Knowledge and Implementation of Evidence-Based Practices by Teachers of Students with Learning Disabilities in Saudi Arabia

Raghad Almatrafi † and Hawazen Alasiri 2††
Umm Al-Qura University, College of Education, Saudi Arabia

Summary
Evidence-based practices (EBPs) are essential teaching strategies for a high-quality teaching experience. The purpose of the study was to identify the extent to which teachers of learning disabilities students (LDSs) implement EBPs in Saudi Arabia and to reveal the differences among those teachers implementing such practices. The study used a questionnaire to assess the influences of teaching experience and exposure to training courses on the knowledge and implementation of EBPs among 65 LDS teachers. The analysis of the survey revealed no statistically significant differences in the knowledge of EBPs and their sources at the 0.05 level among the LDS teachers who implemented EBPs. Although there were no statistically significant differences in teaching experience, the number of training courses showed statistically significant differences at the 0.05 level among the LDS teachers who implemented EBPs. The results also revealed a high level of criteria selection among the LDS teachers when implementing EBP (M = 2.46). Overall, the findings indicated no statistically significant correlation between LSD teachers’ knowledge and their EBP implementation levels. The findings suggest that more intensive training courses are needed to inform teachers about what EBPs are appropriate for their students and to focus on how to apply these practices correctly.

Keywords: Evidence-Based Practices (EBP), Significance, Knowledge & Implementation, Learning Disabilities

1. Introduction
Education is the first and most fundamental building block for the development and progress of any community. Countries are experiencing tremendous progress due to their support of teachers in keeping pace with modern trends and developing the educational process. Teachers are the cornerstone on which the development of the educational process is based, as their attitudes, experiences, and skills are clearly reflected in the educational outcomes (Al-Zarea and Al-Yafe’i, 2020). Several studies emphasize the importance of the teacher’s role in the educational process due to its significant impact on the development of students’ performance, with or without disabilities.

Evidence-based practices (EBPs) in the field of education are among the recent trends that have received great attention in developed countries. Previously, the term “evidence-based practices” used to be only related to the medical profession, and its purpose was to improve the patient’s condition by considering the empirical evidence, the experience of the health practitioner, and the patient’s preferences for treatment. Therefore, clinicians must consider evidence to reach an effective decision in the process of therapy (Diery et al., 2020). However, EBPs have acquired new significance in the field of teaching as a professional field (Diery et al., 2020). They have become one of the most influential policies in the field of education, especially for people with disabilities. (Cook and Cook, 2016).

Some teachers prefer to use ineffective methods, as they have false beliefs that prevent the use of these practices (Unluol, 2019), along with their preferences for informal sources rather than being based on evidence when defining traditional educational methods (Al-Helwan, 2020). Several educators also believe that empirical research does not provide practical solutions and that these EBPs do not provide meaningful results (Unluol, 2019). Cook and Cook (2013) mentioned that some teachers tend to permanently use practices that do not have any positive impact, or that the impact is too focused on students’ performance (Al-Hussein, 2017). Thus, there is a gap between teachers’ perspectives and EBPs, the reason for which may be due to insufficient attention paid to teachers’ perceptions of EBPs, which must be accounted for as a first step in the development of research on EBPs in the teaching profession (Diery et al., 2020). Due to the insufficient studies that investigate teachers’ perceptions in general regarding EBPs (Diery et al., 2020), the current study aims to study the extent to which LDS teachers know and implement EBPs, and the obstacles they may face in this endeavour.

2. Literature review
Theoretical framework
Undoubtedly, the role of general education teachers, and LDS teachers, in particular, is important in the
progress and success of the education process, as they can generate and reach new knowledge using scientifically proven teaching methods (Al-Diyat and Al-Hadidi, 2018). LDS teachers provide academic and technical services through which LD students can keep pace with their general education peers (Ministry of Education, 2009).

The work mechanism of LDS teachers is based on significant criteria that must be referred to. According to the Education and Training Evaluation Authority and the Ministry of Education (2020), LDS teachers must know how to deal with LD students by having an adequate understanding of the material in which difficulties arise, using methods to encourage positive ideas in students regarding their ability to learn, and having a strong knowledge of the research on effective teaching on how to teach LD students. Teachers must also be familiar with the teaching methods used with LD students, which are concerned with reading, writing, and mathematics, and use a wide range of methods in providing curriculum content to activate student participation. Teachers must also apply research-backed teaching and learning strategies and adapt their teaching methods to meet group and individual instructions. The standards of the teachers’ work mechanism also stipulate that they can design integrated learning programs by linking the content to appropriate teaching methods and designing clear educational plans so that they can implement them. Furthermore, teachers can design individual educational plans commensurate with the content of the curriculum and the needs of the students.

According to Awad (2018), LDS teachers should cooperate from the beginning of the school year with the school’s specialized team in developing a plan after conducting an initial survey of those expected to have learning disabilities. They should also participate in the diagnosis and evaluation process to determine the learning disabilities of students and take part in studies, research, conferences, seminars, and courses in their field of specialization. They must exchange advice with the general classroom teacher on matters related to LD students, such as teaching methods, methods of dealing with students, how to conduct exams, and follow-up on the progress of students. It is important to prepare and train teachers to be professionals capable of improving student outcomes by understanding and selecting appropriate EBPs (Scheeler et al., 2016).

### Evidence-Based Practices in Education

Teachers face many challenges that affect how they teach and what they teach, but some factors play a role in motivating and teaching students, and teachers need sufficient experience to implement EBPs (Fortson, 2018). Hudson et al. (2016) highlighted that EBPs have become one of the most influential policies in the field of special education (Cook and Cook, 2016). EBPs can be defined as practices supported by multiple and high-quality studies, which are used in inferable research designs, and show positive effects on student results (Cook and Cook, 2016). Al-Zarea and Al-Yafei (2020) also emphasized that EBPs are those strategies that have proven their effectiveness by high-quality studies, are based on scientific evidence and are expressed through research tools. Another definition by Burchard et al. (2017) describes EBPs as educational practices that have been shown to work well through repeated studies.

In a special issue of the Journal of Exceptional Children, Gersten et al. (2005) suggested several standards that must be met in EBPs. They were adopted by Ecker in his synthesis article on the most reliable and supportive online resources that help teachers to choose EBPs, and Al-Husseini in his study “quality indicators of research methods in special education: evidence-based practices” (Ecker, 2016; Al-Hussaini, 2005, 2020), which included at least four studies with the minimum quality indicators, or two studies in which the quality indicators were met and supported a particular educational practice and with a confidence interval of 20% and an effect size greater than zero. A field test of the effects system must be conducted by specialists during the review of grant applications, manuscripts, or research proposals. Revisions based on field testing must also be made in research design and research proposals. It is also necessary to conduct a firm and sober field test on the impact of quality indicators on EBPs and to consider the issue of integrating results from different types of research, such as qualitative research, relational research, and single-case design, taking into account the fact that funding agencies or journals in special education have to approve this research. Based on a review of previously published studies, the researcher observed a lack of Arabic studies that addressed EBPs in special education and LDs in particular. Only two studies were found. Al-Zarea and Al-Yafei (2020): “Extent of implementing evidence-based practices in the autism program by teachers of ADS students in Jeddah” used the descriptive survey method to determine how far teachers of ASD students...
implemented EBPs. The researcher used a questionnaire to collect data, which was distributed to 300 teachers and yielded several results. The responses of the sample participants regarding the extent of their implementation of EBPs in the autism program varied between “always” and “sometimes,” with arithmetic mean for overall performance (4.00 out of 5). The researcher found that the practices referred to were often applied in performance. The most prominent practices applied were reinforcement, task analysis, modelling, and finally prompting. There were statistically significant differences in the response of the research sample to the performance that could be attributed to the educational qualification in favour of the MA holders in special education, whereas there were no statistically significant differences attributed to gender, the number of years of experience, or the educational stage variables.

Diery et al. (2020) was the most recent foreign study that addressed teachers’ attitudes toward EBPs, as well as their perceived challenges and implementation, and investigated the extent to which personal factors were related to the use of evidence. This exploratory study of 58 higher education teachers used an online survey to reveal that teachers generally have a positive attitude toward EBP and use evidence regularly, both for individual learning and teaching purposes. The study revealed that teachers with experience in research and teaching have a more positive attitude toward EBP and higher uses of evidence. By comparison, teachers with less experience face more challenges.

Abramczyk and Jurkowski’s (2020) examined teachers’ knowledge and beliefs about cooperative learning as an EBP, and how they use it in the classroom with the aim of describing the status quo of cooperative education in Poland. A total of 1495 language teachers in Poland were selected to respond to a questionnaire that included a few questions about their knowledge of principles and methods in cooperative education, how they evaluate their knowledge, and whether they would like to know more about cooperative education. The results indicated that the teachers were aware of the principles of cooperative education, but they knew only a few ways to implement them. Although their beliefs about cooperative education were positive, they did not use cooperative education frequently. Teachers reported that they wanted to learn more about cooperative learning and use it consistently in the classroom and needed support with examples of lessons and learning materials.

Walker (2018) examined the selection of EBPs in teacher education programs in rural schools. The aim was to determine first-year teachers’ perceptions of EBPs. The study was conducted among 35 teachers from 36 rural public schools in south-central Missouri who used 43 EBPs and more than 50 new instructional strategies. The participants were required to identify the strengths and weaknesses of EBPs in their preparation programs by responding to a questionnaire that included open-ended questions and specific questions about EBPs. Participants believed that four main areas needed to be covered more in educational programs: creating and using assessments, classroom management strategies, engaging and motivating hesitant students, and time management techniques. The results also indicated that the participants wanted to spend more time in fieldwork, as they believed this to be an important part of the training program.

Hockaman et al. (2018) studied the use of EBP by special education teacher candidates and their impact on student learning. They used a single-case design to examine the ability of 19 teacher candidates to select and faithfully teach appropriate EBPs, besides their ability to evaluate the effectiveness of the EBPs they used with their students. The teachers chose 40 pre-K to Grade 5 students who were enrolled in an individual educational program. The results showed that the teacher candidates were able to accurately choose and implement EBPs that had good results and effective progress on their students.

Al-Asmari (2018) identified the impact of the CSR strategy on developing reading comprehension among middle school students in the Aseer region and developing reading comprehension skills using the CSR strategy. The study used the experimental method and distributed the sample to two groups (30 students in the experimental group and 30 students in the control group). The results revealed a positive impact of CSR strategies on developing reading comprehension in general.

Al-Hussein (2017), “Evidence-based practices in special education, the best way to teach students with disabilities,” was the first Arabic study in this field. Its purpose was to identify the concept and importance of EBPs, outline the standards used to judge them, clarify how to choose and implement them, and identify the obstacles that hinder their implementation. The study then presented some EBPs and made several recommendations related to EBPs in special education in the Arab world.
Herron’s (2017) study, “Using evidence-based interventions in classrooms for students with disabilities,” was conducted in the USA and aimed to identify the evidence-based teaching practices used by teachers, along with the reasons why some teachers do not use existing EBPs. The study used a longitudinal follow-up approach, and the study population consisted of 30 randomly chosen teachers. Various study tools were employed, and 1868 lessons were video recorded, including lessons of teachers of students with disabilities over two years (from 2009 to the end of the 2011 school year). The author presented teachers with six of the most effective EBPs and measured whether and how frequently they used them. Interviews were conducted with a sample of 18 general education teachers teaching SWDs in their classrooms across the country via various means, such as Skype and Google Hangout, or directly to find out whether the six EBPs were effective in improving the academic achievement of SWDs in the classroom, the frequency of their use of these practices, and what hindered their use. The results indicated that general education teachers used only three of the six EBPs (90% of the teachers used direct teaching, followed by graphic organizers, which were used by 27% of the teachers, while peer education was used by 10% of the teachers). By contrast, all six highly effective EBPs were used by the teachers interviewed, with explicit and peer-to-peer teaching used by 100%, followed by CSR strategies by 94%, investigation-based education by 83%, and graphic organizers by 77% of the teachers interviewed.

Al-Husseini (2016) surveyed 333 teachers in public and private education. The study measured how familiar teachers were with evidence-based teaching practices (EBTTPs), how much they were used in schools, and what relationships existed between them. The results indicated that the participants generally reported average knowledge and use of teaching practices in teaching students, but they reported less use of self- or peer-mediated activities. The respondents in the questionnaire were more familiar with these practices than the other participants, but there was no significant relationship between specialization, level of education, number of years of experience in the teaching field, and general knowledge of EBPs. However, the results indicated a strong positive relationship between knowledge of practices and their use in education.

Ecker’s (2016) analytical study examined the most reliable websites for determining EBPs for teachers and students. The author selected and examined 47 websites, 16 of which were classified as potentially reliable; of the 16, only 13 sites catered to a variety of needs. Of the 13 sites, Best Evidence Encyclopedia ranked first, since it displays practices of the highest quality.

A theoretical study by Ginevra et al. (2015) described the importance of evidence-based reforms for students with severe intellectual disabilities (SIDs) and discussed advances in defining EBPs for these students, including a summary of activities (or interventions) known as EBPs for this category available in the specialized literature and online resources. The study concluded that high-quality empirical research is an effective way to learn which practices are most effective and lead to improvements in student outcomes. Although the standards for EBP differ, they all follow the same basic approach in defining studies of acceptable quality and in defining the status quo of EBPs. EBPs for students with SIDs in reading, math, science, and academic fields, in general, can be found in specialized literature, but it has been found that teachers rarely turn to them. Fortunately, several websites have introduced EBPs based on studies conducted on students with SID, which teachers consider a main source of information that helps them improve education in the classroom, unlike the specialized literature.

Roberts et al. (2009) conducted a statistical descriptive study aimed at describing the characteristics of evidence-based teaching strategies for students who had difficulty reading at the late primary, middle, and secondary levels. Five important areas in improving reading among grade students were presented: (i) word recognition, (ii) fluency, (iii) vocabulary, (iv) comprehension, and (v) motivation to read. The results revealed that word study may be important for students with learning difficulties, but its immediate effect on reading comprehension can be insignificant and difficult to determine statistically. There is no doubt that word study is important in improving reading comprehension, but it is rarely sufficient on its own. Teaching fluency and practice may be more effective when combined with teaching word reading and comprehension skills, and the direct teaching of vocabulary may have little effect on vocabulary development. Students with LDs may need guidance and support to master and apply strategies on their own and to know which ones to use, for what purpose, and when. Moreover, finding ways to motivate and attract students to read is one of the most important features of teaching students with LDs, especially with the increasing difficulty of reading materials and the classroom environment, which in turn reduces reading motivation.
The researcher acknowledges that the current study is quite similar to the study by Al Zarea and Al Yafe’i (2020) in terms of the tools used, as both used the questionnaire as a study tool. However, this study differs in its methods and sample. Al Zarea and Al Yafe’i (2020) studied teachers of students with Autism Spectrum Disorder (ASD), but the current study studied LDS teachers. The studies of Al-Hussein and Jennifer et al. (2015) addressed the topic in a theoretical rather than a practical way. Furthermore, despite the abundance of foreign studies, most of them are theoretical studies or studied teachers in general; examples are the studies by Derry et al. (2020), Abramchik and Gorkovsky (2020), Walker (2018), Hockman et al. (2018), Heron (2017), and Al-Hussein (2016). The researcher also found a dearth of studies that specifically addressed the field of learning disabilities; some of the available were outdated (between 2009 and 2015), such as a study by Roberts et al. (2009), which conclusively analyzed several important articles in the field of reading. As far as the researcher knows, the current study is one of the first studies in the Arab world in the field of LDs to measure the extent to which LDS teachers implement EBPs.

Thus, the study addressed the main question: What is the level of knowledge and implementation of EBPs among LDS teachers? The following sub-questions arise from the main question:
1. To what extent do years of experience and training courses affect LDS teachers’ knowledge of EBPs and their sources?
2. To what extent do years of experience and training courses influence LDS teachers’ implementation of EBPs?
3. What is the correlation between LDS teachers’ knowledge and the level of their implementation of EBPs?
4. What key criteria do LDS teachers select when implementing EBPs?

4. Methodology

The study followed the descriptive-analytical approach, which analyzes a studied phenomenon, links the studied phenomenon with the variables, and then analyzes the variable (BTS Academy, 2020). A closed questionnaire tool was used to access specific information in the form of numbers, which were converted into outputs that could be interpreted (Al-Mahmoudi, 2019).

4.1 Study population and sample

The study population consisted of 181 LDS teachers in the Makkah Al-Mukarramah region at different academic levels (26 teachers in the city of Makkah Al-Mukarramah, 102 in the city of Jeddah, and 53 in the city of Taif, according to the statistics of the Education Department in Makkah Al-Mukarramah Region, Ministry of Education). The questionnaire was distributed electronically to a sample of 63 LDS teachers (17 teachers from the city of Makkah Al-Mukarramah, 27 from the city of Jeddah, and 19 teachers from the city of Taif).

4.2 Data collection tools

To achieve the objectives of the study and answer its questions, the researcher developed a closed questionnaire electronically. In its final form, the tool consisted of 24 phrases across three domains: (i) LDS teachers’ knowledge of EBPs and their sources (9 phrases), (ii) LDS teachers’ implementation of EBPs (9 phrases), and (iii) considerations taken when LDS teachers decide to implement EBPs (9 phrases). The independent variables were years of experience and training courses. The paired Likert scale was used in the first and second domains, and it included “yes”/”no” responses for the teachers, whereas the 3-point Likert scale employed always, often, rarely responses for the third domain. The construction process of the tool was subjected to the following stages:

4.3 Statistical methods

To achieve the objectives of the study and analyze the collected data, a variety of statistical methods were applied using the Statistical Package for Social Sciences (SPSS) after the data were encoded and keyed into the computer. The statistical methods used in this study are as follows:
1. To calculate the psychometric properties, the correlation coefficient (Pearson) and Cronbach’s alpha and the split-half methods were employed using Spearman’s equation.
2. To answer the study’s first question, descriptive statistics, including frequencies, means, standard deviations, and relative weight, were used.
3. To verify the validity of the study hypotheses, the t-test and the Kruskal–Wallis test were applied.

5. Results and Discussion

The study results revealed a medium level for LDS teachers’ knowledge and implementation of EBPs (mean = 1.54); implementation of EBPs ranked first (mean = 1.548, standard deviation = 0.149), followed by the knowledge of EBPs (mean = 1.838, standard deviation = 0.144).

Based on the perspective of the teachers of LD students, EBP knowledge fell within the range of the low level (mean = 1.26, standard deviation = 0.23). The questionnaire analysis revealed that Item 1 “I am aware of the term “evidence-based practices” scored the highest mean (mean = 1.26, standard deviation = 0.49), which indicates a medium level of use from the point of view of the LDs teachers followed by Item 3 “I am aware of the most prominent evidence-based practices in the academic field for people with learning disabilities” (mean = 1.49, standard deviation = 0.50), which indicates a medium level of use. Item 5, “I know the Best Evidence Encyclopedia website,” scored the lowest use level (mean = 1.06, standard deviation = 0.25), which indicates a low level of use from the point of view of LDS teachers.

Teachers did not seem to use the Best Evidence Encyclopedia website, although Eker (2016) confirmed that the Best Evidence Encyclopedia website offered high-quality practices. The website was ranked first among 47 sites. The low level of use of this highly ranked website among the teachers in the current study may be due to their insufficient knowledge of online sources, particularly those that use a foreign language.

On the other hand, teachers of LD students believed that the level of EBP implementation was high (mean = 1.84, standard deviation = 0.14). Phrases 3, 8, and 9 had the highest scores. Phrase 3 “I use the repeated reading strategy” (mean = 1.98, standard deviation = 0.13) exhibited a high use level, Phrase 8 “I use direct teaching” (mean = 1.98, standard deviation = 0.13) also showed a high use level, and Phrase 9 “I use assistive technology” (mean = 1.98, standard deviation = 0.13) had a high degree of use among LDS teachers. Phrase 5, “I use self-regulation strategies,” scored the lowest use mean (mean = 1.95, standard deviation = 0.50), which indicates a medium degree of use among the LDS teachers.

The researcher argues that LDS teachers used three practices to a large extent, including direct teaching, which is always implemented by general education teachers, according to the study by Heron (2017). Repeated reading and assistive technology are among the easy strategies, so teachers use them more. To identify the differences in LDS teachers’ knowledge of EBPs that could be attributed to their experience (less than five years, 5–10 years, more than 10 years), the researcher used non-laboratory tests, and due to the large discrepancy in the experience categories, the Kruskal–Wallis test was applied which showed that there were no statistically significant differences at the 0.05 level in the LDS teachers’ knowledge of EBPs, as revealed by the total score and all questionnaire phrases related to the experience variable. This indicates that the experience variable did not affect LDS teachers’ implementation of EBPs.

To assess whether training courses (no courses, 1 course, 2 to 3 courses, more than 3 courses) resulted in differences in LDS teachers’ knowledge of EBPs, the researcher used non-laboratory tests. Given the presence of a large discrepancy in the training courses, the Kruskal–Wallis test was used.

The findings showed that there were statistically significant differences at the 0.01 and 0.05 levels in LDS teachers’ knowledge of EBPs, as demonstrated by the total scores of most of the questionnaire phrases related to the training courses in favour of the higher number of courses. This indicates an effect of the training courses on the teachers’ knowledge, except regarding Phrases 1, 3, and 4. However, there were no statistically significant differences at the 0.05 level in the LDS teachers’ knowledge of EBPs in these phrases.

Overall, the results of the current study are consistent with the findings of Al-Husseini (2016), who showed that there were no differences between the number of years of experience and the LDS teachers’ knowledge of EBPs. Abramchik and Gorkovsky (2020) showed that teachers have knowledge of EBPs but do not know how to apply them. Furthermore, Walker (2018) stated that teachers need to know EBPs in terms of time management, classroom management, and student motivation. The findings showed differences in the level of LDS teachers’ knowledge of EBPs in favour of the higher number of courses, which suggests that the courses had a significant impact on the knowledge of LDS teachers’ knowledge of EBPs. This may
be due to the fact that such courses carry out practicums and workshops for these practices.

There were no statistically significant differences at the 0.05 level in LDS teachers’ implementation of EBPs, as shown in the total score and most of the questionnaire phrases related to the experience variable, which indicates that the experience had no effect on the LDS teachers’ implementation of EBPs except for Phrase 1 “I use the CSR strategy,” which showed statistically significant differences at the 0.05 level. To determine the direction of the differences in Phrase 1, the Mann–Whitney test was used to compare the years of experience.

In addition, there were statistically significant differences between the group of (< 5 years) and the other groups in favour of the former, which means that members of that category use EBPs more.

To determine the differences in the LDS teachers’ implementation of EBPs resulting from training courses (no courses, 1 course, 2 to 3 courses, more than 3 courses), the researcher used non-laboratory tests. However, given the discrepancy in training courses, the Kruskal–Wallis test was used. According to the data analysis, there were statistically significant differences at the 0.05 level in LDS teachers’ implementation of EBPs, as revealed by the total score and Phrases 8 and 9 of the questionnaire, in favour of the higher number of training courses. This observation suggests that the number of training courses had an effect on LDS teachers’ implementation of EBPs. However, the remaining phrases did not show statistically significant differences in relation to training courses.

The observed variations in teachers’ use of EBPs were consistent with Heron’s (2017) results. Further, Hockman’s (2018) explained that teachers in his study were able to apply EBPs effectively, a conclusion that is congruent with the findings of the current study, as no significant differences due to the number of years of experience were observed. In other words, all teachers were able to implement their practices effectively. Al-Zarea and Al-Yafi’i (2020) agreed with the current study that there are no differences in implementation due to the years of experience. However, the training course variable in the current study created significant differences in favour of higher numbers of courses, and the researcher attributed the reason to the fact that the training courses had a positive impact on the LDS teachers’ implementation of EBPs.

To verify whether there was a correlation between LDS teachers’ knowledge and their implementation of EBPs, Pearson’s correlation coefficients were calculated between the scores of the whole sample on the first domain “LDS teachers’ knowledge” and their scores on the domain of their implementation of the EBPs. The results showed that there was no statistically significant correlation between LDS teachers’ knowledge and the level of their implementation of EBPs. The correlation coefficient was 0.203 from the point of view of the teachers, which is not statistically significant at the 0.05 level.

Al-Hussein (2016) did not approve of that conclusion; rather, his study revealed a strong positive relationship between knowledge and implementation. To identify what key criteria LDS teachers select when implementing EBP, the researcher calculated frequencies, percentages, arithmetic means, standard deviations, and ranks for the results of the most important criteria selected when LDS teachers implemented EBPs. She applied the 3-point Likert scale (ALWAYS, OFTEN, RARELY), established the order of scores 1, 2, or 3, and split the period between 1–3 into three levels (interval length = 0.67). In other words, levels 1 to 1.66 = low, 1.67 to 2.23 = medium, and 2.33 to 3.00 = high. The analysis showed a high level of use among LDS teachers in selecting EBPs for the purpose of implementation (mean = 2.46, standard deviation = 0.39). The table also reveals that Phrase 5, “I adapt the practice to suit the student’s capabilities,” scored the highest mean of use (mean = 2.603, standard deviation = 0.555), which means a high degree of use from the point of view of teachers. Phrase 4, “I select the practice based on the material cost,” achieved the lowest mean of use (mean = 2.19, standard deviation = 0.78).

The same finding was reported by Ecker and Unluol (Ecker, 2016; Unluol, 2019). The researcher posits that student outcomes are the main reason for the implementation of the practices. Thus, EBPs must first be selected based on the student’s capabilities, before considering the educational environment and the students’ tendencies, as indicated by the findings of the current study.
6. Conclusions and Recommendations

The findings of this study are expected to inform decision-makers in the Ministry of Education and those working in the field to develop Arabic online resources that help teachers acquire their EBPs easily. The findings suggest that intensive training courses may help teachers focus on how to apply these practices correctly. Most books and studies do not accurately review the methods of applying EBPs. The study findings proved that the differences in the implementation of EBPs were heavily influenced by exposure to more courses. I recommended that future studies should employ direct observations and interviews with the participants to assess the ways they implement EBPs, which more accurately identify problematic areas with no restriction to formulated or specific phrases, a goal that could not be achieved in the current study due to the COVID-19 pandemic. Finally, more research on EBP implementation in detail is recommended.

References

1Raghad Almatrafi has a bachelor’s degree in learning disabilities from the Department of Special Education, College of Education, Umm Al-Qura University, Saudi Arabia. She obtained a master’s degree in Learning Disabilities from Umm Al-Qura University. Her research interests include the field of learning disabilities and their teaching methods. Her work also included early detection of learning disabilities and the quality of education for them.

2Hawazen Alasiri has a bachelor’s degree in Special Education Intellectual Disabilities from the Department of Special Education, King Saud University, Saudi Arabia. She received a master’s degree in special education from the Graduate School of Education, Indiana State University in the United States and a PhD in Education in Learning Disabilities from Western Michigan University in the United States. Universal design for learning, inclusive education, response to intervention, and the teaching and assessment of students with disabilities are her areas of research interest. Hawazen promises to make a positive impact on the special education field and on people with special needs and their families and to work to improve available services.