



RELATIONSHIP BETWEEN GENERAL EDUCATORS' BELIEFS AND TEACHING PERFORMANCE IN TEACHING STUDENTS WITH LEARNING DIFFICULTIES IN INTERMEDIATE SCHOOLS IN SAUDI ARABIA

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ABSTRACT

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Although Saudi Arabia has committed to inclusive education for students with learning difficulties (LD), limited research has focused on general educators' beliefs and their teaching performance. Moreover, the best implementation of inclusion is not only placement of students with LD in general education classroom, but first and foremost is focusing on educators' beliefs towards having LD students in their classroom in order to improve those practices. Thus, all educators should seek the belief that all students even with disabilities belong to regular classrooms. This investigation examines the relationship between teachers' beliefs and their teaching performance along with the moderating effect of gender on this relationship. A sample of 401 general educators from intermediate schools in Riyadh, Saudi Arabia was included in this study. This quantitative research project used a questionnaire to gather information on the educators' demographic information, beliefs and teaching performance. By using structural equation modelling (SEM) via AMOS, all valid 401 questionnaires were analyzed. The findings revealed that educators' beliefs were correlated positively with their teaching performance. However, the results showed that gender did not moderate the relationship between educators' beliefs and their teaching performance. The findings of this study may offer perception for stakeholders in the Ministry of Education in Saudi Arabia to rethink ways to develop teaching performance of teachers in inclusive practices. The recommendations from the study and the suggestions for further studies are discussed. This limited research about educators' practices has created the need for a thorough investigation of the factors that predict their teaching performance.

Contribution/Originality: This study is one of very few studies which have investigated relationship between general educators' beliefs and teaching performance in Saudi Arabia. The finding of this study has the potential positive reflection on educators' teaching performance of teaching students with LD hence enhancing and improving inclusive practices in Saudi Arabia.

1. INTRODUCTION

In the Kingdom of Saudi Arabia (KSA), the special education field was extensively developed between 1987 and 2000. These developments included provision of services for students with learning difficulties (LD) in regular schools. Al-Mousa (2010) confirmed that the shift of the educational placement of LD students from special and separate schools to regular schools happened between 1990 and 2000. Specifically, Abunayyan (2019) added that educational services for LD students in general schools were first provided between 1997 and 1998. Hence, the Saudi government has put forward its best efforts in fostering a productive experience for students facing new kinds of disabilities that were not previously known. Nevertheless, Aldabas (2015) has reported that the specific educational services required by students with LD are considered to be some of the last to be offered in the special education field in KSA due to the limited knowledge about LD. To date, LD students comprise the largest percentage of students with special needs in the KSA (Battal, 2016).

Given these developments, the Ministry of Education (MOE) in the KSA has started to pay more attention to the LD field (in addition to the educationists who have already devoted their attention to this issue), and especially to how significant it is to realize the needs of providing specialized education services (Alnaim, 2015). Hence, officials and educationists are keen to ensure that general schools can be the seat for servicing students with LD because they are the most suitable and Least Restrictive Environment (LRE) for these students to learn (Abunayyan, 2019). Moreover, it is worth mentioning that the building of an inclusive programme is one of the items on the educational agenda for Saudi Vision 2030.

1.1. Inclusion Practices

Worldwide, there has been a growing focus on improving the educational practices of inclusive environments (Avramidis & Norwich, 2010). Not enough is known about how educators' beliefs predict teaching performance and how beliefs and teaching performance interact with each other to improve inclusive practices. Chiner and Cardona (2013) have suggested that educators' beliefs about inclusion should be considered as one of the main concerns in educational studies. In the KSA, the current research on inclusive practices that focuses on general educators' practices is still lacking in this respect. Dare, Nowicki, and Felimban (2017) along with Alquraini (2011) have confirmed that there have been few studies examining the educators' perspectives on inclusion in the KSA. Recently, Alasim and Paul (2019) and Alharbi and Madhesh (2018) reported that there is a lack of understanding of inclusion practices in the KSA. Moreover, Alnaim (2015) has stated that since the concept of LD still raises various questions in the KSA, it is important to investigate educators' perceptions about LD.

Indeed, when reviewing the literature on the benefits of inclusion, it should be noted that students with LD benefit from inclusion in the Least Restrictive Environment (LRE). Additionally, in such an environment, they will have the opportunity to interact with non-disabled classmates in both academic and non-academic activities during the school day, with both benefitting from such inclusion (Al-Mousa, 2010; Rakap & Louise, 2010). With this intention, the special and general education systems in the KSA should take action to collaborate for successful inclusion by including all members who work with disabled students, especially general educators, in initiatives aimed at supporting the students who can benefit from such changes (Aldabas, 2015).

1.2. General Educators Beliefs

As discussed above, the benefits of inclusion will not be achieved unless general educators hold a positive attitude towards the inclusion of those students. In other words, the success or failure of applying the educational practices of inclusion depends on the general educators' beliefs about inclusion (Avramidis & Norwich, 2010; Monsen, Ewing, & Kwoka, 2013; Tsakiridou & Polyzopoulou, 2014). Moreover, several studies have shown that both the professional development of educators and their performances in the classroom are largely affected by their beliefs and attitudes (Abunayyan & Aljaloud, 2016; Alharthi & Evans, 2017; Avramidis & Norwich, 2010; Cornoldi,

Capodiecì, Colomer Diago, Miranda, & Shepherd, 2018; Jones, 2009; Jordan, Schwartz, & McGhie-Richmond, 2009). In other words, previous studies have supposed that general educators' beliefs tend to be a barrier to successful inclusive practices (Al-Ahmadi, 2009; Aldabas, 2015; Alqahtani, 2017; Alquraini, 2011; Leatherman & Niemeyer, 2005; MacFarlane & Woolfson, 2013). Moreover, the negative beliefs that general educators hold towards students with LD can limit the effectiveness of educational services (Abunayyan & Aljaloud, 2016).

Within this context, it has been argued that general educators have the most significant role in empowering LD students to gain the full benefits from their learning in regular classrooms. Alharbi and Madhesh (2018) confirmed that the effectiveness of inclusion is identified through the beliefs and behavior of the community surrounding the schools and the whole society. Therefore, general educators have to realize that they play a crucial part in facilitating successful learning for students with special needs through inclusive practices (Alfaro, Kupczynski, & Mundy, 2015; Lomax & Schumacker, 2016). Indeed, it is critical to understand general educators' beliefs about the inclusion of LD students, and whether these beliefs predicate their teaching performance, which ultimately affects the successful implementation of inclusive practices.

1.3. Aims of the Present Study

The purpose of this study is to investigate the possible relationship between teachers' beliefs about inclusion of students with LD and their teaching performance in inclusive classroom in intermediate schools. This study also aims to analyze the moderation effect of gender in this specific relationship. This investigation can help researchers in the LD field to improve professional development for better practices. Accordingly, this study on educators' beliefs seeks to address the following research hypotheses:

Hypothesis one (H1): There is a significant relationship between general educators' beliefs and teaching performance.

Hypothesis two (H2): There is a significant moderating effect of gender on the relationship between general educators' beliefs and their teaching performance.

2. THEORETICAL FOUNDATION

2.1. Conceptual Framework

The conceptual framework of the current study was based on the Theory of Planned Behavior (TPB) first espoused by Ajzen in 1985. According to Ajzen (1991) an individual's attitudes towards specific behavior show the degree to which the performance of the behavior is positively or negatively valued. This idea has been further supported by MacFarlane and Woolfson (2013) who stated that the TPB offers a useful framework for addressing the relationship between beliefs and behavior. In the inclusive education field, there has been a number of studies examining educators' attitudes using the framework of the TPB (e.g., Lui, Sin, Yang, Forlin, and Ho (2015)). Hence, when applied to the present study, this theory suggests that if general educators hold positive beliefs towards the inclusion of LD students, educators will be more accepting those students and enthusiastically work with them. Thus, LD students will perform positively and effectively in the inclusive classroom. However, MacFarlane and Woolfson (2013) have argued that there is a gap in the inclusive literature regarding the application of TPB to educators' beliefs and their corresponding behavior towards special needs students. Indeed, it is expected that educators' beliefs play a significant role in determining their teaching performance.

Studies on educators' beliefs have been guided by the TPB. For instance, Alharthi and Evans (2017) specifically investigated special education teachers' attitudes rather than those of general educators. They used the TPB to explain how educators' behavior was affected by their attitudes, ultimately finding that the educators held a positive attitude towards inclusion, and that there were no significant differences with respect to the educators' genders, years of experience or attitudes. Similarly, MacFarlane and Woolfson (2013) used the TPB to investigate the relationship between educators' beliefs and their behavior towards students with social, behavioral and emotional difficulties. The results revealed that educators' beliefs directly influenced classroom behavior, and that

educators who held more positive beliefs had more intentions to work with disabled students. Similarly, the study conducted by [Baguisa and Ang-Manaig \(2019\)](#) using the TPB framework found that there was a strong relationship between educators' attitudes and students' periodically assessed performance.

In the Saudi context, there is still a lack of investigation into the moderation effect of gender in the relationship between educators' beliefs and their teaching performance. Because of this, more investigations of the type presented here are needed because simply knowing about the impact of gender on educators' beliefs does not provide novel contributions or benefit results. Hence, the present study considered gender as a moderating variable on the relationship between beliefs and performance.

2.2. Literature Review

Past researchers have carried out a number of studies on general educators' beliefs and attitudes towards inclusion across the global context. Studies from, for example, Saudi Arabia, Malaysia, the U.K., Canada, Greece, India, Tanzania and Ghana have indicated that even though many general educators support inclusion, others have expressed their doubts about inclusion's benefits, with some holding the view that inclusion could be accompanied by difficulties and problems ([Alharthi & Evans, 2017](#); [Ali, Mustapha, & Jelas, 2006](#); [Alqahtani, 2017](#); [Alrubaian, 2014](#); [Mbwambo, 2015](#); [McGhie-Richmond, Underwood, & Jordan, 2007](#); [Nketsia, Saloviita, & Gyimah, 2016](#); [Rouse, 2008](#); [Tiwari, Das, & Sharma, 2015](#); [Tsakiridou & Polyzopoulou, 2014](#)). Indeed, the literature is filled with studies that have confirmed that general educators' beliefs and acceptance of inclusion are key to its successful implementation ([MacFarlane & Woolfson, 2013](#); [Nketsia et al., 2016](#)).

In contrast to the above, [Cook and Cameron \(2010\)](#) investigated the concerns and rejection ratings apparent in educators beliefs regarding inclusion with respect to three different types of disabilities which were; learning disabilities (LD), cognitive disabilities (CD), and attention deficit disorder (ADD). They found that the educators' rejection of inclusion correlated with their educational interactions with students. The students with LD in this study received a significantly higher rejection rating than non-disabled students, while students with LD received a lower rejection rating than students with other types of disabilities, including CD and ADD.

Along similar lines, [Jordan et al. \(2009\)](#) drew on several research projects conducted in primary schools as part of the Supporting Effective Teaching (SET) project in Canada. Their study found a strong relationship between educators' beliefs, their behavior and the quality of their teaching practices. Likewise, [Avramidis and Norwich \(2010\)](#) reported that, based on the results of their study, educators' behavior was affected by their beliefs and attitudes. [Leatherman and Niemeyer \(2005\)](#) explored educators' attitudes towards inclusion and how these attitudes affected their behavior in the classroom. Educators reported that positive attitudes were formed as a result of their experiences in inclusive classrooms. Their results also indicated that the educators applied inclusive practices that prompted disabled children to become more involved with the children without disabilities in all classroom activities.

[Cornoldi et al. \(2018\)](#) compared educators' beliefs in three western countries and found that general educators had positive attitudes towards LD students. Moreover, these attitudes affected these educators' interactions with the LD students. This finding corroborates the idea of [Jordan et al. \(2009\)](#) who found that educators who believed that students with special needs were their responsibility demonstrated more effective behavior with all students. [Sharma and Sokal \(2016\)](#) reported that there was a relationship between general educators' self-reported attitudes and classroom behavior. The results also indicated that educators who applied highly inclusive practices had more positive attitudes towards disabled students; thus, they exhibited a significantly lower degree of worry than other educators who did not implement highly inclusive practices in their teaching. However, [Al-Ahmadi \(2009\)](#) found that general educators had slightly negative attitudes towards the inclusion of LD students, which may have impacted these educators' teaching in inclusive classrooms.

There have been a few other related studies on attitudes and practices that did not specifically consider the case of LD or even the special education field. However, they are still relevant as there are a limited number of studies that examine this specific relationship. For example, [Purnomo \(2017\)](#) found a correlation between mathematics educators' beliefs and their teaching behaviors and practices. [Wilcox-Herzog \(2002\)](#) also examined the relationship between early childhood educators' beliefs and their behavior. Forty-seven female educators' beliefs were assessed with a self-report questionnaire, and their actions were evaluated with four observational measures through video recordings. The results indicated that there was no significant relationship between educators' beliefs and their behavior.

Most of the studies in the field of special education have only focused on the difference between female and male beliefs towards inclusion. For example, [Al-Abduljabbar \(1994\)](#) along with [Abed and Alrawajfh \(2017\)](#) found that female educators were more accepting of inclusive practices than their male counterparts. These results differed from those of [Al-Ahmadi \(2009\)](#); [Rakap and Louise \(2010\)](#) and [Alqahtani \(2017\)](#) who confirmed that while there were differences in beliefs towards inclusion, male educators were accepting more of such practices than female educators. A few studies have reported that gender had no effect on educators' beliefs about inclusion ([Alharthi & Evans, 2017](#); [Chiner & Cardona, 2013](#); [Cornoldi et al., 2018](#); [Madhya & Sivarajan, 2015](#); [Monsen et al., 2013](#)), which also found that factors such as gender, school location, teacher's specialization and job, did not affect the level of teaching competency. Despite these diverse findings, previous studies have not yet dealt with the moderating effect of gender in the relationship between beliefs and performance. Hence, a more conclusive result can be obtained if gender is considered as a moderator variable that may affect this relationship. [Conner, Smith, and McMillan \(2003\)](#) have indicated that, with respect to the evidence of the TPB, gender can be viewed as a moderator variable that affects the relationships between measured variables and intentions.

3. METHODOLOGY

3.1. Instrument

This study further develops a research model based on the TPB that in this case is designed to investigate general educators' beliefs towards the inclusion of students with LD. A questionnaire was used to collect data from the respondents. The instrument was divided into three main sections to specifically address the hypothesis that was proposed for this study. The first section covered the demographic information of the educators, such as gender, current qualifications and experience. The second and third sections consisted of items covering beliefs and teaching performance. The belief section of the questionnaire was designed by the researcher following the TPB and, more specifically, based on [Ajzen \(2002\)](#) recommendations for creating a questionnaire to assess educators' beliefs. The teaching performance questionnaire was adapted with some modifications from the classroom observation scale (COS), which was developed by [Stanovich and Jordan \(1998\)](#). The latest version of this scale was published in 2018, and this was the version that was used in this study. All items on the questionnaire were measured using a five-point Likert scale, where (1) represented 'extremely unlikely', and (5) was 'extremely likely'. These questionnaires were completed by the general educators in order to achieve this study objective. A total of 401 usable questionnaires were received and analyzed using structural equation modelling (SEM) via AMOS software.

3.2. Participants and Sampling Method

The target respondents of this study were Saudi general educators. The present study employed two criteria in selecting the participants: (1) the educators must have held at least a bachelor's degree or above in any general subject (e.g., religious studies, Arabic language, mathematics, sciences, English language); (2) they must have worked at government intermediate-level schools which included inclusive classrooms in Riyadh. Regarding the ethical issue of this study, the participants were informed that the confidentiality and anonymity of their

information were guaranteed. In addition, general educators gave their acceptance to participate in this study before starting to fill the questionnaires. Importantly, the researchers received the approval of MOE in KSA to collect the data. Moreover, data were collected from intermediate schools in five main districts of Riyadh. Riyadh is the capital and largest city of the KSA and has the highest number of schools. Cluster sampling technique was employed to collect data from the educators. According to [Cohen, Manion, and Morrison \(2011\)](#) as well as [Chua \(2016\)](#) cluster sampling can be used when a study includes a wide area as well as a large size of the population. Based on [Krejcie and Morgan \(1970\)](#) and the [Raosoft \(2011\)](#) calculator, the sample size of the present study should have included 343 participants. However, a large sample size is necessary when a researcher decides to use SEM ([Blunch, 2013; Hair, Black, Babin, & Anderson, 2013; Weston & Gore, 2006](#)). Thus, for the purposes of analysis, a total of 500 questionnaires were distributed. Nevertheless, out of the 409 questionnaires returned, only 401 responses were usable. The rest were rejected due to the issue of outliers.

4. DATA ANALYSIS AND RESULTS

4.1. Preliminary Data Analysis and Data Preparation

SPSS version 24 was used for data preparation before the analysis while AMOS 24.0 was used and to determine the fit of the study model as well as for the statistical analysis of the collected data. The researchers followed some significant steps to validate this study. Firstly, the first version of the questionnaire was given to professional experts in special education, thus their notes and observations were considered. Secondly, the questionnaire of this study was originally written in English and subsequently translated into Arabic because the population of this study were Arabic speakers. Importantly, in order to guarantee the validity of using this questionnaire in several languages, it was essential to avoid any mistake in the translation of the questionnaire. According to [Chua \(2016\)](#) there are numerous instructions on the selected language to be used while preparing the statements of questionnaire. One of the main significant regulations is to apply back translation, in order to guarantee that the used language is found in the mother language of the participants.

Therefore, some steps were taken to fulfil the questionnaire's back-translation process by checking with specialist translators who also had background in special education. In regard to the reliability, the total Cronbach for the factors were above 0.873, which indicated a high value of reliability and emphasized the validity of the questionnaire to achieve the targets. Moreover, these results revealed that the multiple correlation values represented a valid standard of correlation for the items in each questionnaire.

4.2. Demographic Information

The educators' demographic information is presented in [Table 1](#). It shows that respondents comprised 59.4% female general educators and 40.6% male general educators. Most of the educators (80.8%) held a bachelor's degree. Almost half of the educators had over 15 years of teaching experience (45.1%).

Table-1. Summary of demographic information of questionnaires participants.

Variable	Group	Percentage %
Gender	Female	59.4
	Male	40.6
Qualification	Bachelor	80.8
	Master	17.7
	Doctoral	1.5
Experience	Less than 5 years	17.2
	From 6 to 10 years	22.4
	From 11 to 15 years	15.2
	Over 15 years	45.1
Note: N=401.		

SEM using the AMOS (version 24) model-fitting program was performed to validate the measurements of the relationship between beliefs and teaching performance among the general educators teaching LD students in intermediate schools in Riyadh. To examine the adequacy of this model, the researchers employed both the measurement model and the structural model. The hypothesized models were estimated using the covariance matrix derived from the data. Thus, the estimation procedures satisfied the underlying statistical distribution theory, hence yielding estimates of defensible properties. Finally, multigroup analysis was conducted to examine the moderating role of the teachers' genders to meet the second objective of this study.

4.3. Analysis Procedures

4.3.1. Construct Validity

The measurement model (confirmatory factor analysis, or CFA) of the study was deployed to examine the construct validity and reliability of the model constructs. This study adopted a set of indices that had to be compared with the result of the model fit to confirm that it was good. These indices were as follows: chi-square (χ^2), degree of freedom, comparative fit index (CFI), Tucker-Lewis index (TLI) and the root-mean-square error of approximation (RMSEA). According to the analysis, chi-square (χ^2) should have been $< .5$, RMSEA should have been $< .08$ and CFI and TLI should have been $> .90$ (Hair et al., 2013; Kline, 2016; Lomax & Schumacker, 2016). For this reason, the measurement model for the model of study was revised by using modification indices. Figure 1 reveals that the CFA indicated an acceptable fit with chi-square (χ) = 1153.753, degree of freedom (DF) = 479, RMSEA = 0.059, CFI = 0.940 and TLI = 0.934.

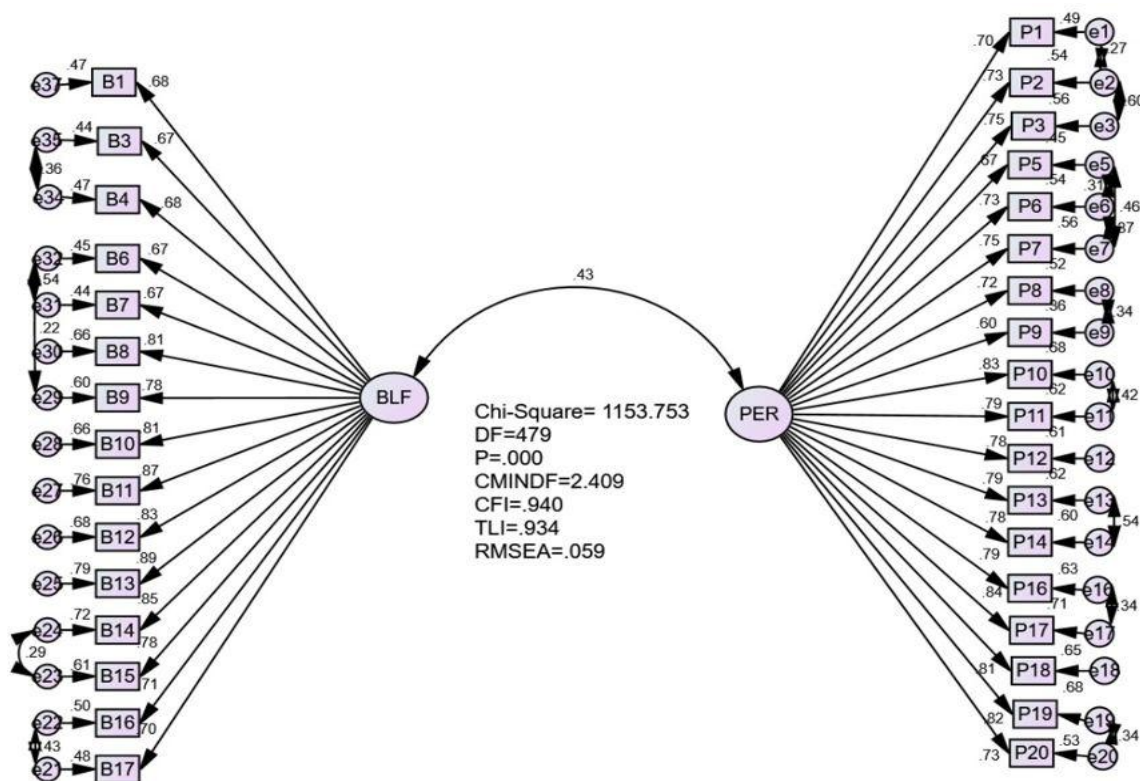


Figure-1. Confirmatory Factor Analysis results of study model.

Accordingly, seven items (five items from beliefs and two from the teaching performance dimensions) were deleted for not meeting the specifications mentioned. Five of these items had a loading less than 0.5 (B2, B18, B19, B20, and P4) and two items (B5 and P15) had loading more than 0.5 but were deleted because the model was not a good fit without removal of these items. All items including the deleted items are shown in Table 2.

Table-2. Items of the Model.

Item Code	BLF			Item Code	PER		
	Loading	Covariance	Error		Loading	Covariance	Error
B1	0.68	0.47	e37	P1	0.70	0.49	e1
B2	0.38	0.14	e38	P2	0.73	0.54	e2
B3	0.67	0.44	e35	P3	0.75	0.56	e3
B4	0.68	0.47	e34	P4	0.36	0.13	e4
B5	0.74	0.54	e39	P5	0.57	0.45	e5
B6	0.67	0.45	e32	P6	0.73	0.54	e6
B7	0.67	0.44	e31	P7	0.75	0.56	e7
B8	0.81	0.66	e30	P8	0.72	0.52	e8
B9	0.78	0.60	e29	P9	0.60	0.36	e9
B10	0.81	0.66	e28	P10	0.83	0.68	e10
B11	0.87	0.76	e27	P11	0.79	0.62	e11
B12	0.83	0.68	e26	P12	0.78	0.61	e12
B13	0.89	0.79	e25	P13	0.79	0.62	e13
B14	0.85	0.72	e24	P14	0.78	0.60	e14
B15	0.78	0.61	e 23	P15	0.80	0.64	e15
B16	0.71	0.50	e22	P16	0.79	0.63	e16
B17	0.70	0.48	e21	P17	0.84	0.71	e17
B18	-0.10	0.02	e40	P18	0.81	0.65	e18
B19	-0.14	0.01	e41	P19	0.82	0.68	e19
B20	0.03	0.00	e42	P20	0.73	0.53	e20

Further evidence vis-à-vis the hypothesized model's validity and adequacy of the measurement model for beliefs and teaching performance are discussed in this section. This section focuses on the measurement model in terms of its two types of construct validity, namely convergent construct validity and divergent construct validity. The first indicator of this step can be checked by looking at all of the items which show that all of the loadings are more than 0.60. In this case, the factor loadings for the items are acceptable with an adequate sample size of participants (Hair., Hult, Ringle, & Sarstedt, 2014). Thus, all indicators in this research were related to their variables, and as a result, there was enough evidence of the convergent construct validity of the measurement model. With regards to divergent construct validity, as shown in Figure 1, the correlation between the two variables was less than 0.85. Hence, the discriminant validity was supported, and both of these two variables for this study supported discriminant validity (Hair et al., 2014). Overall, the findings indicated that the study model was psychometrically sound.

4.3.2. Adequacy of the Hypothesized Structural Model

After ensuring the psychometric properties of the study model, the structural model was deployed to examine the influence of teacher's beliefs on their teaching performance (see Figure 2). This step addressed the first research hypothesis. This step was considered as the second stage of AMOS analysis after successful development of the measurement model as the structural model. This hypothesized model showed consistency of the hypothesized causal relationships with the data (normed chi-square = 2.409; RMSEA = .059; CFI = .940; TLI = .934). All of the fit indices for the teacher's beliefs on the teaching performance model satisfied the recommended values, which indicated a fit of the structural model. Additionally, the analysis revealed that teachers' beliefs explained 19% of their performance. The parameter estimates of the hypothesized model were free from offending values with uncorrelated errors. The path coefficients of the causal structure were statistically significant at a level of .01 and demonstrated practical importance. The standardized path coefficient of teachers' beliefs → teaching performance was important and statistically significant, $\beta = 0.43$ (see Figure 2)

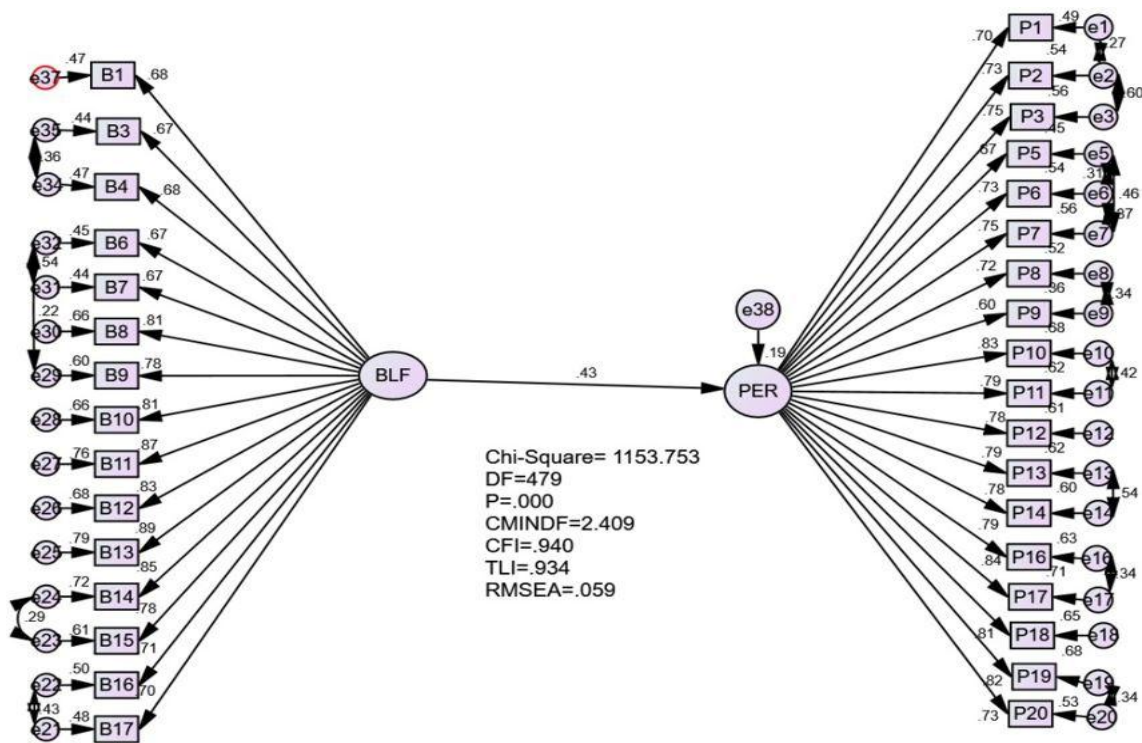


Figure-2. Structural model of the study.

4.3.3. Analysis of Moderating Effect

Table 3 below shows the results of the moderation analysis, which were in line with the second hypothesis of this study regarding the impact of gender on the relationship between the teachers’ beliefs and teaching performance. The estimation of the constrained measurement model produced another chi-square value, which was then tested against the baseline value for statistically significant differences. Finally, the change in the CFIs and the value of the RMSEA of the restricted model were verified against the cut-off scores of .001 and .05, respectively (Byrne, 2013; Kline, 2016).

Table-3. Results of the gender-invariant analysis.

Indices	Unconstrained	Constrained	Change	Decision
Chi-square	1868.133	1868.28	0.147	Groups are not different at the model level; however, they are different at the path level.
Degree of freedom	958	959	1	
CFI	0.920	0.920	0.000	
RMSEA	0.049	0.049	0.000	

The variance test for the structural model showed no statistically significant change in the chi-square value across the Saudi male and female teachers’ groups. That is, the increase in the chi-square values from the unrestricted model to the constrained model produced a poorer model of the relationship between the teacher’s beliefs and their teaching performance. Furthermore, there was no change in both the CFI and the RMSEA.

5. DISCUSSION

Regarding the results of the structural model, educators’ beliefs were found to have influenced their teaching performance. This result supports our hypotheses that educators’ beliefs about the inclusion of students with LD are a significant predictor of teaching performance. Accordingly, a change in the educators’ beliefs resulted in an improvement in teaching performance. Furthermore, it was determined that beliefs can also affect what educators see as being significant in their teaching performance; they are likely to perform positively when they hold positive beliefs. In other words, this result indicated that as general educators’ beliefs became more positive, their teaching

performance tended to improve. Moreover, through SEM analysis, it was also found that the model of beliefs adapted from the TPB was a good fit for the data and predicted a significant relationship between beliefs and performance. Significantly, the prediction based on TPB theory was that positive beliefs would result in a higher level of performance. As past studies drawing on TPB had shown, it is possible to predict teaching performance through an analysis of beliefs (Alharthi & Evans, 2017; Baguisa & Ang-Manaig, 2019; MacFarlane & Woolfson, 2013). In these cases, general educators who had positive beliefs towards inclusion and who welcomed LD students in their classrooms tended to perform more positively with respect to their teaching.

The present study reiterated the conclusion found in studies conducted by MacFarlane and Woolfson (2013) and Stanovich and Jordan (1998) which emphasised that educators' beliefs about inclusion promoted inclusive behavior and improved overall performance. Similarly, Sharma and Sokal (2016); Avramidis and Norwich (2010); and Jordan et al. (2009) found a positive correlation between educators' attitudes and inclusive practices. Purnomo (2017) also reported that educators' beliefs were correlated with their teaching behaviors. Further, Leatherman and Niemeyer (2005) and Cornoldi et al. (2018) made reference to the fact that general educators' attitudes largely influenced their interactions with students with LD. Cook and Cameron (2010) also found that educators' rejection of inclusion was correlated with their educational interactions with students with disabilities. However, the study conducted by Wilcox-Herzog (2002) established findings to the contrary; she found that there was no significant relationship between educators' beliefs and their behavior.

The results have shown that there was no moderation effect of the educators' gender. According to Conner et al. (2003) the TPB considers gender as a moderation variable that affects some relationships. Consequently, it is important to provide evidence that gender can be interpreted as a moderator in studies that apply the TPB. Throndsen and Turmo (2012) have argued that gender differences in educators' beliefs as well as the relationship between beliefs, gender and performance have received insufficient attention in educational studies. Regarding the previous literature, Alharthi and Evans (2017) used the TPB when considering the influence of gender and reported that there were no differences to be founded between male and female beliefs towards inclusion of LD students. Additionally, some other studies have examined the role and effect of gender on beliefs rather than the moderation effect of gender on a specific relationship related to educators' beliefs. Most of these studies have found significant differences between females and males with respect to their beliefs about inclusion (Abed & Alrawajfh, 2017; Al-Abduljabbar, 1994; Al-Ahmadi, 2009; Alqahtani, 2017; Rakap & Louise, 2010). On the other hand, there is also evidence that the gender of general educators has no effect on their beliefs (Alharthi & Evans, 2017; Chiner & Cardona, 2013; Cornoldi et al., 2018; Monsen et al., 2013). Regarding the impact of gender in teaching practice, Madhya and Sivarajan (2015) have indicated that in their study, educators' gender did not impact their level of teaching competency.

One potential reason could explain why gender does not have a moderating effect in this relationship with respect to the present study; it may be that both the female and male educators shared the same culture and religion as well as lived in the same area. Another potential explanation is that both groups were working in government intermediate-level schools with the same salaries. Additionally, they had similar teaching responsibilities, as the educational rules in the KSA do not differentiate between educators according to their gender.

From the above discussion, it can be said that educators' positive beliefs about the inclusion of LD could lead to more successful teaching performances, and thus achieve the success of inclusion practices. In other words, if educators' beliefs towards inclusion are positive, they are likely to put forth their best efforts when facing difficult situations with LD students in inclusive classrooms. In effect, this study aims to generate essential data in the field of educators' beliefs studies, as there is a lack of studies focusing on the correlation between educators' beliefs and their teaching practices.

6. IMPLICATIONS AND RECOMMENDATIONS

The present study provides a basis upon which the evidence related to this relationship can be extended in further studies. There are practical implications that should be considered. First, the results of this study provide practical support for asking about educators' beliefs about inclusion, showing how their beliefs might impact their teaching performance in an inclusive classroom. Additionally, it also provides an opportunity for general educators to reflect on what they perceive to be valuable for their own practices. Educators need to realize the important role of their beliefs and how they affect their performance in classrooms; as a result, they may need to rethink their teaching approaches and work to improve certain teaching strategies that may help them to deal more effectively with students with LD. Therefore, the MOE should intensify their efforts in providing awareness programmes in all schools to encourage positive beliefs towards students with LD; these beliefs will likely guide their teaching performance towards a high level of effectiveness.

These programmes should be established to provide information about, for example the nature of LD and the characteristics of LD students. In addition to these awareness programmes, the MOE should also develop an official in-service programme that aims to improve general educators' teaching performance and inclusive practices. It is highly recommended that the MOE should organize a professional team to periodically evaluate the quality of teaching in inclusive classrooms and present an official report about educators' practices, especially with respect to their teaching performance with LD students, to be reviewed by education administrators and policymakers. These reports could help these officials improve educational services for LD students. Moreover, the ultimate aim should be to improve educators' practices so that students with LD will finally benefit from an inclusive classroom. It can be said that the findings of this study could be of practical value and help educational policymakers develop a better understanding of educators' beliefs and their link with teaching performance, thus providing insights into the effective development and implementation of inclusive practices.

7. CONCLUSION

Although it is important to investigate these educators' beliefs on their own, it is also crucial to consider the link between their beliefs about the inclusion of students with LD and teaching performance. Accordingly, this study set out to examine the relationship between general educators' beliefs towards the inclusion of LD students and their teaching performance while also considering the moderating effect of gender in this relationship. The results showed that there was a positive correlation between beliefs and teaching performance. Another significant finding was that there was no moderating effect of gender in this relationship. In fact, previous research conducted in the Saudi context (Abed & Alrawajfh, 2017; Al-Ahmadi, 2009; Alharthi & Evans, 2017; Alqahtani, 2017) has shown that educators can hold positive or negative beliefs, but no differences in their beliefs according to gender were revealed. Therefore, no studies have been found that have examined this specific relationship in the Saudi context.

Indeed, this study was limited to one stage of schools. Thus, it is important to include all stages of schools in KSA. Furthermore, the research methodology used in this study can be useful to researchers working on LD issues, but the use of another methodology is recommended for further research, such as qualitative interviews of general educators, to gain a broader understanding of beliefs and how they are related to teaching performance. Moreover, further research is needed to examine school principals' and educational supervisors' beliefs towards inclusion and their correlation with educators' beliefs and performance in order to determine the best ways to change their beliefs if needed, hence improving inclusive practices as well. Along with these avenues, ongoing research is needed on the moderating effect of some other relevant factors that may affect the relationship between educators' beliefs and their teaching performance, such as teaching experience or class size.

At present, the most critical factor to be considered in future research related to teachers' beliefs is the impact of transferring learning from the traditional classrooms to online educational platforms. Recently, in early 2020, all

educational institutions around the world, including schools, have been forced to transfer all face-to-face traditional classes to online platforms to avoid the spread of Covid-19 (Giovannella, Passarelli, & Persico, 2020). Indeed, we believe that the Covid-19 pandemic would change teachers' beliefs of teaching LD students in their regular classrooms. Dong, Cao, and Li (2020) stated that parents and teachers of special needs' students might have encountered many challenges and difficulties during this unforeseen situation. However, the rejection rate of teaching LD students may also increase due to many factors that can affect teachers' beliefs and concerns towards the inclusion, such as using alternative online materials for such students, considering how to apply individual education plan for them, and planning on how the teachers can manage the class time effectively for all the students. In brief, there is an urgent need to examine the influence of teachers' beliefs on their teaching performance in teaching LD students via online classes by considering the current and unique situation that teachers are experiencing for the first time in their teaching. Further research would provide valuable evidence at improving inclusive practices not only in traditional learning environment, but also online.

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