusing on the faculty attitudes of students with LD at Saudi universities. However, previous studies did not investigate the faculty›s familiarity with inclusive practices for university students with LD at Saudi universities.

3.3 Purpose of the Study

Although various countries have attempted to make strides in the global movement towards inclusion (MacFarlane & Woolfson, 2013), students with learning disabilities still face several challenges in higher education (Reed *et al.,* 2011). One such challenge is implementing inclusive practices; many teachers lack quality preparation for teaching students with learning disabilities (Al-Ahmadi, 2009). Binmahfooz (2019) indicated that many teachers have limited or no experience working with students with learning disabilities. One way to help students with learning disabilities at the university level is to ensure that instructors have adequate capability and experience to deal with students with LD and to teach them and help integrate them into university life. While previous studies highlighted the crucial role of the skills and experiences that instructors should acquire to effectively teach students with learning disabilities, there is limited research on university faculty›s familiarity with inclusive educational practices for students with LD in Saudi Arabia and worldwide (Alnahdi & Schwab, 2020). Therefore, it was vital to research the familiarity of faculty members with inclusive practices for students with learning disabilities. In essence, this study sought to contribute to the knowledge base on teacher education and inclusive practices implemented globally, especially for students with learning disabilities and countries still in the early stages of developing and implementing inclusive educational practices.

3.4 Research questions

Given the importance of providing educational support and accessibility to post-secondary students at universities, the primary aim of the present study was to examine the familiarity of faculty members with inclusive practices for students with LD in university education. Saudi faculty members at a public university addressed several significant research questions. Specifically, there were three main questions that the study focused on. First, how familiar are faculty members with inclusive practices for students with LD? Second, did the level of familiarity differ for different types of inclusive practices? Third, was there a difference in familiarity with inclusive practices depending on academic ranks and the number of years of teaching experience?

4. METHOD

4.1 Participants

A survey was sent to over 1500 faculty members from Najran University (NU) in Saudi Arabia. A total of 264 faculty members, having different years of teaching experience and academic ranks, participated in this study. Najran University is an emerging university that was previously known as The Community College of King Khalid University. The university

includes 14 colleges, 3 research centres and supporting deanships. Table 1 displays the demographic characteristics of the study participants.

Table 1:   Background information on faculty members

Demographic variables	Total (*N*=264)
Gender	
Male	191
Female	73
Teaching Experience (years)	
1–3	12
4–7	118
8+	134
Previous teaching of (students with LD)	
Yes	122
No	142
Academic Rank	
professor	90
associate professor	98
assistant professor	75
lecturer	1

4.2 Questionnaire

A descriptive research design was used to collect the data. More specifically, the researcher used a survey method to investigate participants' familiarity with large populations. Therefore, the researcher designed a study instrument that included a questionnaire that was based on the Likert scale. It was created online using Qualtrics, a web-based software used to conduct surveys, with a shareable link. The questionnaire also consisted of demographic questions, including gender, academic ranks, teaching experiences, previous experiences teaching students with LD and inclusive practices. The questions on inclusive practices were generated based on standards of accommodating post-secondary students with LD underlined by the DO-IT Centre of the University of Washington on their website. Apart from the accommodations, this website also includes information and media related to the concept of Universal Design (UD), which means designing and compositing environments, products or buildings to be greatly used and accessible by all individuals regardless of their disability, age and size (Burgstahler, 2008).

Furthermore, the study questions were divided into three aspects: instructional practices, classroom and assignment practices, and examination practices. Each aspect contained multiple questions and responses. The researcher used a five-point Likert-type scale ranging from 1 (very familiar) to 5 (very unfamiliar); in which, 1 = very familiar, 2 = familiar, 3 = inadequately familiar, 4 = unfamiliar, and 5 = very unfamiliar.

4.3 Validity and reliability

The questionnaire items were translated into Arabic and proofread to preserve their intended meanings. The five experts who measured the validation of the questionnaire's contents had majored in special education. Several revisions were made to the questionnaire based on the reviewers' suggestions and the approval of research ethics was then obtained from NU. Thirty randomly selected participants from NU undertook a pilot study. The survey asked whether they wanted to participate in the study. Thereafter, the questionnaire's internal reliability was measured using Cronbach's alpha; all scales indicated excellent reliability (0.98).

4.4 Procedure and data analysis

After testing the study instrument in terms of validity and reliability and obtaining the approval of research ethics from NU, the researcher, who worked in the Department of Special Education at NU, sent an official letter along with the survey link of the questionnaire to the dean of the College of Education via the online portal of NU. Next, the dean forwarded the survey link to the Vice President of Graduate Studies and Scientific Research, who then issued a letter with the survey link to all deans of colleges. The deans forwarded the questionnaire to the chairs of departments at NU. Lastly, the chairs of departments submitted the questionnaire to all faculty members via the university's online portal.

The responses were converted into numerical data. SPSS 23.0 was used to produce means and standard deviations for measuring faculty members familiarity. After that, a two-way ANOVA was used to determine significant differences in familiarity levels of faculty members concerning types of inclusive practices, academic ranks and years of teaching experience. Lastly, hierarchical regression analysis was used to reveal the best predictor of faculty members' familiarity among the study variables.

5. FINDINGS

The current study aimed to examine faculty members' familiarity with inclusive practices for students with LD using a quantitative survey. The mean overall score of faculty members' familiarity was 2.8 (SD = 1.2) on a five-point Likert-type scale, indicating inadequate familiarity with inclusive practices for post-secondary students with LD, as shown in Table 2.

Table 2:   Average familiarity of inclusive practices

	N	Minimum	Maximum	Mean	Std. Deviation
Total of Inclusive Practices	264	1.00	5.00	2.8519	1.20012
Valid N (listwise)	264				

The second research question addressed the mean differences among the three types of inclusive practices. Three categories were measured: instructional practices, classroom and assignment practices and examination practices. Overall, the faculty members expressed inadequate familiarity with inclusive practices for post-secondary students with LD. The mean differences were as follows: instructional practices (M= 2.82), classroom and assignment practices (M= 2.86) and examination practices (M=3.63). However, it was noted that Saudi faculty members have low familiarity with examination practices, as presented in Table 3 below. These results suggest that most Saudi faculty members are unfamiliar with examination practices for students with LD in Saudi university education.

Table 3: Average familiarity for types of inclusive practices

		Instruction	Assignment and classroom	Examination
N	Valid	264	264	264
	Missing	0	0	0
Mean		2.8291	2.8699	3.6390
Std. Deviation		1.21810	1.23314	1.48463
Variance		1.484	1.521	2.204
Minimum		1.00	1.00	1.17
Maximum		5.00	5.00	5.83

As shown in Table 4, the one-way ANOVA results revealed that faculty's familiarity with inclusive practices across their teaching experiences of students with LD in post-secondary education was not statistically significant, $F (1.26) = 1.90$, $p = .169$, denoting similarities in familiarity across the (Yes) group (*taught students with LD*) ($n = 122$, $M = 2.74$, $SD = 1.35$) and (No) group ($n = 142$, $M = 2.94$, $SD = 1.04$). The one-way ANOVA comparing faculty's familiarity of inclusive practices across their academic rank showed that the lecturer group contained only one case and would not permit post-hoc comparisons. The results were not statistically significant, $F (3.26) = .74$, $p = .526$, indicating similarities in familiarity across professors ($n = 90$, $M = 2.71$, $SD = 1.37$), associate professors ($n = 98$, $M = 2.90$, $SD = 1.12$), and assistant professors ($n = 75$, $M = 2.93$, $SD = 1.06$). Finally, the one-way ANOVA comparing faculty's familiarity of inclusive practices across the number of years of experience was not statistically significant, $F (2.26) = 1.57$, $p = .209$), denoting similarities in familiarity across the 1–3 years group ($n = 12$, $M = 3.28$, $SD = 1.66$), 4–7 years group ($n = 118$, $M = 2.73$, $SD = 1.12$), and 8+ group ($n = 134$, $M = 2.91$, $SD = 1.21$). Overall, the one-way ANOVA results found that teaching students with LD in post-secondary education, academic ranks and the number of years of teaching experience did not have a significant impact on the faculty's familiarity with inclusive practices provided to students with LD in higher education.

Table 4: Differences in faculty members' demographics for inclusive practices

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Yes	122	2.7421	1.35487	.12266	2.4993	2.9849	1.00	5.00
No	142	2.9462	1.04491	.08769	2.7728	3.1195	1.00	5.00
Total	264	2.8519	1.20012	.07386	2.7064	2.9973	1.00	5.00
Professor	90	2.7107	1.37370	.14480	2.4230	2.9984	1.00	5.00
Associate Professor	98	2.9074	1.12853	.11400	2.6812	3.1337	1.00	5.00
Assistant Professor	75	2.9386	1.06595	.12309	2.6933	3.1838	1.00	5.00

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Lecturer	1	3.6071	.	.	.	.	3.61	3.61
Total	264	2.8519	1.20012	.07386	2.7064	2.9973	1.00	5.00
1-3 years	12	3.2887	1.66009	.47923	2.2339	4.3435	1.00	5.00
4-7 years	118	2.7334	1.12758	.10380	2.5278	2.9389	1.00	5.00
8+	134	2.9171	1.21149	.10466	2.7101	3.1241	1.00	5.00
Total	264	2.8519	1.20012	.07386	2.7064	2.9973	1.00	5.00

6. DISCUSSION

The findings of the current descriptive and quantitative survey study may reveal beneficial effects for the education of students with learning disabilities in Saudi higher education. The first finding of this study indicates that faculty members are inadequately familiar with inclusive practices appropriate for students with LD in Saudi universities. Secondly, the examination practices were the least familiar among the three types of inclusive practices given to students with LD in Saudi university education. In addition, faculty characteristics including teaching students with LD in post-secondary education, academic ranks and the number of years of teaching experience have no significant impact on their familiarity towards students with LD in Saudi university education.

To begin with, faculty members are inadequately familiar with inclusive practices given to Saudi post-secondary students with LD in university education. This suggests that it is essential to increase the adequacy of faculty members in terms of their familiarity with the inclusive practices provided to students with LD in higher education. Leyser *et al.* (2011) and Slee (2018) affirm that it is vital to increase the awareness and knowledge of faculty members to benefit students with LD in university education. However, previous studies indicate that faculty members who did not receive training had inadequate familiarity and knowledge about the inclusive practices for students with LD (Murray *et al.,* 2011). Similar findings were also observed in the study by Leyser and Greenberger (2008), that more than half of the faculty members had insufficient to minimal familiarity with the types of inclusive practices for students with learning disabilities.

The current research also suggests that Saudi faculty members must develop their knowledge of the three types of inclusive practices used to accommodate students with LD in higher education. This study also revealed that, among the three types of inclusive practices, faculty members were unfamiliar with the examination practices provided to students with LD. However, this is not consistent with several other studies that suggest that most faculty members understand and are familiar with the alternative examination practices provided to students with LD in university education (Khansa, 2015, Bourke *et al.,* 2000). Apart from examination practices, the current study's findings also suggest that Saudi faculty members are required to develop their knowledge and familiarity with other inclusive practices, as they

are inadequately familiar with inclusive instructional practices and inclusive classroom and assignment practices of students with LD in university education.

The present research findings agree with previous studies that the faculty's experiences teaching university education make insignificant differences to their familiarity with inclusive practices provided to students with LD. Notably, the results of Leyser and Greenberger (2008) indicated that the differences in the number of years of teaching were found to have no significant influence on faculty's familiarity with accommodating practices provided to university students with LD. However, *Leyser et al.* (2011) noticed a relationship between teaching in university education and faculty's attitudes toward providing inclusive practices for students with LD. It was clear that faculty members with less than five years of experience displayed more positive attitudes than faculty members with more experience (Leyser *et al.,* 2011, Abu-Hamour, 2013). Consequently, it can be assured that faculty's experiences of teaching university students with LD may change their attitudes towards inclusive practices for students with LD, but it does not influence their familiarity with inclusive practices.

The current findings are inconsistent with previous studies on how the faculty's experiences of teaching students with LD influence their familiarity with inclusive practices. The current study suggests that teaching university students with LD makes no significant difference to their familiarity with inclusive practices for students with LD. This finding contradicts the Leyser and Greenberger's (2008) study, which reported a significant increase in knowledge and influenced attitudes towards inclusive practices among faculty members who had previous experience teaching students with learning disabilities. Therefore, this study raises an interesting question for educators about whether they should consider previous teaching experiences when organising training sessions for faculty members to increase their familiarity with inclusive practices for university students with LD. Additionally, this current finding also suggests that having previous experiences of teaching students with LD does not necessarily make faculty members familiar with inclusive practices provided to them.

Lastly, the findings of this study also reveal that no differences were found in faculty's familiarity with inclusive practices for students with LD concerning their academic ranks. The results showed that being a professor, associate professor, assistant professor or lecturer makes no difference to their familiarity with inclusive practices provided to students with LD. The current findings may result from recent trends that help integrate students with LD in university education in Saudi Arabia (Aldabas, 2015). However, previous studies contradict these findings. For instance, studies conducted by Rao and Gartin (2003) as well as Leyser and Greenberger (2008) found a strong relationship between faculty members' ranks and their knowledge and attitudes towards inclusive practices provided to students with LD in university education (Rao & Gartin, 2003). In another study conducted by Abu-Hamour (2013), it was found that assistant professors possessed more knowledge about inclusive practices provided to university students with learning disabilities (Abu-Hamour, 2013).

7. CONCLUSION

To ensure the successful provision of inclusive practices to students with LD in university campuses, increasing the familiarity of faculty members with inclusive practices is the highest priority of university decision-makers to promote the inclusion of students with LD in university programmes and specialisations. Despite the present-day significance of faculty members› familiarity with inclusive practices, the current study's findings revealed the clear lack of

familiarity with inclusive practices, especially in examination practices, among the Saudi faculty members at Najran University. In conclusion, the study proposes that given the lack of faculty members› familiarity with inclusive practices, it becomes vital to implement training programmes aimed at enhancing the familiarity and capability of faculty members concerning the use of inclusive practices for students with LD at Saudi universities.

8. IMPLICATIONS

As indicated in the present study, there is an obvious requirement to improve Saudi faculty's familiarity with the inclusive practices provided to students with LD in Saudi universities. Faculty members and administrators can be adequately educated through in-service programmes (Bourke *et al.,* 2000). Training sessions would benefit faculty members by enhancing their knowledge of inclusive practices used in classrooms and assignments, examinations and instructional practices (Hindes & Mather, 2007). The current findings indicate that faculty members are unfamiliar with examination practices. Furthermore, as more students with LD are pursuing a university education, faculty members need to understand their requirements and traits better and increase their knowledge of the inclusive practices used in examinations. Providing ongoing workshops and training with actual models of exams specifically designed for students with LD may help faculty members draw an ideal picture of instructional and examination accommodations given to students with LD (Khouri *et al.,* 2019).

9. LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH

Although the current study examined the familiarity of faculty members with inclusive practices provided to university students with LD in Saudi Arabia, the findings mostly corroborate the results of previous studies conducted on faculty members› familiarity with inclusive practices in universities globally. These findings reveal a profound requirement for better support and practices granted by Saudi laws, despite the legislation mandating appropriate accommodations to university students with LD in Saudi universities.

Institutions providing university education must do more to improve the provision of accommodations to students with LD. Moreover, this research proposes the requirement for faculty members to assess their willingness to support students with LD in Saudi Arabia, a fact that needs to be addressed in future research. In addition, it is supposed that university students without learning disabilities may also reveal similar findings concerning their knowledge of inclusive practices compared to faculty members. This supposition is another opportunity for future research.

An explicit limitation of the present study is the relatively small sample of faculty members that participated in the survey. Although the current research incorporated a demographic approach, when comparing faculty›s familiarity with inclusive practices across their academic ranks, only one lecturer participated in the survey, making it difficult to compare faculty members› ranks. Additionally, since the study investigated the faculty members› responses of only one public Saudi university, it represents the faculty members› familiarity of only a specific area in Saudi Arabia and does not amount to conclusive evidence. It should be noted that the current results may not be generalised to faculty members working in different regional universities across Saudi Arabia.

10. RECOMMENDATIONS FOR PRACTICES

The current findings revealed inadequate familiarity of Saudi faculty members with inclusive practices, especially examination practices. Therefore, providing the faculty members with practical tools would support them when dealing with university students with LD. It is essential to emphasise the importance of incorporating the principles of universal design (UD) to teach university students with LD (Burgstahler, 2008). Moreover, the engagement of UD in the education of students with learning disabilities in universities is beneficial because it is equitable to use, simple and intuitive, provides flexibility in use, perceptible information, tolerance for error, low physical effort and appropriate size and space for use (Burgstahler & Cory, 2010).

Another recommendation in favour of providing inclusive practices for university students with LD is increasing the awareness of learning disabilities within the university campus and adopting inclusive learning practices. Experts must create a campaign targeting the university experiences of students with learning disabilities and share their experiences with faculty members regardless of their position, titles and abilities.

11. ACKNOWLEDGEMENTS

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APPENDIX A

The study questionnaire

Participants' characteristics						
Gender	Male	Female				
Teaching Experience (years)	1–3	4–7	8+			
Previous teaching of (students with LD)	Yes	No				
Academic Rank	professor	associate professor	assistant professor	lecturer		
Instructional practices						
Clearly define course requirements and announce exam dates and assignments	very familiar	familiar	inadequately familiar	unfamiliar	very unfamiliar	
Provide printed materials ahead of time to allow students enough time to read and understand the course content						
Use multimedia methods to present class materials to address diversity in learning styles and strengths (eg auditory, visual, kinesthetic)						
Provide important information by oral and written formulas						
Set goals and review and summarize previous lectures periodically						
Use more than one method to clarify the information						
Read aloud what I'm writing on the board						
Use short, uncomplicated instructions and repeat them more than once						
Allow sufficient time for students to provide directions and necessary information						
Use written commentary videos						
Submit study guides or review papers						
Design distance learning materials with accessibility in mind						
Classroom and assignment practices						
Help the student find effective peer bloggers for lectures in class						
Provide the student with a copy of the lecture notes or the lecture outline						
Allow the student to record the lecture.						
Allow the student extra time to complete assignments in class, especially written assignments						
Provide notes and help students plan the workflow for assignments.						
Offer assistance in correcting written work.						

Examination practices				
Allow students with learning disabilities to have an extension in test time.				
Perform tests in a low-dispersion room				
Use of assistive reader, writer, or word processor technology in exams				
Allow oral tests				
Use assistive technology to check grammar and spelling for writing tests.				
Use a calculator for the tests.				