

Public school principals' opinions on the effectiveness of special education teacher evaluation processes in promoting professional development and job performance accountability in the Kingdom of Saudi Arabia

آراء مديري المدارس الحكومية حول فعالية عمليات تقييم معلم التربية الخاصة في تعزيز التطوير المهني ومساءلة الأداء الوظيفي في المملكة العربية السعودية

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Abstract

This study examined the perceptions of principals of public schools in the Makkah Region of the Kingdom of Saudi Arabia regarding the effectiveness of their school districts' evaluation systems for special education teachers in promoting professional development and job performance accountability. Using an exploratory quantitative approach employing an online questionnaire, the study obtained the opinions of 498 principals of public schools from three cities in the Makkah region namely, Makkah, Jeddah, and Taif. The study found that the principals believed that the overall process of evaluation was effective. Nevertheless, the study's findings highlight the need for enhancing knowledge and training regarding the evaluation process and to redirect the focus of evaluation on the growth and development of special education teachers. In addition, the study recommends that evaluation systems for special education teachers must consider their classroom control, management, and organization and also consider the special education teachers' knowledge and usage of techniques and materials for teaching. Limitations and opportunities for future research are also provided.

Keywords: principals, special education teachers, public schools, Kingdom of Saudi Arabia, effectiveness, teacher evaluation

الملخص

تناولت هذه الدراسة آراء مديري المدارس الحكومية في منطقة مكة المكرمة بالمملكة العربية السعودية فيما يتعلق بفاعلية أنظمة التقييم لمعلمي التربية الخاصة في تعزيز التطوير المهني ومساءلة الأداء الوظيفي. تم استخدام المنهج الكمي الاستكشافي باستخدام استبيان إلكتروني ، شارك في هذه الدراسة عدد ٤٩٨ من مديري المدارس الحكومية من ثلاث مدن في منطقة مكة المكرمة وهي مكة وجدة والطائف. وجدت الدراسة أن مدراء المدارس يعتقدون أن عملية التقييم الشاملة كانت فعالة. ومع ذلك ، فإن نتائج الدراسة سلطت الضوء على الحاجة إلى تعزيز المعرفة والتدريب فيما يتعلق بعملية التقييم وإعادة توجيه تركيز عملية التقييم نحو نمو وتطوير معلمي التربية الخاصة. بالإضافة إلى ذلك ، توصي الدراسة بأن أنظمة التقييم لمعلمي التربية الخاصة يجب أن تأخذ في عين الاعتبار التحكم في الفصول الدراسية وإدارتها وتنظيمها ، وكذلك مراعاة معرفة معلمي التربية الخاصة باستخدام التكنولوجيا في التدريس. الكلمات المفتاحية: مديري المدارس، معلمي التربية الخاصة، المدارس الحكومية، المملكة العربية السعودية ، الفاعلية ، تقييم المعلم.

Introduction:

Instructional practices across the globe continue to become more inclusive in principle and implementation. This can be seen in the increased access provided to students with disabilities to curricula that are in alignment with grade level standards. Nevertheless, there continues to be a gap in the levels of achievement between students in the special education and general education streams (Kim et al., 2018; Sledge, 2014). A longitudinal study of academic achievement in children with autism from the age of two years to nine years, for instance, revealed that the achievement levels of children who continued to be placed in general education classrooms were higher than those who had been transferred to special education classrooms (Kim et al., 2018).

Closely allied to the learning experiences of children with disabilities, is the effectiveness of the teachers in charge of their instruction. Several decades of research have indicated that the effectiveness of a teacher or a group of various teachers involved in the education of a child has the potential to positively impact the immediate and long-term academic gains of the student (Chetty et al., 2011, 2013a, 2013b; Jones & Brownell, 2014). For instance, a longitudinal study that followed one million children from fourth grade into maturity concluded that a teacher who is highly effective not only impacts the immediate academic accomplishments of a student but also that student's future as regards attending college, success in employment, and overall quality of life (Chetty et al., 2011). Teacher quality, in addition, is of considerable significance for the success of every facet of school development, particularly when there is an increase in the diversity of the student population along with the expectations of schools (Darling-Hammond, 2012).

Relatedly, there is acknowledgment of a need to create a system for effective teaching. Darling-Hammond (2012) highlights components of a probable system namely, common teaching standards associated with meaningful student education;

assessments based on performance on the basis of these standards, directing functions such as, preparation of teachers, their licensing, and advanced certification, at national and regional levels; support structures to confirm availability of skilled evaluators, mentoring to provide additional assistance to teachers as required; and aligned opportunities for professional learning that aid the enhancement of teachers and their quality of teaching (Darling-Hammond, 2012). Consequently, there have been accompanying efforts by both educational researchers and policymakers to determine what being a “highly effective teacher” means and to contemplate the measures that must be taken to confirm that the opportunity to be taught by highly effective teachers is offered to all students. In particular, attempts have been made to identify the teacher attributes associated with enhanced student accomplishment and to establish systems, encompassing models for teacher assessment, that help in the accurate identification of effective teachers. In general, teacher effectiveness has not been identified through the usage of models for teacher assessment. Moreover, leaders have often been unable to differentiate between teachers, resulting in teachers who have received favourable assessments while their differing contributions to student accomplishment have been disregarded (Sledge, 2014).

Evaluation of Special Education Teachers

Historically, scrutiny of the evaluation of special and general education teachers has revealed overlaps due perhaps to the shared legal and contractual responsibilities and duties of these teachers. From a contractual perspective, both groups are expected to work toward aiding the learning needs of students, managing their learning and behaviour, and teaching in classrooms. In addition, they have certain legal duties such as, giving details of child neglect and abuse (Holdheide et al., 2010; Imber & van Geel, 2009). Special education teachers are additionally obligated to comply with supplementary responsibilities and duties as stipulated by laws applicable in their country. While teaching remains the most significant responsibility of a teacher, special education teachers are

expected to perform other tasks such as, case management, monitoring of progress, assessing, book-keeping, handling meetings with parents and other interested parties, and administering support staff to satisfy legal obligations (Hong, 2018).

Evaluation systems often focus principally on the activities of teachers as associated with enhancing students' scholastic accomplishments. Such evaluation systems do not have the capacity to assess the supplementary responsibilities performed by special education teachers. Instead, a one-size-fits-all form of teacher evaluation is often utilised to assess both general and special education teachers (Benedict et al., 2013; Holdheide et al., 2012; Jones et al., 2013; Semmelroth et al., 2013; Semmelroth & Johnson, 2014).

Unsurprisingly, perhaps, the development of procedures to evaluate special education teachers has been an ongoing concern ever since the movement of special education classes from special schools to general educational environments (Moya & Gay, 1982). Accompanied by a concern regarding the ownership of the responsibility for this evaluation (Moya & Gay, 1982), it would appear that the evaluation of special education teachers is an area of considerable interest to the stakeholders of inclusive educational environments across the globe.

Historically, the purposes of evaluation have been related to staffing decisions (e.g., removing teachers who are inefficient); recognizing and rewarding excellent teachers; providing opportunities for professional development; and enhancing student learning (Church, 2012; Hong, 2018; Orphanos, 2014; Popham, 2013b). Traditional forms of teacher evaluation, consequently, utilised two-point scales (i.e., satisfactory and unsatisfactory) and performed two principal appraising purposes namely, summative and formative. While summative evaluation is utilized in decision-making associated with the management of personnel, formative evaluation is utilized to aid teachers in enhancing their practices

(Hong, 2018; Weidner, 2020). Furthermore, formative evaluation signifies what takes place in a classroom as a process for professional development and growth. In contrast, a summative evaluation is a measure that is externally imposed and uniformly utilised. Its intention is to assess all teachers on similar criteria with the objective of determining their value, merit, and aptitude as staff members (Glickman et al., 2010). Additionally, summative evaluations utilise standard forms and evaluate teachers on their teaching quality, atmosphere and management of the classroom, scheduling, and the act of teaching (Danielson & McGreal, 2000).

Overall, it would appear that the purpose of evaluation can be grouped into three groups: teacher motivation, professional development, and quality control signifying that the evaluation of teachers can be undertaken for many reasons. For instance, to ensure the ongoing nature of learning and to confirm that students are grasping the content being imparted to them. It can also be used as a method for development and growth, both personal and professional. Teacher motivation, additionally, can be spurred by awareness of outcomes (Jones et al., 2022; Sergiovanni, 2009; Widener, 2011).

Research problem and questions

Special education in the KSA, while implemented since the middle of the previous century, has not been well-researched or documented until later in the century. Increasing attention to the effectiveness of special education across the globe has resulted in a corresponding increase in attention to special education in this sizeable Middle Eastern country. In this context, the present paper was undertaken to provide insights regarding the process of evaluation of special education teachers in the KSA. Focusing on public schools in the Makkah Region, this study examined the perceptions of the principals regarding the effectiveness of their school districts' evaluation systems for special education teachers, in general, and in promoting professional development and job

performance accountability among special education teachers, in particular.

The study will endeavour to answer the following questions:

- a) What is the overall process of evaluation of special education teachers in Saudi Arabia? That is, what are the processes, components, sources of performance information, characteristics of feedback underlying the evaluation of special education teachers in Saudi Arabia?
- b) What do principals of public schools with integrated special education classes perceive as regards the effectiveness (of the process) and impact (on special education teachers' professional development/growth, etc.) of the evaluation of special education teachers in Saudi Arabia?
- c) Do principals' characteristics (i.e., demographic features) and school characteristics (e.g., location, number of students with disabilities, etc.) impact the principals' perceptions of the effectiveness and impact of the evaluation of special education teachers in Saudi Arabia?

Review of Literature:

Snyder and Pufpaff (2021) highlighted that while the process of teacher evaluation is complex and challenging, in general, it becomes even more so in the context of special education teachers. In the case of general education teachers, their effectiveness is assessed against grade-level standards, standardized assessments, and general standards of learning. Though the systems utilized vary, overall, the systems include observations, both formal and informal, by an administrator. The teachers' performance is also evaluated using checklists, rubrics, or growth measures (Betebenner, 2009; Marzano, 2014; Popham, 2013a). Other factors considered during the evaluation include samples of teachers' records, students' work, and lesson plans (Sawchuk, 2015). Snyder and Pufpaff (2021) also note, however, that while the goal of the process of teacher

evaluation is to assess the quality of teaching and to support professional development to assist in offering successful student services, existing instruments of evaluation and practices are possibly more intended for general education teachers. This is perhaps due to the mismatch between existing instruments of evaluation and the responsibilities of special education teachers (Snyder & Pufpaff, 2021).

Observation tools are also utilized for the evaluation of special education teachers leading to significant research attention to their reliability and validity. Findings suggest that observer reliability is unpredictable unless numerous raters and several observations are utilized to optimize the process (Johnson & Semmelroth, 2014). Content specific observation tools have also been found to have favourable impacts on student outcomes (Hill et al., 2008; Smolkowski & Gunn, 2012).

Other facets influencing the evaluation of special education teachers are their wide-reaching roles and responsibilities of a special education teacher and their need to operate under various complex conditions, with a diverse student population, and also facilitate student progress toward an extremely personalised goal set. These make it problematic to develop a comprehensive system of evaluation for these teachers (Johnson & Semmelroth, 2014).

Participants in the evaluation process are reported to be chiefly administrators: in their role as a schools' instructional leaders (Widener, 2011). In particular, the principals' role encompasses school management to support favourable student achievement, a secure setting for teaching and learning, proficient resource usage. In addition, the principals' role also includes the analysis of classroom practices and approaches with the objective of improving instruction. Furthermore, principals are to supervise and assess instruction quality, offer staff advancement, and offer support to enhance instruction, for instance (Widener, 2011). On the whole, principals have a responsibility to aid teachers in enhancing their professional capabilities and to safeguard the occurrence of learning.

This responsibility is unavoidably associated with evaluation (Sergiovanni, 2009).

In their systematic review of teacher evaluation systems across the United States, Gilmour and Jones (2020) found, in general, that guidance was not provided to schools in most states and districts as regards the adaptation of evaluation systems for special education teachers. While some states placed emphasis on the technical facets of evaluation, the focus of most districts was instructional matters. Overall, however, the focus of evaluation was related to the roles of special education teachers; their procedural responsibilities such as, writing IEPs (Individualised Education Plans), leading meetings, organising associated services, and performing student evaluations; and instructional matters such as, instruction that was “research-based”, “developmentally appropriate”, or focused on the needs of individual students (Gilmour & Jones, 2020).

Relatedly, sources of performance information include observation of the classroom performance of a teacher, meetings with the administrator, scrutiny of artifacts (lesson plans, materials, and home/school communication), and check of student performance, student assessments, peer appraisals, and self-assessments (Muio, 2019). A connected facet is the feedback offered during the process of evaluation. The typical characteristics of the feedback provided during the evaluation of special education teachers include the quantity of information provided, occurrence of formal and informal feedback, extent of information given, value of the suggestions and ideas covered in the feedback, preciseness of given information, type of information given, scheduling of feedback, and the quantity of time expended on the process of evaluation by administrators and other participants (Muio, 2019).

Widener (2011) reported that the effectiveness of evaluation of special education teachers can be impacted by the person who performs the evaluation. For instance, there could be a difference if

the evaluation was performed by a person with a special education background rather than a person with a background in general education. Relatedly, there could be a difference if the evaluation was performed by a person with sufficient knowledge and training in the evaluation of special education teachers rather than a person without the requisite knowledge and training (Widener, 2011).

Relatedly, it has been found that the downstream impact of the evaluation process can be evaluated in terms of the impact of the process on the professional practices of a teacher; his/her professional growth; favourable impact on student learning, school enhancement goals, and school climate; and quality, development goals, professional development, job performance accountability of special education teachers (Muoio, 2019).

A study in Illinois by Holdheide and colleagues (2012) reported a lack of consensus as regards the approach that would result in enhanced instructional practice and improved student outcomes. Earlier research by the same authors revealed various challenges as regards evaluating and supporting success in special education teachers. These include especially the lack of availability of skilled special education teachers resulting in positions being unfilled or unqualified personnel being recruited to fill the gaps. Another challenge is the attrition and movement of special education teachers (Holdheide et al., 2010). Typically, the challenges associated with the evaluation of special education teachers include the heterogeneity of their students, the diversity of their work settings, the individualisation of instruction to suit student needs, and concerns related to equipping such teachers to provide quality special education (Johnson & Semmelroth, 2014).

Other challenges of the evaluation process include the accuracy with which the growth of students with disabilities can be measured; measuring the teaching methods of special education teachers; factoring in different roles and responsibilities of special education teachers; lack of guidance regarding how to use observation as an evaluation tool; and the overlooking of situations

where the special education teacher is engaged in co-teaching (Hong, 2018).

Research Framework

Based on the background, the study proposes to test certain hypotheses related to the matter under consideration.

H1: Components of evaluation have a positive impact on the effectiveness of evaluation of special education teachers

H2: Sources of performance information have a positive impact on the effectiveness of evaluation of special education teachers

H3: Challenges of evaluation have a negative impact on the effectiveness of evaluation of special education teachers

H4: Effectiveness of evaluation has a positive impact on the impact (outcomes) of evaluation of special education teachers

Figure 1 depicts the overall research framework for the study.

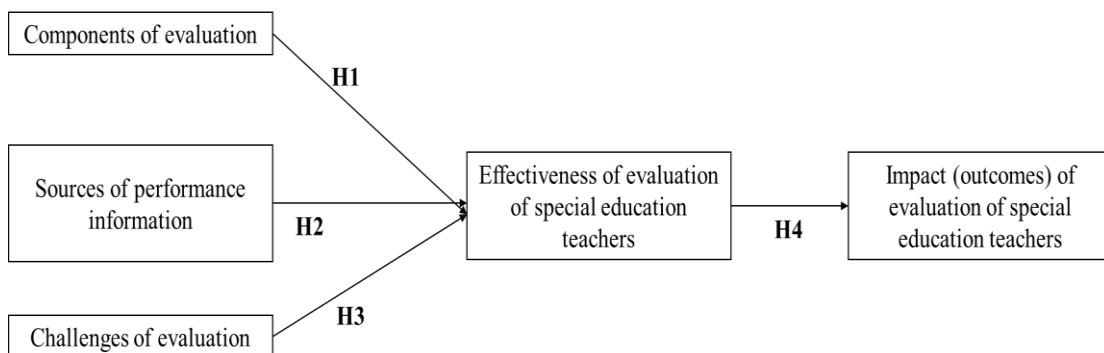


Figure 1: Research Framework

Methodology:

An exploratory quantitative cross-sectional approach (Creswell & Creswell, 2018) was utilised to fulfil the objectives of the study. An exploratory approach was utilised since fairly little continues to be known about the context (special education in the KSA). In addition, quantitative data were used in this exploration.

Finally, the study was undertaken during a specific time period, April to June 2022. An online questionnaire using Google Forms was utilised to obtain data regarding the perspectives of principals of public schools in the Makkah Region of the Kingdom of Saudi Arabia regarding the effectiveness of their school districts' evaluation systems for special education teachers in promoting professional development and job performance accountability.

Sample population

The sample population for the study was principals of public schools with integrated special education classes in the Makkah Region of the KSA. The researcher contacted the administration of the public schools in the region and obtained permission to approach the teachers to participate in this study. The researcher contacted the teachers using contact details furnished by the school administration. A total of 498 principals participated in this study. All the invited principals participated in the study.

Measures

A questionnaire was designed in English by the researcher and subsequently translated to Arabic and utilised to collect data from the participating principals. The items in the questionnaire were adopted from prior studies. Being a native Arabic speaker, the researcher performed the translation. A two-member panel comprised of the researcher's university colleagues was formed to ensure that the translation was appropriate and the intent of the questionnaire was not lost in translation. Moreover, the panel evaluated the content of the questionnaire for its overall construction and ease of understanding. The members of the panel held doctorates in education and were fluent in English and Arabic. Following the review from the panel, the researcher made changes to a few phrases in the Arabic version to ensure that it was identical in meaning to the equivalent text in the English version. Table 1 summarises the data that were collected in April-June 2022.

Table 1: Questionnaire design

Section	Description	Details	#Items	Adapted from
1	Demographic data of the principals	Age, gender, educational qualification, qualification in special education, teaching experience, years as principal	6	NA
2	Details about the school	Location, total number of special education teachers in school, number of students with disabilities in school, number of students with disabilities in each class	4	NA
3	Principals' awareness and perceptions regarding the process of evaluation of special education teachers	The need for different evaluations for special education teachers, the usage of formal and informal evaluations of special education in the district, the elements of evaluations, the number and length of evaluations, the evaluators, etc.	8	Widener (2011)
4	Principals' perceptions regarding the components of special education teachers' evaluation	To gain awareness of the principals' perceptions regarding the components of the evaluation; five-item Likert scale utilised (1 indicating "Strongly disagree" to 5 indicating "Strongly Agree")	7	Fern Ridge School District, 2014; Gilmour & Jones, 2020; Hong, 2018

Section	Description	Details	#Items	Adapted from
5	Sources of performance information for the special education teachers' evaluation process	To gain awareness of the principals' perceptions regarding the information used in the evaluation process; five-item Likert scale utilised (1 indicating "Not considered for use", 2 indicating "Used rarely", 3 indicating "Used occasionally", 4 indicating "Used often", and 5 indicating "Used always")	7	Muoio (2019)
6	Characteristics of feedback provided during special education teachers' evaluation	To gain awareness of the principals' perceptions concerning the nature of the feedback provided during the evaluation process; The principals were asked to provide ratings on a scale of 1 to 5 for the different statements included in this construct	7	Muoio (2019)
7	Effectiveness of special education teachers' evaluation	To gain awareness of the principals' perceptions regarding effectiveness of the evaluation process; five-item Likert scale utilised (1 indicating "Strongly disagree" to 5 indicating "Strongly Agree")	6	Widener (2011).
8	Impact of the special	To obtain insights regarding the extent to	9	Muoio (2019)

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Section	Description	Details	#Items	Adapted from
	education teachers' evaluation process.	which the participating teachers agreed with the impact of the evaluation process; five-item Likert scale utilised (1 indicating "Strongly disagree" to 5 indicating "Strongly Agree")		
9	Challenges associated with evaluation of special education teachers	to assess the teachers' perceptions regarding the challenges associated with the evaluation process; five-item Likert scale utilised (1 indicating "Strongly disagree" to 5 indicating "Strongly Agree")	5	Hong (2018)
	Suggestions to improve evaluation of special education teachers	To assess the principals' agreement with different suggestions to improve the evaluation process; five-item Likert scale utilised (1 indicating "Strongly disagree" to 5 indicating "Strongly Agree")	8	Hong (2018)

Cronbach's alpha was used to test the reliability of the questionnaire (Table 2). The alpha values ranged from 0.558 to 0.760 for the six scales assessed for reliability. Apart from the "Impact of the special education teachers' evaluation process" scale ($\alpha=0.760$), the alpha values of the remaining scales were lower than 0.75. However, no items were removed from the questionnaire as these values fell into

the moderately reliable ranges ($\alpha=0.50-0.75$) based on the range suggested by Hinton and colleagues (2014) for reliability.

Table 2: Reliability analysis

Variables	Cronbach's Alpha	N of Items
Components of special education teachers' evaluation	0.592	5
Sources of performance information for the special education teachers' evaluation process	0.616	3
Effectiveness of special education teachers' evaluation	0.558	3
Impact of the special education teachers' evaluation process	0.760	5
Challenges associated with evaluation of special education teachers	0.638	3
Suggestions to improve evaluation of special education teachers	0.685	4

Statistical Analyses

The perceptions of the principals regarding the effectiveness of special education teacher evaluation processes in public schools in the Makkah Region of the Kingdom of Saudi Arabia were obtained using the Arabic version of the questionnaire. The questionnaire was administered to the principals using a Google Form which was distributed using WhatsApp. The questionnaire was first piloted with 30 principals (10 each from the three different cities in the Makkah Region). The pilot helped determine the time that would be approximately required by the principals to complete the questionnaire and to identify modifications to the content of the questionnaire (additions/deletions/changes). After the pilot study where the participants indicated that the questionnaire did not require substantial modification, the questionnaire was administered to the 498 principals. Subsequently, the study utilised different statistical analyses such as, frequencies and percentages, descriptive

statistics (mean (M) and standard deviation (SD)), and inferential statistics (correlation, Structural Equation Modelling using Partial Least Squares). The normality of the data was tested using Kolmogorov-Smirnov statistic, with Lilliefors significance level and the Shapiro-Wilk statistic (Table 3). The study's data were not found to be normally distributed. Consequently, non-parametric tests such as, Mann-Whitney U test, Kruskal-Wallis test, and Spearman's rho, were utilized for the inferential analyses.

Table 3: Normality testing of the data

	Basis	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Age							
Effectiveness of special education teachers' evaluation	21-25	0.335	8	0.009	0.804	8	0.032
	26-30	0.136	21	0	0.956	21	0
	31-35	0.12	22	0	0.941	22	0
	>35	0.153	54	0.003	0.943	54	0.012
Impact of the special education teachers' evaluation process	26-30	0.158	21	0	0.94	21	0
	31-35	0.174	22	0	0.908	22	0
	>35	0.285	54	0	0.859	54	0
Gender							
Effectiveness of special education teachers' evaluation	Male	0.102	34	0	0.955	34	0
	Female	0.151	15	0	0.923	15	0
Impact of the special	Male	0.17	34	0	0.931	34	0

	Basis	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
education teachers' evaluation process	Female	0.159	2 15 6	0	0.88	2 15 6	0
Education							
Effectiveness of special education teachers' evaluation	Graduate	0.115	49 2	0	0.955	49 2	0
Impact of the special education teachers' evaluation process	Graduate	0.159	49 2	0	0.931	49 2	0
Qualification in special education							
Effectiveness of special education teachers' evaluation	Yes	0.331	12	0.001	0.65	12	0
	No	0.115	48 6	0	0.957	48 6	0
Impact of the special education teachers' evaluation process	Yes	0.331	12	0.001	0.65	12	0
	No	0.167	48 6	0	0.921	48 6	0
Teaching experience							
	≤ 1	0.407	6	0.002	0.64	6	0.001
Effectiveness of special education teachers' evaluation	2 - 5	0.126	30 6	0	0.954	30 6	0
	6 - 10	0.125	12 8	0	0.938	12 8	0
	>11	0.155	58	0.001	0.937	58	0.005
Impact of the special education teachers' evaluation process	2 - 5	0.157	30 6	0	0.932	30 6	0
	6 - 10	0.203	12 8	0	0.885	12 8	0
	>11	0.236	58	0	0.912	58	0

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	Basis	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Years as principal							
Effectiveness of special education teachers' evaluation	≤ 1	0.245	10	0.09	0.892	10	0.177
	2 - 5	0.229	66	0	0.867	66	0
	6 - 10	0.105	358	0	0.964	358	0
	>11	0.141	64	0.003	0.914	64	0
	≤ 1	0.482	10	0	0.509	10	0
Impact of the special education teachers' evaluation process	2 - 5	0.107	66	0.058	0.945	66	0.005
	6 - 10	0.163	358	0	0.923	358	0
	>11	0.242	64	0	0.874	64	0
School location							
Effectiveness of special education teachers' evaluation	Makkah	0.213	90	0	0.841	90	0
	Jeddah	0.204	246	0	0.903	246	0
	Taif	0.175	162	0	0.877	162	0
Impact of the special education teachers' evaluation process	Makkah	0.217	90	0	0.851	90	0
	Jeddah	0.18	246	0	0.923	246	0
	Taif	0.235	162	0	0.815	162	0
Total number of special education teachers in school							
Effectiveness of special education teachers' evaluation	5 - 10	0.181	168	0	0.893	168	0
	10 - 20	0.149	330	0	0.951	330	0
Impact of the special	5 - 10	0.173	16	0	0.878	16	0

	Basis	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
education teachers' evaluation process	10 – 20	0.154	8	0	0.929	8	0
Number of students with disabilities in school							
Effectiveness of special education teachers' evaluation	<20 students	0.119	37	0	0.947	37	0
	21 – 50 students	0.19	12	0	0.863	12	0
Impact of the special education teachers' evaluation process	<20 students	0.149	37	0	0.942	37	0
	21 – 50 students	0.238	12	0	0.811	12	0
Number of students with disabilities in each class							
Effectiveness of special education teachers' evaluation	6 – 10 pupils	0.117	37	0	0.941	37	0
	>10 pupils	0.223	12	0	0.893	12	0
Impact of the special education teachers' evaluation process	6 – 10 pupils	0.174	37	0	0.915	37	0
	>10 pupils	0.182	12	0	0.904	12	0

These analyses served to assess the principals' perceptions regarding the effectiveness of special education teacher evaluation processes in public schools in the Makkah Region of KSA. All analyses were performed using IBM's Statistical Package for the Social Sciences (SPSS) software version 24.0 and SmartPLS 3.

Results:

Characteristics of the Principals

The majority of the participating principals were male (68.7%) in the age group of >40 years (55.8%). Further, the majority

had completed their graduation (98.8) and only a few (1.2%) were post-graduates. Nevertheless, the majority (97.6%) had no qualification in special education. Additionally, the majority (61.4%) had 1 – 15 years' teaching experience and the majority (84.8%) had functioned for six years or more as principals (Table 4). The principals were chiefly from schools in Jeddah (49.4%), followed by Taif (32.5%), and Makkah (18.1%). The principals' schools had at least five special education teachers. Approximately two-thirds (66.3%) of the schools had 10 – 20 special education teachers.

The typical number of students with disabilities in the principals' schools was <20 as reported by 74.7% of the principals. However, each class appeared to have at least five students with disabilities as reported by 75.9% of the principals. The remaining 24.1% indicated that there were classes with >10 students with disabilities (Table 4). The high number of students with disabilities in a class, indicated perhaps that there was a concentration of such students in a certain grade. This also indicates the probable recency of the opening up of schools in this region to inclusive educational practices.

Table 4: Characteristics of the Sample

Characteristic	Frequency	Percentage
Age		
< 30 years	8	1.6
31 - 40 years	212	42.6
41 - 50 years	224	45.0
> 50 years	54	10.8
Gender		
Male	342	68.7
Female	156	31.3
Education		
Graduate	492	98.8
Masters	6	1.2

Characteristic	Frequency	Percentage
Qualification in special education		
Yes	12	2.4
No	486	97.6
Teaching experience		
≤ 10 years	6	1.2
11 - 15 years	306	61.4
16 - 20 years	128	25.7
>20 years	58	11.6
Years as principal		
≤ 1 year	10	2.0
2 - 5 years	66	13.3
6 - 10 years	358	71.9
>11 years	64	12.9
School location		
Makkah	90	18.1
Jeddah	246	49.4
Taif	162	32.5
Total number of special education teachers in school		
5 – 10	168	33.7
10 – 20	330	66.3
Number of students with disabilities in school		
<20 students	372	74.7
21 – 50 students	126	25.3
Number of students with disabilities in each class		
6 – 10 pupils	378	75.9
>10 pupils	120	24.1

Perceptions regarding the evaluation of special education teachers in Saudi Arabia

The data obtained from the principals revealed that the majority (77.1%) of them believed that the evaluation of special education teachers should not be performed using the same tools/approaches as general education teachers. However, all of them (100%) agreed that there is a need for special education

teachers to be evaluated differently. Also, the principals' data revealed that most of them (95.2%) indicated that their school districts utilised formal and informal evaluations of special education teachers. Consequently, the principals' responses revealed that they had some awareness of the components of a formal evaluation as the majority (84.3%) agreed that formal evaluations included classroom observations and review of lesson plans but not pre-/post-observation conferences. It could be seen that all of them (100%) agreed that the average number of formal evaluations for a special education teacher was 1-2 observations. The average length of formal evaluations was typically understood to be 20-30 minutes as reported by the majority of the principals (48.2%) followed by 10-20 minutes as reported by 37.3% of the principals. Only 14.5% of the principals indicated that the length of a formal evaluation was 30 minutes or more. The formal evaluations were performed by supervisors as reported by all (100%) the principals. That is, evaluator(s) from the school district, officials from the Ministry of Education, and principals from other schools in the same school district did not participate in formal evaluations.

Regarding informal evaluations, all (100%) the principals indicated that solely walk-through observations were utilised. That is, the schools did not use informal evaluation approaches such as, observation of teachers' behaviour in referral and placement meetings, observation of teachers' participation in professional activities, or informal comments from students/parents/other teachers (Table 5).

Table 5: Process of Evaluation of special education teachers

	Frequency	Percentage
Believe that the evaluation of special education teachers can be performed using the same tools/approaches as general education teachers		
Yes	114	22.9

	Frequency	Percentage
No	384	77.1
There is no need for special education teachers to be evaluated differently		
No, there is a need, they have to be evaluated differently	498	100.0
School district utilise formal and informal evaluations of special education teachers		
Yes	474	95.2
No	24	4.8
Formal evaluations of a special education teacher include		
Review of lesson plans	36	7.2
Classroom observation	42	8.4
Review of lesson plans, Classroom observation	420	84.3
Average number of formal evaluations for a special education teacher		
1-2 observations	498	100.0
Average length of formal evaluations for a special education teacher		
10-20 minutes	186	37.3
20-30 minutes	240	48.2
30 minutes or more	72	14.5
Who performs the formal evaluations for a special education teacher		
Supervisors	498	100.0
Informal evaluations of a special education teacher include		
Walk-through observations	498	100.0

Regarding the components of the evaluation of special education teachers in Saudi Arabia, the principals' perceptions revealed that a combination of components was used in the evaluation (Table 6). Their ratings ranged from 1.289 (SD=0.454) to 4.289 (SD=0.687) signifying that a combination of formal and informal observation was used to gather data about special education teachers'

performance and that supervisors met with special education teachers to establish and review their professional growth activities. Moreover, the responses indicated that formal methods and informal observation were used to gather data about special education teachers' performance, and that IEP goals were utilized as student learning goals to measure effectiveness of special education teachers. However, it seemed that student achievement was not incorporated into the evaluation scores of special education teachers nor did supervisors meet with special education teachers to establish and review their goals.

Table 6: Components of the evaluation of special education teachers in Saudi Arabia

Components of the evaluation	Mean	± SD
Student achievement is incorporated into the evaluation scores of special education teachers	2.012	± 1.199
IEP goals are utilized as student learning goals to measure effectiveness of special education teachers	3.373	± 1.211
Supervisors meet with special education teachers to establish and review their goals	1.289	± 0.454
Supervisors meet with special education teachers to establish and review their professional growth activities	3.651	± 0.857
Informal observation is used to gather data about special education teachers' performance. For example, walk-through observations, teachers' behaviour in referral and placement meetings, participation in professional activities, informal comments from students/parents/other teachers	3.482	± 1.146
Formal methods are used to gather data about special education teachers' performance. For example, reviewing lesson plans, classroom observation, pre-/post-observation conferences	4.289	± 0.687
A combination of formal and informal observation is used to gather data about special education teachers' performance	3.711	± 1.199

The principals' responses regarding the sources of information used in the process of evaluation of special education teachers revealed that the most frequently utilized sources included meetings with evaluator; scrutiny of student performance; and student assessments (Table 7). Their ratings in this regard ranged from 3.012 (SD=0.977) to 3.771 (SD=0.701). In contrast, observation of classroom performance of special education teachers; scrutiny of artifacts (e.g., resources, lesson plans, communication between home and school, etc.); peer assessments; and self-assessments seemed to receive lower consideration for use with the principals' ratings ranging from 1.386 (SD=0.656) to 2.759 (SD=0.816).

Table 7: Sources of performance information for the special education teachers' evaluation process

Sources of performance information	Mean ± SD
Observation of classroom performance of special education teachers	2.759 ± 0.816
Meetings with evaluator	3.771 ± 0.701
Scrutiny of artifacts (E.g., resources, lesson plans, communication between home and school, etc.)	1.916 ± 0.732
Scrutiny of student performance	3.277 ± 0.856
Student assessments	3.012 ± 0.977
Peer assessments	1.386 ± 0.656
Self-assessments	1.482 ± 0.666

Regarding the characteristics of the feedback provided to teachers during the evaluation process, the principals' responses indicated that a high level of information was provided during the evaluation of special education teachers (Table 8). In addition, the frequency of formal feedback seemed to be higher than the frequency of informal feedback. The depth of information given

during the process was at a medium level as was the amount of time spent on the evaluation process. However, the principals' responses also revealed that the amount of time allotted by the school for teachers' professional development was limited. Moreover, the intended outcome of evaluation was oriented towards more the accountability of teachers rather than their development. Their principals' ratings in this regard ranged from 1.892 (SD=0.808) to 3.675 (SD=0.624)

Table 8: Characteristics of the feedback provided during the evaluation of special education teachers in Saudi Arabia

Characteristics of the feedback	Mean	± SD
Amount of information provided	3.675	± 0.624
Frequency of formal feedback	3.771	± 0.75
Frequency of informal feedback	2.373	± 0.833
Depth of information given	2.157	± 1.059
Amount of time spent on the evaluation process	2.157	± 1.437
Amount of time allotted by the school for teachers' professional development	1.892	± 0.808
Intended outcome of evaluation	2.205	± 1.150

The principals' ratings ($M \pm SD = 1.506 \pm 0.718$ to $M \pm SD = 4.566 \pm 0.681$) regarding the effectiveness of evaluation of special education teachers in their school district revealed that they agreed that the evaluation is more effective if performed by evaluators with a special education background. Moreover, they indicated that it was necessary that the evaluators have sufficient knowledge and training to effectively observe and evaluate special

education teachers. The principals' ratings also indicated that the overall evaluation process was effective, on the whole, and that the evaluation process in the school district was in line with the KSA's guidelines for special education. However, they indicated that the special education processes and procedures implemented in the school district were not always as per the KSA's guidelines for special education. Also, their ratings indicated that the evaluation would not be more effective if performed by evaluators with a background in general education (Table 9).

Table 9: Effectiveness of special education teachers' evaluation

Effectiveness of evaluation	Mean ± SD
On the whole, the overall evaluation process is effective	3.325 ± 0.763
The evaluation process in the school district is in line with the KSA's guidelines for special education	3.181 ± 0.680
The special education processes and procedures implemented in the school district are as per the KSA's guidelines for special education	2.735 ± 0.747
The evaluation is more effective if performed by evaluators with a special education background	4.566 ± 0.681
The evaluation is more effective if performed by evaluators with a background in general education	1.506 ± 0.718
The evaluators have sufficient knowledge and training to effectively observe and evaluate special education teachers	3.602 ± 0.85

Regarding the impact of the process of evaluation of special education teachers, the principals' responses ($M \pm SD = 1.831 \pm 0.904$ to $M \pm SD = 3.566 \pm 0.973$) revealed that the overall impact of the evaluation process on promoting job performance accountability of special education teachers; on quality of special education teachers; and on the professional practices of special education a teacher was strong. On the other hand, the overall impact of the evaluation process on professional growth of a special education teacher; on development goals of special education teachers; on student learning; and on school climate was medium. The overall impact of

the evaluation process on improvement goals of the school and on promoting professional development of special education teachers was lower with the principals indicating that these aspects had only some impact (Table 10).

Table 10: Impact of the special education teachers' evaluation process

Impact of evaluation process	Mean ± SD
Overall impact of the evaluation process on the professional practices of special education a teacher.	3.205 ± 0.819
Overall impact of the evaluation process on professional growth of a special education teacher	2.892 ± 0.932
Overall impact of the evaluation process on student learning	2.639 ± 1.014
Overall impact of the evaluation process on improvement goals of the school	1.88 ± 1.035
Overall positive impact of the evaluation process on school climate	2.313 ± 1.042
Overall impact of the evaluation process on quality of special education teachers	3.41 ± 0.893
Overall impact of the evaluation process on development goals of special education teachers	2.771 ± 0.782
Overall impact of the evaluation process on promoting professional development of special education teachers	1.831 ± 0.904
Overall impact of the evaluation process on promoting job performance accountability of special education teachers	3.566 ± 0.973

In addition, the principals' ($M \pm SD = 1.904 \pm 0.688$ to $M \pm SD = 4.614 \pm 3.206$) responses regarding the challenges associated with the evaluation of special education teachers revealed that the principal challenge encountered was measuring the progress of students with disabilities. Moreover, they indicated that it can be challenging to precisely measure the teaching methods of special education teachers. In addition, the principals' perceptions indicated that there is no formal guidance on how to use observation as an

evaluation tool. However, facets such as, the evaluation system does not factor in different roles and responsibilities of special education teachers and the evaluation system does not factor in situations where the special education teacher is engaged in co-teaching seemed to present lesser difficulties during the process of evaluation (Table 11).

Table 1: Challenges associated with evaluation of special education teachers

Challenges associated with evaluation	Mean \pm SD
Measuring the progress of students with disabilities can be challenging	4.614 \pm 3.206
It can be challenging to precisely measure the teaching methods of special education teachers	3.675 \pm 0.947
The evaluation system does not factor in different roles and responsibilities of special education teachers	1.916 \pm 0.795
There is no formal guidance on how to use observation as an evaluation tool	3.217 \pm 0.92
The evaluation system does not factor in situations where the special education teacher is engaged in co-teaching	1.904 \pm 0.688

Finally, the principals were provided with some suggestions, based on the researcher's experience and existing research, to improve the evaluation of special education teachers (Table 12). The principals' responses ($M \pm SD = 2.398 \pm 1.006$ to $M \pm SD = 4.060 \pm 0.813$) indicated that they agreed with the suggestion that evaluation systems for special education teachers must consider their control, management, and organization of classrooms. Moreover, they agreed that evaluation systems for special education teachers must consider their knowledge and usage of techniques and materials for teaching; their usage of instructional time; their capacity to create a setting where self-discipline and self-concepts can be learned by students; teachers' communication with students regarding content areas to enhance student learning and understanding; and their relationships with students, relationships with other staff, and relationships with students' parents. On the other hand, suggestions

such as, the process to develop systems to evaluate special education teachers must include all relevant stakeholders (e.g., teachers, principals, parents, Ministry officials); and evaluation systems for special education teachers must consider their usage of encouragement to increase student participation were less favourably received.

Table 12: Suggestions to improve evaluation of special education teachers

Suggestions to improve evaluation	Mean ± SD	
The process to develop systems to evaluate special education teachers must include all relevant stakeholders (e.g., teachers, principals, parents, Ministry officials)	2.639	± 0.99
Evaluation systems for special education teachers must consider their knowledge and usage of techniques and materials for teaching	4.000	± 1.054
Evaluation systems for special education teachers must consider their control, management, and organization of classrooms	4.060	± 0.813
Evaluation systems for special education teachers must consider their relationships with students, relationships with other staff, and relationships with students' parents	3.229	± 1.34
Evaluation systems for special education teachers must consider teachers' communication with students regarding content areas to enhance student learning and understanding	3.434	± 1.195
Evaluation systems for special education teachers must consider their usage of encouragement to increase student participation	2.398	± 1.006
Evaluation systems for special education teachers must consider their usage of instructional time	3.711	± 0.939
Evaluation systems for special education teachers must consider their capacity to create a setting where self-discipline and self-concepts can be learned by students	3.675	± 1.195

Difference in effectiveness of special education teachers' evaluation and impact of the special education teachers' evaluation process based on characteristics of the principals and their schools

Mann-Whitney U test was utilized to check if there were differences in the effectiveness of special education teachers' evaluation and impact of the special education teachers' evaluation process based on the principals' gender, education, qualification in special education, total number of special education teachers in school, number of students with disabilities in school, and number of students with disabilities in each class. The Mann-Whitney U Test revealed that there were no significant differences (at $p \leq 0.05$) in the principals' perceptions by gender, education, or qualification in special education. However, the total number of special education teachers in school and number of students with disabilities in each class had a significant impact on the perceptions of the principals regarding effectiveness of special education teachers' evaluation and impact of the special education teachers' evaluation process at $p \leq 0.5$ (Table 13).

Table 13: Difference in effectiveness of special education teachers' evaluation and impact of the special education teachers' evaluation process based on teachers' characteristics

Characteristic	Effectiveness of special education teachers' evaluation		Mann-Whitney U (p value)	Impact of the special education teachers' evaluation process		Mann-Whitney U (p value)
	Mean rank	Sum of Ranks		Mean rank	Sum of Ranks	

Gender

Male	129.08	22072.50	5971.5 (0.182)	122.87	21010.50	6304.5 (0.487)
Female	116.0	9052.5		129.67	10114.5	

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Characteristic	Effectiveness of special education evaluation		Mann-Whitney U (p value)	Impact of the special education teachers' evaluation process		Mann-Whitney U (p value)
	Mean rank	Sum of Ranks		Mean rank	Sum of Ranks	
Education	6	0		0		
Graduate	125.8	30957.	162 (0.092)	125.57	30889.5	229.5 (0.258)
	4	00			0	
Masters	56.00	168.00		78.50	235.50	
Qualification in special education						
Yes	138.5	831.00	648 (0.639)	113.00	678.00	657 (0.678)
	0					
No	124.6	30294.		125.30	30447.0	
	7	00			0	
Total number of special education teachers in school						
5 – 10	146.2	12286.	5143.5 (0.000)	59.05	4960.50	1390.5 (0.000)
	7	50				
10 – 20	114.1	18838.		158.57	26164.5	
	7	50			0	
Number of students with disabilities in school						
<20 students	127.4	23713.	5395.5 (0.344)	128.24	23853.0	5256 (0.220)
	9	50			0	
21 – 50 students	117.6	7411.5		115.43	7272.00	
	4	0				
Number of students with disabilities in each class						
6 – 10 pupils	118.4	22387.	4432.5 (0.010)	114.26	21595.5	3640.5 (0.000)
	5	50			0	
>10 pupils	145.6	8737.5		158.83	9529.50	
	3	0				

The Kruskal-Wallis test utilized to check if there were differences in the effectiveness of special education teachers' evaluation and

impact of the special education teachers' evaluation process based on the principals' age, teaching experience, years as principal, and location. In this instance, it could be found that there was a significant difference based on age, teaching experience, and years as principal as regards impact of the special education teachers' evaluation process. However, only teaching experience had a significant impact on the perceptions regarding effectiveness of special education teachers' evaluation. In addition, the school location was found to have a significant impact on the principals' perceptions regarding effectiveness of special education teachers' evaluation and impact of the special education teachers' evaluation process (Table 14).

Table 14: Difference in in effectiveness of special education teachers' evaluation and impact of the special education teachers' evaluation process based on age, teaching experience, years a principal, and school location

	Effectiveness of special education teachers' evaluation	Chi-Square (p)	Impact of the special education teachers' evaluation process	Chi-Square (p)
	Mean rank		Mean rank	
Age				
< 30	199.25		18.5	
31 - 40	257.65	2.426	265.0094	24.213
41 - 50	241.97	(0.489)	241.2768	(0.000)
> 50	256.17		256.9444	
Teaching experience				
≤ 10	228.50		18.50	
11 - 15	261.25	10.038	247.74	17.406
16 - 20	215.66	(0.018)	266.00	(0.001)
>20	264.40		246.29	
Years as principal				
≤ 1	228.50		18.50	
2 - 5	261.25	4.379	247.74	25.293
6 - 10	215.66	(0.223)	266.00	(0.000)

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	Effectiveness of special education evaluation	Chi-Square (p)	Impact of the special education evaluation process	Chi-Square (p)
>11	264.40		246.29	
School location				
Makkah	318.90	26.063 (0.000)	324.90	68.624 (0.000)
Jeddah	232.67		268.38	
Taif	236.50		178.94	

Correlation Analysis

The relationships between the different variables of the study were tested using the Spearman's Rho analysis (Table 15). The correlations indicated that components and sources of information of special education teacher evaluation were positively related to the effectiveness of special education teacher evaluation and the impact of special education teacher evaluation process. However, the effectiveness of special education teachers' evaluation was negatively, though not significantly, correlated with impact of the special education teachers' evaluation process ($r=-0.78$). The challenges associated with evaluation of special education teachers had a negative and significant association with effectiveness of special education teachers' evaluation ($r=0.093$) though the strength of this relationship was low.

Table 15: Correlation (Spearman's Rho)

	(1)	(2)	(3)	(4)	(5)	(6)
Components of special education teachers' evaluation (1)	1					
Sources of performance information for the special education	0.247*	1				

	(1)	(2)	(3)	(4)	(5)	(6)
teachers' evaluation process (2)						
Effectiveness of special education teachers' evaluation (3)	0.201*	0.417*	1			
Impact of the special education teachers' evaluation process (4)	0.238*	0.274*	-0.078	1		
Challenges associated with evaluation of special education teachers (5)	0.055	0.238*	-	0.632*	1	
Suggestions to improve evaluation of special education teachers (6)	-0.010	0.144*	0.089	0.429*	0.507*	1

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

**. Correlation is significant at the 0.05 level (2-tailed).*

Hypotheses Testing

The SmartPLS 3 software was utilised to create a Structural equation model (SEM) using Partial Least Squares method (Al-Marroof & Al-Emran, 2018). Essentially, SEM was used because the paper attempts also to understand the factors that influence the effectiveness of the evaluation of special education teachers and the eventual outcomes of special education in the KSA. The SEM model was fit to the data with the variables, components of evaluation, Sources of performance information, and challenges of evaluation, to assess their impact on the effectiveness of special education evaluation and the overall impact of the process of evaluation (Figure 1). These variables were chosen because each tapped diverse facets of the outcomes of the process of special education teacher evaluation.

The structural model and associated analytical results are depicted in Figure 2. The path coefficients (β), the explained variance (R^2) and

the effect size (f^2) for each path segment in the model are portrayed. It could be seen that all of the path coefficients were significant and in the proposed direction.

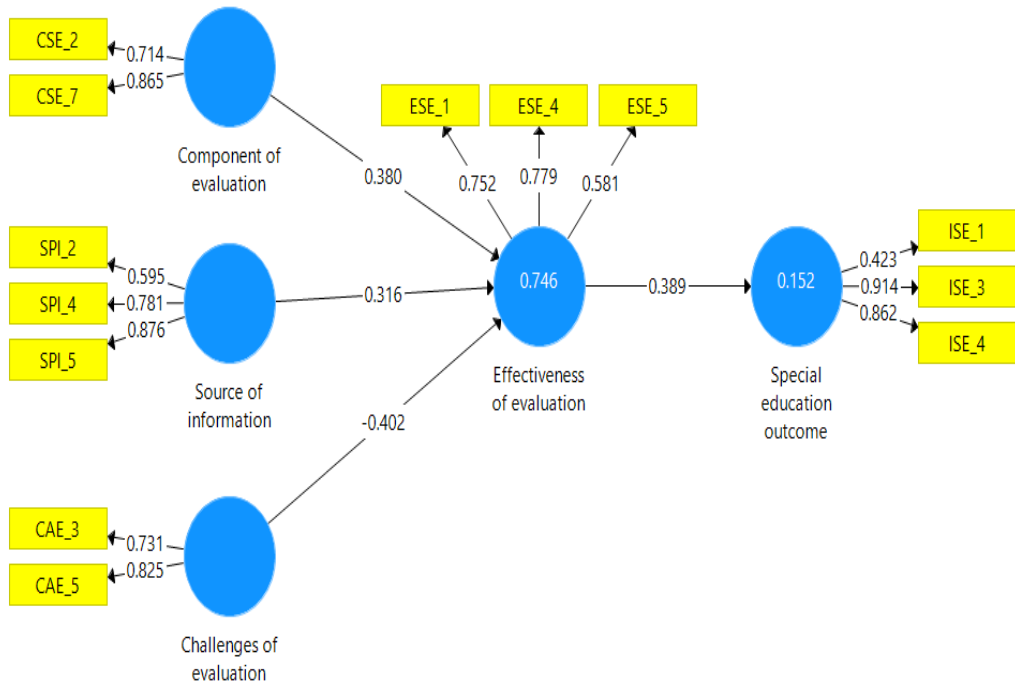


Figure 2: PLS model for factor loadings

From the R^2 value (Table 16), it can be seen that 74.4% of the effectiveness of evaluation is explained by components of evaluation, source of information, and challenges of evaluation. This indicates that the effectiveness of evaluation is possibly positively impacted by the components used in the evaluation and the different sources of information. In contrast, it is negatively impacted by the challenges associated with the evaluation process. On the other hand, it was also found that only 15.0% of the outcomes of special education could be explained by effectiveness of evaluation. This suggests that though evaluation may be effective, the impact is not

related or extended to special education outcomes. Nevertheless, more than 1.5% of the variance in a predicting construct was accounted for by each of the predicting constructs in the model. Further, the R^2 values for both the predicted constructs in the model were >0.10 . This outcome signifies the adequacy of the structural model as it satisfies the criteria for the level of variance explained (R -squared ≥ 0.10 and predictor variable explaining $\geq 1.5\%$ of variance) (Falk & Miller, 1992).

Table 16: R square

	R Square	R Square Adjusted
Effectiveness of evaluation	0.746	0.744
Special education outcome	0.152	0.150

The PLS algorithm was also run to generate path coefficients. The significance of these coefficients was examined by running bootstrapping with 5000 bootstrapping samples and 498 cases (Hair et al., 2011, 2014; Henseler et al., 2009). As seen in Figure 4 and Table 17, the direct paths between Challenges of evaluation and Effectiveness of evaluation, Component of evaluation and Effectiveness of evaluation, Effectiveness of evaluation and Special education outcome, Source of information and Effectiveness of evaluation were all significant. In other words, the effectiveness of evaluation was negatively and significantly impacted by challenges of evaluation but positively and significantly impacted by components of evaluation and sources of information. Relatedly, special education outcome was positively and significantly impacted by Effectiveness of evaluation. These findings support the four hypotheses proposed by the study.

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Table 17: Path coefficients

Hypotheses	Origin Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P
Challenges of evaluation -> Effectiveness of evaluation	-0.404	-0.404	0.034	11.952	0.000
Components of evaluation -> Effectiveness of evaluation	0.367	0.365	0.026	13.932	0.000
Effectiveness of evaluation -> Special education outcome	0.395	0.401	0.038	10.535	0.000
Sources of information - > Effectiveness of evaluation	0.325	0.327	0.029	11.322	0.000

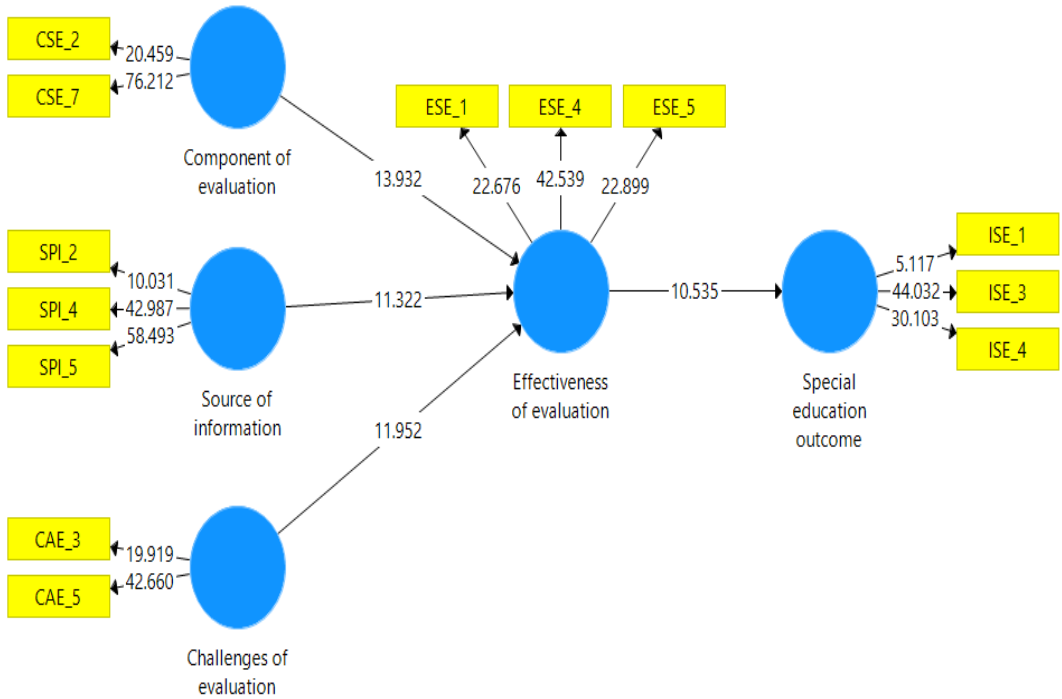


Figure 4: Bootstrapping model

Discussion:

The stated purpose of this research was to investigate the perceptions of principals regarding the effectiveness of special education teacher evaluation processes in public schools in the Makkah Region of the KSA. The findings of the study provide insights regarding the current state of special education teacher evaluation in the country. Consistent with prior research, the findings of the study highlight the different aspects of the process underlying the evaluation of special education teachers in the context of KSA.

From the principals’ responses, some insights regarding the overall process of evaluation of special education teachers in Saudi Arabia could be identified. For instance, the principals indicated that the evaluation of special education teachers needed to be performed in a different manner than the evaluation of general education teachers.

Moreover, they indicated that their school districts utilised formal and informal evaluations of special education teachers (Gilmour & Jones, 2020). The approaches used for formal evaluations were limited to classroom observations and review of lesson plans whereas informal evaluations were limited to walk-through observations. Both forms of evaluations were performed by the supervisors of special education teachers. While this latter finding does not precisely align with prior research which asserts that the most appropriate persons to perform the evaluation of teachers are the school administrators or principals, the role of the supervisor in the KSA appears to encompass evaluation of teachers (Widener, 2011). The typical length of a formal evaluation was found to be less than thirty minutes, which is indicative of evaluations being considered a mere necessity to be completed at specified intervals as stipulated by the special education guidelines in the country.

The evaluation process was found to include many components such as, formal and informal observation (Gilmour & Jones, 2020; Muoio, 2019). Moreover, while the professional growth activities of special education teachers were established and reviewed in discussions with their supervisors, their goals were overlooked. In addition, data related to the performance of special education teachers were obtained from the formal and informal methods, whereas IEP goals were utilised to measure the effectiveness of teachers as regards student learning goals (Gilmour & Jones, 2020; Muoio, 2019). The sources of information most frequently utilised in the evaluation process included meetings with evaluator; scrutiny of student performance; and student assessments. Sources receiving lower favour included observation of classroom performance of the teachers; scrutiny of artifacts they utilised; and peer and self-assessments (Muoio, 2019).

The principals' responses indicated that the feedback provided during the evaluation process included high extents of information. Moreover, formal feedback was provided more often

than informal feedback. However, the depth of information provided during the evaluation and the time spent on the process were believed to be at medium levels. Also, the amount of time allotted for teachers' professional development by their schools was low, indicating a lack of emphasis on professional development. Relatedly, the emphasis of the outcome of evaluation appeared to give greater significance to accountability over development (Muio, 2019).

In addition, the principals' perceptions regarding the evaluation of special education teachers revealed the need for the evaluation of special education teachers to be performed by persons with a background in special education and with the necessary knowledge and training to evaluate special education teachers (Widener, 2011). Interestingly, while the principals indicated that the evaluation process in their school districts was effective and in line with the country's guidelines, it appeared that not all processes and procedures were implemented in conformance with the country's guidelines for special education.

The impacts of the process of special education evaluation could be understood to be the promotion of job performance accountability of special education teachers, their quality and their professional practices. The impacts were lower with regard to the teachers' professional growth and development goals, student learning, school climate, and schools' improvement goals (Muio, 2019).

The principal challenges encountered with the evaluation of special education teachers were related to measuring both the progress of the students they worked with and their teaching methods. Another significant challenge was the lack of guidance related to the usage of observation as a tool for evaluation (Hong, 2018).

The study also found that certain characteristics of the principals and their schools characteristics impacted the principals' perceptions

of the effectiveness and impact of the evaluation of special education teachers in Saudi Arabia. Specifically, the total number of special education teachers in school, number of students with disabilities in each class, school location, and the principals' teaching experience had an impact on the principals' perceptions of the effectiveness and impact of evaluation. In addition, age and years as principal had an impact on the principals' perceptions of the impact of evaluation.

The correlation analysis revealed that the components and sources of information of special education teacher evaluation were positively related to the effectiveness and the impact of special education teacher evaluation process. However, negative relations were found between the effectiveness of special education teachers' evaluation and the impact of the special education teachers' evaluation process and also the challenges associated with evaluation of special education teachers and the effectiveness of special education teachers' evaluation.

The testing of the study's hypotheses using the PLS-SEM approach revealed support for all the four hypotheses of the study. That is, *H1*: Components of evaluation have a positive impact on the effectiveness of evaluation of special education teachers; *H2*: Sources of performance information have a positive impact on the effectiveness of evaluation of special education teachers; *H3*: Challenges of evaluation have a negative impact on the effectiveness of evaluation of special education teachers; and *H4*: Effectiveness of evaluation has a positive impact on the impact (outcomes) of evaluation of special education teachers can be *accepted*. In addition, the use of the PLS-SEM approach confirmed the construct and composite reliability of the questionnaire together with its convergent and discriminant validity indicating that the questionnaire can be employed in further studies investigating the evaluation of special education teachers.

Conclusion:

The purpose of this study was to offer insights regarding the process of evaluation of special education teachers in the KSA. In this regard, the study used an exploratory quantitative design using a custom questionnaire developed for the study by the researcher. The perceptions of principals from public schools with integrated special education classes in the Makkah region revealed that the evaluation of special education teachers was performed by their supervisors typically using a combination of formal and informal methods. However, the study found from the principals' responses that there were some shortcomings regarding the time spent on the evaluation process as the time spent, on average, on formal evaluations was 20-30 minutes.

The study also found that the effectiveness of special education teachers was measured using students' IEP goals (as student learning goals). That is, student achievement was overlooked. Additionally, while supervisors meet with special education teachers to establish and review their activities related to professional growth, the teachers' goals seem to be overlooked. Overall, it appeared that the evaluation was focused on teacher accountability rather than their professional development.

Regarding effectiveness of evaluation, the study found that the involvement of evaluators with a background in special education and with training and knowledge pertinent to evaluation could be beneficial. There also appeared to be some discrepancy as regards the implementation of guidelines related to special education. For instance, while the evaluation process seemed to strictly adhere to the country's guidelines for special education, adherence was not as rigid as regards the overall processes and procedures related to special education. Nevertheless, the impact of the process of evaluation seemed to focus on accountability, quality, and professional practices of special education teachers, rather than student outcomes, teachers' professional growth/development and development goals, and the schools' improvement goals. These

indicate a need for a revision of the existing system for special education teachers' evaluation.

The study also highlighted the principal challenges related to the evaluation of special education teachers. It appeared that the main challenges were related to assessing the progress of students with disabilities and assessing the teaching approaches of the special education teachers. In addition, the principals' indicated that there was a need to provide training to use the evaluation tools and a revision of the system was required to factor in the different roles and responsibilities and contexts of special education teachers. It may be noted that this study, to the extent known, is possibly one of the first to investigate evaluation of special education teachers in the KSA.

Overall, the study's findings highlight that the effectiveness of special teacher evaluation is impacted by the components of the process and the sources of performance information utilized. The underlying challenges also impact the effectiveness of special teacher evaluation. In its turn, the effectiveness of special teacher evaluation has a downstream impact on the outcomes of the evaluation.

Limitations of the Study:

The study involved only principals from public schools with integrated special education classes and not special education teachers or their supervisors. Consequently, the findings may present only one perspective of the situation. A future researcher could undertake a similar study involving a broader group of participants. Moreover, the study was undertaken only in Makkah Region which limits the generalisability of the study's findings to the whole of the KSA. This limitation could be addressed by performing a country-wide study to assess the evaluation practices across the country. A future researcher could also undertake a

qualitative study to get deeper insights regarding the evaluation of special education teachers in the KSA.

Another limitation of the study was related to the use of Google Forms to administer the questionnaire as this constrained the researcher's ability to explain the rationale and goals of the study to the participants. A considerable limitation regarding the questionnaire was that the constructs had to be derived from literature related to the evaluation of teachers, in general, and based in the West. A further limitation is that suggestions related to improving the evaluation of special education teachers into the questionnaire. Though the rationale was to try to narrow down suggestions as found in existing literature, the researcher's perceptions have influenced the recommendations or suggestions made by the principals. These are anticipated to change if participants are asked to provide their own perceptions on this matter.

Implications:

The findings of the study indicate that considerable change is required in the process for special education teacher evaluation in the KSA. Drawing on the top two suggestions to as indicated by the principals' responses, the study recommends that evaluation systems for special education teachers must consider their control, management, and organization of classrooms and must also consider their knowledge and usage of techniques and materials for teaching.

Additionally, the study recommends that potential evaluators be provided with knowledge and training related to evaluation of special education teachers. Specifically, with regard to the different processes, components, and sources of information related to evaluation. In addition, training can be provided to evaluators regarding the nature of feedback to be provided. Overall, the emphasis of evaluation needs to be redirected to the development and growth of special education teachers rather than their accountability.

Compliance with Ethical Standards

Conflict of Interest: The author declares that he has no conflict of interest.

Ethical Approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the Ulster University Research Ethics Committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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