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Special Education Teachers' Perceived Self-Efficacy in Teaching Students with Disabilities in Sultanate of Oman and United Arab Emirates

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Abstract: The purpose of the current study was to investigate the level of self-efficacy of special education teachers in teaching students with disabilities in inclusive classrooms. The relationship between the level of self-efficacy and these selected variables: gender, country, teaching experience, and school level taught were examined. Also, the variation of the level of self-efficacy according to the domain of knowledge and skills was examined. Five hundred and thirteen special education teachers from Oman and the UAE participated in the study. The Special Education Teachers' Perceived Self-Efficacy Scale was used to collect data for this study after verifying the construct validity. The findings showed that the teachers perceived their self-efficacy as being efficient in all scale domains except the formal assessment domain. The findings also showed special education teachers' country, gender, and school level taught significantly correlated with their self-efficacy in particular domains of knowledge and skills. Finally, the findings indicated that the level of self-efficacy of special education teachers varies according to the domain of knowledge and skills.

Keywords: Self-efficacy, Inclusion, Special Education Teachers, Sultanate of Oman, UAE.

تصور معلمي التربية الخاصة لفاعليتهم الذاتية في تعليم الطلبة ذوي الإعاقة في سلطنة عُمان والإمارات العربية المتحدة

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ملخص: استهدفت الدراسة الحالية التعرّف على تصورات معلّمي التربية الخاصة لمستوى فاعليتهم الذاتية في تدريس الطلبة ذوي الإعاقة في الصفوف الشاملة، والكشف عن العلاقة بين الفاعلية الذاتية لدى المعلّمين ومتغيّرات الجنس، والدولة، والخبرة في التدريس، والمرحلة الدراسية، بالإضافة إلى الكشف عن اختلاف مستوى الفاعلية الذاتية باختلاف المجال المعرفي والمهارات. وقد تكوّنت عيّنة الدراسة من (513) معلّما ومعلّمة من معلمي التربية الخاصة في سلطنة عُمان والإمارات العربية المتحدة. وتمّ استخدام مقياس "تصورات معلمي التربية الخاصة لفاعليتهم الذاتية" بعد التحقق من دلالة صدق المفهوم للمقياس. أشارت النتائج إلى أن تصورات أفراد الدراسة حول فاعليتهم الذاتية كانت إيجابية في جميع أبعاد المقياس باستثناء بُعد التقييم الرسمي. واتضح أيضاً وجود علاقة ذات دلالة بين مستوى الفاعلية الذاتية عند المعلمين ومتغيرات الجنس، والدولة، والخبرة في التدريس، والمرحلة الدراسية في بعض أبعاد المقياس. كما تبيّن أن مستوى الفاعلية الذاتية عند معلمي التربية الخاصة يختلف باختلاف المجال المعرفي والمهارات.

الكلمات المفتاحية: الفاعلية الذاتية، الصفوف الشاملة، معلمي التربية الخاصة، سلطنة عُمان، الإمارات العربية المتحدة.

Introduction

Over the course of three decades, a large number of studies addressed general education teachers' self-efficacy in teaching typically developing children. However, less is known about the general or special education teachers' self-efficacy in teaching students with disabilities (Hsien, 2007; Kaner, 2010; Sharma, Loreman, & Forlin, 2012).

Self-efficacy evolved from Bandura's social cognitive theory. Bandura (1997) defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (p. 3). Self-efficacy influences the person's choices, efforts, and perseverance (Bandura, 2006). Additionally, it impacts the way a person thinks, feels, and behaves (Bandura 1993). Self-efficacy also plays a major role in the learning process (Ramdas & Zimmerman, 2008; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998).

The impact of teachers' self-efficacy on the educational outcomes has been widely researched since 1977. Previous research consistently demonstrated that teachers' self-efficacy is associated with students' academic achievement (Akbari & Allvar, 2010; Caprara, Barbaranelli, Steca & Malone, 2006; Moore & Esselman, 1992; Ross, 1992), students' motivation (Bandura, 1977), and students' self-efficacy (Anderson, Greene, & Loewen, 1988).

In addition, the literature suggested that teachers' self-efficacy in teaching students with disabilities associated positively with their attitudes toward inclusion (Ahsan, Sharma, & Deppeler, 2012; Avramidis, Balyliss, & Burden, 2000; Avramidis & Norwich, 2002; Barco, 2007; Emam & Mohamed, 2011; Loreman, Sharma, & Forlin, 2013; Sari, Celikoz, & Secer, 2009; Sokal & Sharma, 2014; Wright, 2013).

The literature also suggested that teachers' gender, school level taught, and teaching experience impact self-efficacy. With regards to teachers' gender, the findings of previous studies were inconsistent. Ahsan,

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Sharma, and Deppeler (2012); and Haj Hussien and Alqaryouti (2015) found that male teachers reported significantly higher levels of self-efficacy than female teachers. In contrast, Barco (2007) reported that female teachers expressed a higher level of self-efficacy in teaching inclusive classrooms than male teachers. However, Hashim, Ghani, Ibrahim, and Zain (2014); Hofman and Kilimo (2014); Loreman, Sharma, and Forlin (2013); and Tejeda-Delgado (2009) reported that the teachers' gender had no significant impact on perceived self-efficacy in teaching inclusive classrooms.

Similarly, the findings of previous studies were inconsistent with regard to the impact of teachers' school level taught on their self-efficacy in teaching students with disabilities. Haj Hussien and Alqaryouti (2015) reported that teachers' school level taught had a significant negative relationship with their self-efficacy in special education and classroom management, while the relationships were not significant with their self-efficacy in assessment and collaboration. Bowlin (2012) found that primary school teachers expressed higher levels of self-efficacy in teaching in inclusive classrooms than secondary school teachers. Emam and Mohamed (2011) found that preschool teachers expressed higher level of self-efficacy in teaching in inclusive classrooms than primary school teachers. However, Ahsan, Sharma, and Deppeler (2012) found that secondary school teachers expressed higher levels of self-efficacy in teaching in inclusive classrooms than primary school teachers.

With regard to the impact of the teachers' teaching experience on general education teachers' self-efficacy, Haj Hussien and Alqaryouti (2015) found that teachers' teaching experience had a significant positive relationship with their self-efficacy in classroom management only, while the relationships were not significant with their self-efficacy in special education, assessment, and collaboration. Hashim, Ghani, Ibrahim and Zain (2014) also reported that teachers' teaching experience had no significant impact on perceived self-efficacy.

Furthermore, the findings of the previous research consistently indicated that general education teachers' level of self-efficacy varied significantly according to the domain of knowledge and skills (Bandura, 2006; Herbert et al., 1997; Haj Hussien & Alqaryouti, 2015; Zimmerman, 2000). Self-efficacy is not a global trait but rather a multidimensional one that varies according to the domain of functioning.

Finally, several researchers expressed concerns with regards to the validity and reliability of the instruments used to measure the teachers' self-efficacy (Haj Hussien, 2014; Henson, 2001; Pajares, 1997; Tschannen-Moran, Woolfolk- Hoy, & Hoy, 1998; Tschannen-Moran & Woolfolk -Hoy, 2001).

In summary, the previous literature provides strong evidence that teachers' perceived self-efficacy significantly impacts their choices, efforts, perseverance, and attitudes toward inclusion, as well as the learning process and the students' educational outcomes. In addition, the previous literature review indicates that there is a lack of research regarding special education teachers' self-efficacy in teaching students with disabilities in inclusive classrooms. Many researchers also examined the relationship between the level of self-efficacy of special education teachers and their gender, school level taught, and teaching experience. However, findings of these studies were inconsistent and further exploration is still needed. Moreover, the previous literature suggests that the level of self-efficacy vary significantly according to the domain of knowledge and skills. Examining the validity of this theoretical postulation in the field of inclusive education is meaningful. Finally, several researchers expressed concerns with regards to the validity and reliability of the instruments used to measure the teachers' self-efficacy.

Problem and Purpose of the Study:

Recently, the Sultanate of Oman and the United Arab Emirates (UAE) have been in the process of implementing inclusive education for all students. Consequently, the number of students with disabilities is increasing steadily in the public schools in both countries. This increase will require an additional number of special education teachers who possess both the knowledge and the skills necessary to teach and meet the needs of students with disabilities. Therefore, examining the level of self-efficacy of special education teachers in both countries who teach in inclusive classrooms is important.

The primary purpose of the current study is to identify the level of self-efficacy of special education teachers who teach students with disabilities in public schools in the Sultanate of Oman and UAE. Furthermore, the study examines the relationship between the level of self-efficacy of special education teachers and these selected variables: country, gender, school level, and teaching experience. Moreover, the present researchers attempt to explore whether the levels of self-efficacy of special education teachers vary according to the domain of knowledge and skills. More specifically, the present researchers attempt to answer the following questions:

1- What is the level of self-efficacy of special education teachers in teaching students with disabilities in inclusive classrooms?

2- What is the relationship between the level of self-efficacy of special education teachers and their gender, country, school level taught, and teaching experience?

3- Does the level of self-efficacy of special education teachers vary according to the domain of

knowledge and skills?

Participants:

The target population of the current study consisted of six hundred special education teachers who teach in all grade levels in all public schools that provide educational services for students with disabilities in the Sultanate of Oman and UAE. The population involved 240 special education teachers from the Sultanate of Oman and 360 special teachers from the UAE. The questionnaires were sent to the administrators of the selected schools in both countries. Five hundred and thirteen special education teachers volunteered to complete the questionnaires with a response rate of 85.5% in both countries. The sample involved 225 special education teachers from the Sultanate of Oman (36 males & 189 females) and 288 special education teachers from UAE (64 males & 224 females).

Instrument:

The Special Education Teachers' Perceived Self-Efficacy Scale, as developed by Haj Hussien (2014), was used to collect data in this study. The 33 scale items were developed to measure the special education teacher's self-appraisal of his/her ability for the knowledge and tasks necessary to teach students with disabilities based on the theoretical framework of Bandura's social cognitive theory, teachers' perceived self-efficacy literature, and the literature relevant to the knowledge and skills considered necessary for special education teachers to possess to teach students with disabilities effectively. The teacher perceived self-efficacy in mastering the knowledge and skills represented in each item was rated on a 3- point Likert scale (1 not at all, 2 partially, and 3 completely).

For the purpose of the current study, the construct of the Special Education Teachers' Perceived Self-Efficacy Scale validity was reexamined by examining the factor structure of the scale utilizing the principal component analysis (PCA) and Varimax orthogonal rotation method. A final sample size of 470 cases were subjected to analysis (using listwise deletion), providing a ratio of over 14 cases per variable. Six factors with initial eigen values greater than one according to Kaiser criterion have been extracted. The six rotated factors explained (70.755%) of the total variance as shown in Table 1. The factor loading matrix for this final solution is presented in Table 2.

Table 1. Initial eigen values and accounted variance of the extracted factors after rotation

Factor	Initial Eigen Value	% accounted variance	% cumulative accounted variance
1	14.739	19.288	19.288
2	3.363	12.373	31.661
3	1.729	11.810	43.470
4	1.335	9.354	52.824
5	1.175	9.139	61.963
6	1.008	8.793	70.755

Table 2. Factor loadings based on a principal component analysis with Varimax rotation method for 33 items of the Special Education Teachers' Perceived Self-Efficacy Scale (N=*470*)

Factor Label	Item	Factor					
		1	**2**	**3**	**4**	**5**	**6**
Classroom Management (CM)	CM9	**.827**	.207			.112	
	CM27	**.788**		.170	.211		
	CM21	**.788**	.254	.180		.109	
	CM15	**.750**	.187				.232
	CM10	**.742**	.181	.250	.111	.114	
	CM6	**.715**	.137	.165	.196	.139	
	CM19	**.715**		.227	.248		
	CM3	**.708**	.243	.109			
	CM8	**.592**	.379	.231	.125	.147	.136
	CM33	**.557**	.410	.227		.212	.140
Accommodation & Modification (AM)	AM32	.290	**.747**	.154	.234	.182	.153
	AM16	.175	**.746**	.206	.201	.215	.108
	AM20	.274	**.746**	.181	.269	.108	.181
	AM14	.315	**.690**	.176	.187	.256	
	AM1	.342	**.649**	.265	.198	.141	.218
Collaboration (CO)	CO31	.171	.164	**.755**		.266	.264
	CO25	.239	.192	**.753**	.257		.141
	CO4	.183	168	**.724**		.325	.225
	CO13	.322		**.696**	.334		.123
	CO2	.257	.274	**.636**	.183	.121	.237
	CO5	.373	.237	**.567**	.238	.106	.114
Factor Label	**Item**	**Factor**					
		1	**2**	**3**	**4**	**5**	**6**
Informal Assessment (IASS)	IASS30	.149	.271	.198	**.734**	.221	.254
	IASS24	.141	.337	.203	**.709**	.214	.271
	IASS18	.168	.317	.224	**.640**	.330	.214
	IASS12	.124	.232	.269	**.616**	.330	.263
	IASS7	.168	.325	.228	**.456**	.411	.307
Formal Assessment (FASS)	FASS29		.186	.165	.221	**.849**	.202
	FASS23		.169	.168	.263	**.843**	.194
	FASS17	.202	.324	.134	.201	**.692**	.152
Policy & Procedures (PP)	PP28	.198	.111	.168	.181	.153	**.798**
	PP22	.151	.163	.240	.126	.137	**.737**
	PP16	.277		.149	.315	.160	**.655**
	PP11		.237	.243	161	.163	**.580**

Table 2 shows that the first factor consisted of ten items reflecting the knowledge and skills in classroom management; the second factor consisted of five items reflecting the knowledge and skills in accommodations and modifications; the third factor consisted of six items reflecting the knowledge and skills in collaboration; the fourth factor consisted of five items reflecting the knowledge and skills in informal assessment; the fifth factor consisted of three items reflecting the knowledge and skills in formal assessment; and the sixth factor consisted of four items reflecting the knowledge and skills in policy and procedures. The 33 items loaded significantly in the six factors they were intended to measure. All values of the item loadings were higher than 0.45 as shown in Table 2, which exceeds the recommended cutoff value 0.30 which is suggested by Costello and Osborne (2005), and Russell (2012).

Furthermore, convergent and discriminatory validity, as well as reliability for the Special Education Teachers' Perceived Self-Efficacy Scale were reexamined in the current study through calculating the composite reliability, average variance extracted, and maximum shared variance. Composite reliability (CR) is an alternative measure of the traditional reliability measures (e.g., Cronbach's alpha) when the scale is multidimensional. Average variance extracted (AVE) is a measure used to evaluate the convergent validity of the latent construct indicators when the scale is multidimensional. Maximum shared variance (MSV), and average shared variance (ASV) are measures used to evaluate the discriminatory validity of the latent construct indicators when the scale is multidimensional. The six factors demonstrated adequate validity and reliability as shown in Table 3.

Table 3. Composite Reliability (CR), Average Variance Extracted (AVE), Maximum Shared Variance (MSV), and Average Shared Variance (ASV)

Factor	Statistic			
	CR	**AVE**	**MSV**	**ASV**
Classroom Management (CM)	0.932	0.578	0.441	0.295
Accommodation & Modification (AM)	0.913	0.679	0.549	0.412
Collaboration (CO)	0.899	0.597	0.480	0.404
Informal Assessment (IASS)	0.915	0.683	0.549	0.452
Formal Assessment (FASS)	0.906	0.765	0.473	0.289
Policy & Procedures (PP)	0.819	0.534	0.513	0.366

All values of the composite reliability (CR) for the six factors presented in Table 3 were higher than 0.81, which exceed the recommended cutoff value of 0.70 as suggested by Hair, Black, Babin, and Anderson (2010). Furthermore, all values of the average variance extracted (AVE) for the six factors also exceed the recommended cutoff value of 0.50, which indicate adequate convergent validity (Hair, Black, Babin, & Anderson, 2010). Finally, all values of maximum shared variance (MSV), and average shared variance (ASV) were less than the values of the average variance extracted for the six factors, which indicate adequate discriminatory validity (Hair, Black, Babin, & Anderson, 2010).

Findings and Discussion:

This study focused on the level of self-efficacy of special education teachers in teaching students with disabilities in inclusive classrooms. The data was analyzed using the Statistical Package for Social Sciences (SPSS), and the Analysis of Moment Structures program (AMOS) to provide answers to the questions of the study. Below are the findings of each question and its related discussion.

Question 1: What is the level of self-efficacy of special education teachers in teaching students with disabilities in inclusive classrooms?

To establish the level of self-efficacy of special education teachers in teaching students with disabilities in inclusive classrooms, the percentages as well as the mean scores and standard deviations of the teachers' responses on each domain of the self-efficacy scale were calculated and presented in Table 4. The total score for each domain was computed by adding the mastery level ratings of teachers for each knowledge and skill represented in each item and then dividing the total by the number of items in that domain. The following criterion was used to classify the teachers' level of perceived self-efficacy; a mean score (on a 3-point Likert scale) above 2.33 reflects efficient level; a mean score between 1.67 and 2.3 reflects partially efficient level; and a mean score below 1.67 reflects inefficient level. The criterion was derived through calculating the increment value by dividing the difference between the highest possible rating (3), and the lowest possible rating (1) on the total number of scale points (3), and then using the increment (0.67) to calculate the bounds of the three intervals.

Table 4. Percentages, means, and standard deviations of self-efficacy level of teachers for each domain in each country

Domain	Country	% Level of Self-Efficacy			Statistic		
		Inefficient	Partially Efficient	Efficient	N	M	SD
CM	Oman	2.60	23.60	73.80	222	2.64	0.45
	UAE	0.00	13.30	86.70	248	2.79	0.32
	Total	1.20	17.80	81.00	470	2.72	0.39
AM	Oman	15.80	27.00	57.20	222	2.35	0.62
	UAE	6.20	32.10	61.70	248	2.48	0.50
	Total	10.40	29.90	59.70	470	2.42	0.56
CO	Oman	14.10	32.10	53.80	222	2.38	0.55
	UAE	5.70	21.10	73.20	248	2.59	0.45
	Total	9.40	26.00	64.60	470	2.49	0.51
IASS	Oman	16.10	41.50	42.40	222	2.24	0.58
	UAE	7.90	27.60	64.50	248	2.48	0.53
	Total	11.50	33.80	54.70	470	2.37	0.57
FASS	Oman	47.10	30.80	22.10	222	1.91	0.67
	UAE	28.50	43.80	27.70	248	2.10	0.62
	Total	37.20	37.70	25.10	470	2.01	0.65
PP	Oman	16.50	48.20	35.30	222	2.18	0.57
	UAE	4.00	26.40	69.60	248	2.54	0.43
	Total	9.60	36.10	54.30	470	2.37	0.53

Table 4 shows that the special education teachers' mean scores on the domains were 2.42 for accommodations and modifications, 2.72 for classroom management, 2.49 for collaboration, 2.01 for formal assessment, 2.37 for informal assessment, and 2.37 for policy and procedures. These results suggest that the special education teachers perceived themselves at an efficient level in accommodations and modifications, classroom management, collaboration, informal assessment, policy and procedures, and partially efficient in formal assessment only.

Despite the fact that special education teachers obtained mean scores reflecting an efficient level of self-efficacy, further analysis based on the percentages of special education teachers according to their level of self-efficacy (inefficient, partially efficient, and efficient) revealed that a significant percentage of special education teachers perceived themselves as being inefficient or partially efficient in teaching students with disabilities in inclusive classrooms. The findings indicate that 74.9%, 45.7%, 45.3%, 40.3%, 35.4%, 19% of special education teachers reported an inefficient or partially efficient level in the formal assessment, policy and procedures, informal assessment, accommodations and modification, collaboration, and classroom management domains respectively.

The results presented in Table 4 indicate that 1.20%, 17.80%, and 81.00% of special education teachers in the full sample reported that they are at an inefficient, partially efficient, and efficient level of self-efficacy respectively in the classroom management domain. 10.40%, 29.90%, and 59.70% of special education teachers reported that they are at an inefficient, partially efficient, and efficient level of self-efficacy respectively in the accommodation and modification domain. 9.40%, 26.00%, and 64.60% of special education teachers reported that they are at an inefficient, partially efficient, and efficient level of self-efficacy respectively in the collaboration domain. 11.50%, 33.80%, 54.70% of special education teachers reported that they are at an inefficient, partially efficient, efficient level of self-efficacy respectively in the informal assessment domain. 37.20%, 37.70%, and 25.10% of special education teachers reported that they are at an inefficient, partially efficient, and efficient level of self-efficacy respectively in the formal assessment domain. 9.60%, 36.10%, and 54.30% of special education teachers reported that they are at an inefficient, partially efficient, and efficient level of self-efficacy respectively in the policy and procedures domain.

Question 2: What is the relationship between the level of self-efficacy of special education teachers and the variables of gender, country, school level taught, and teaching experience?

The correlations between the level of self-efficacy of special education teachers and the variables of gender, country, school level taught, and teaching experience were examined. A series of multiple linear regression analyses were performed using gender (male = 0, female =1), country (Oman = 0, UAE = 1), school level taught (basic education cycle one = 0, basic education cycle two = 1, and post basic education = 2), and teaching experience (number of years of teaching) as independent variables (predictors), and teachers' self-efficacy for each specific domain as the dependent variable (criterion). The results of the six analyses are summarized in Table 5.

Table 5. Results of the multiple regression analyses when regressing each domain (criterion) of the self-efficacy scale on the four predictors (gender, country, school level taught, and teaching experience)

Criterion Variable (Domain)	**Predictor**	**Statistic**			
		Reg. Coeff. (b)	**S.E**	**Critical Ratio (C.R.)**	**Prob.**
Classroom Management (CM)	Gender	-.137	.050	-2.740	.007
	Country	.114	.038	3.000	.002
	School Level	-.041	.036	-1.138	.250
	Experience	.005	.003	1.667	.122
Accommodation & Modification (AM)	Gender	-.297	.073	-4.068	.000
	Country	.044	.055	.800	.416
	School Level	-.108	.052	-2.076	.037
	Experience	.010	.005	2.000	.046
Collaboration (CO)	Gender	-.294	.065	-4.523	.000
	Country	.152	.049	3.102	.002
	School Level	-.110	.046	-2.391	.016
	Experience	.000	.004	.000	.939
Informal Assessment (IASS)	Gender	-.263	.073	-3.602	.000
	Country	.175	.055	3.181	.001
	School Level	-.135	.052	-2.596	.009
	Experience	.002	.005	.400	.741

Criterion Variable (Domain)	Predictor	Statistic			
		Reg. Coeff. (b)	S.E	Critical Ratio (C.R.)	Prob.
Formal Assessment (FASS)	Gender	-.221	.084	-2.630	.008
	Country	.169	.063	2.682	.007
	School Level	-.006	.059	-.101	.922
	Experience	.000	.006	-.000	.994
Policy & Procedures (PP)	Gender	-.102	.066	-1.545	.122
	Country	.295	.049	6.020	.000
	School Level	-.077	.046	-1.673	.098
	Experience	.009	.004	2.250	.054

The findings showed that special education teachers from the UAE reported significantly higher levels of self-efficacy in all domains than special education teachers from the Sultanate of Oman (p <.01), with the exception of their self-efficacy in the domain of accommodation and modification which didn't reflect a significant self-efficacy mean score difference between the two countries. The higher levels of perceived self-efficacy of special education teachers in the UAE in comparison with perceived self-efficacy of special education teachers in the Sultanate of Oman may be due to the differences in the availability of resources, support, and training programs in the two countries. Several researchers (e.g., Ahsan, Sharma, & Deppeler, 2012; Bowlin, 2012; Das, Kuyini, & Desai, 2013; Loreman, Sharma, & Forlin, 2013) documented that teachers' self-efficacy improved through participation in training programs in teaching in inclusive classrooms.

The findings also showed that male special education teachers reported significantly higher levels of self-efficacy in all domains than female teachers (p <.01), with the exception of their self-efficacy in the domain of policy and procedures, which didn't reflect a significant mean score difference between the two genders. The findings of the current study are consistent with the findings of Ahsan, Sharma and Deppeler (2012); and Haj Hussien and Alqaryouti (2015), but contradict the findings of Barco (2007); Hashim, Ghani, Ibrahim, and Zain (2014); Hofman and Kilimo (2014); Loreman, Sharma, and Forlin (2013); and Tejeda-Delgado (2009). The gender differences may be attributed to the impact of gender roles in the Arab culture.

Moreover, the findings demonstrated that the school level taught variable had a significant negative relationship with the teachers' self-efficacy in accommodation and modification (p <.05), collaboration (p <.05), and informal assessment (p <.01), while the relationships between school level taught and the teachers' self-efficacy in classroom management, formal assessment, and policy and procedures were not significant. These findings indicate that special education teachers who teach in the first cycle of basic education reported higher levels of self-efficacy followed by their counterpart in the second cycle of basic education and those who teach in the post basic education cycle in accommodation and modification, collaboration, and informal assessment. The current findings are consistent with the findings of Haj Hussien and Alqaryouti (2015); Bowlin (2012) and Emam and Mohamed (2011), while they contradict the findings of Ahsan, Sharma, and Deppeler (2012). The reason for the decrease of self-efficacy of special education teachers with the increase of the school level taught may be attributed to the increased demands for more accommodations and modifications, more informal assessments, and an increased need for more collaboration with the increase of school levels. However, self-efficacy of special education teachers in classroom management, policy and procedures, as well as formal assessments does not change significantly with school levels because the knowledge and skills represented in these domains are the same in all school levels.

Furthermore, the results showed that special education teachers' teaching experience had a significant positive relationship (p <.05) with their self-efficacy in the domain of accommodations and modifications only (the more years of teaching the higher the level of self-efficacy), while the relationships between special education teachers' teaching experience and their self efficacy in the rest of the domains were not significant. The insignificant impact of teaching experience on special education teachers' self efficacy in classroom management, collaboration, policy and procedures, informal assessment, and formal assessment may be due to the fact that the knowledge and skills represented in these domains are highly specialized and require formal training to master. However, the knowledge and skills represented in the accommodations and modifications domain do not require formal training and can be improved and mastered by experience.

Question 3: Does the level of self-efficacy of special education teachers vary according to the domain of knowledge and skills?

The variation in perceptions of special education teachers to their level of self-efficacy according to the domain of knowledge and skills was examined. Pair-wise comparisons were performed on the six domains of self-efficacy and the results are summarized in Table 6.

Table 6. Pairwise comparisons of mean scores on each domain of the self-efficacy scale

Domain (I)	Domain (J)	Mean Difference (I-J)	Std. Error	Prob.
Classroom Management (CM)	Accommodation & Modification (AM)	0.299	0.020	.000
	Collaboration (CO)	0.225	0.019	.000
	Informal Assessment (IASS)	0.350	0.024	.000
	Formal Assessment (FASS)	0.707	0.029	.000
	Policy & Procedures (PP)	0.350	0.024	.000
Accommodation & Modification (AM)	Collaboration (CO)	-0.074	0.022	.001
	Informal Assessment (IASS)	0.051	0.020	.012
	Formal Assessment (FASS)	0.408	0.026	.000
	Policy & Procedures (PP)	0.051	0.024	.036
Collaboration (CO)	Informal Assessment (IASS)	0.126	0.021	.000
	Formal Assessment (FASS)	0.482	0.027	.000
	Policy & Procedures (PP)	0.126	0.022	.000
Informal Assessment (IASS)	Formal Assessment (FASS)	0.365	0.023	.000
	Policy & Procedures (PP)	0.000	0.021	.996
Formal Assessment (FASS)	Policy & Procedures (PP)	-0.357	0.027	.000

The findings presented in Table 6 revealed that the perceptions of special education teachers of their self-efficacy varied significantly according to the domain of knowledge and skills. The levels of self-efficacy of special education teachers on the six domains as ordered from the highest to lowest are as follows: classroom management, collaboration, accommodations and modifications, policy and procedures, informal assessment, and formal assessment. All pair-wise comparisons between mean scores were found to be significant ($p < 0.05$) with the exception of special education teachers' perceived self-efficacy in the policy and procedures domain when compared with the informal assessment domain. The findings of this study confirmed previous literature (Bandura, 2006; Herbert et al, 1997; Haj Hussien & Alqaryouti, 20015; Zimmerman, 2000) that the level of self-efficacy varied significantly according to the domain of knowledge and skills. This finding confirms that self-efficacy is a multidimensional construct rather than a global trait.

Conclusion and Recommendations:

The findings of this study have implications for researchers, educators and policy makers in Oman and the UAE. The conclusions and recommendations of the current study are the following:

1- The current study highlights the importance of teachers' perceived self-efficacy on their choices, efforts, perseverance as well as the learning process and the students' educational outcomes. Therefore, teachers' perceived self-efficacy should be monitored and interventions provided as needed to increase their self-efficacy.

2- The current study provides additional evidence that supports the validity and reliability of the Special Education Teachers' Perceived Self-Efficacy Scale. This scale may be used by researchers and practitioners in Oman and the UAE to explore various aspects of special education teachers' self efficacy in teaching students with disabilities in inclusive classrooms.

3- Significant numbers of special education teachers in Oman and the UAE perceived their self-efficacy in teaching students with disabilities in inclusive classrooms as inefficient or partially efficient. Moreover, the levels of self-efficacy of special education teachers on the six domains of the self-efficacy scale as ordered from highest to lowest are as follows: classroom management, collaboration, accommodations and modifications, policy and procedures, informal assessment, and formal assessment. These findings suggest the need to develop in-service training plans for special education teachers in teaching students with disabilities in inclusive classrooms. The focus of in-service training programs should be on the knowledge and skills in formal assessment, informal assessment, policy and procedures, accommodations and modifications, collaboration, and classroom management, respectively. Additionally, universities and colleges for pre-service teachers in Oman and the UAE should meet the challenge of the significant change in responsibilities of special education teachers in teaching students with disabilities in inclusive educational settings (general education classroom) rather than separate educational settings (e.g., special education school, self contained classroom).

4- The findings provided evidence that special education teachers' levels of self-efficacy varied with the domains of knowledge. This finding

confirms that self-efficacy is a multidimensional construct rather than a global trait. Thus, this finding suggests that future research on self-efficacy should avoid measuring and analyzing self-efficacy based on a total score (global construct), but rather that self-efficacy should be measured and analyzed based on the score on each specific domain of knowledge.

5- Male special education teachers expressed higher self-efficacy than female special education teachers in all domains with the exception of knowledge in policy and procedures in teaching students with disabilities in inclusive classrooms. Further exploration of the role of Arab culture in the variance of perceived self-efficacy between males and females is highly recommended.

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