

## **General Education Teachers' Perceived Self-Efficacy in Teaching Students with Disabilities in Oman**

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The objective of this study was to determine general education teachers' level of self-efficacy in teaching inclusive classrooms and to investigate whether general education teachers' level of self-efficacy vary according to the domain of knowledge and skills. In addition, the current study examined the relationship between teachers' gender, school level taught, teaching experience and their self-efficacy. Finally, this study explored the relationship between general education teachers' self-efficacy and their attitudes toward inclusion. Seven hundred three general education teachers participated in this study. The mean scores of the teachers on the self-efficacy domains suggest that they had high levels of perceived self-efficacy in classroom management, moderate levels in collaboration and assessment, and low levels in special education. The findings also indicated that the perception of general education teachers as to their level of self-efficacy varied significantly according the domain of knowledge and skills. The findings also revealed that male teachers reported significantly higher levels of self-efficacy than female teachers. Moreover, the findings indicate that teachers' teaching experience and school level taught had a significant relationship with their self-efficacies in some of the domains. Finally, the results showed significant positive correlations between teacher's self-efficacy and their attitudes towards inclusion.

**Keywords:** self-efficacy, attitudes, inclusion, teachers, scale, Oman

### **Introduction**

Perceived self-efficacy evolved from social cognitive theory. Perceived self-efficacy is a key factor in determining how individuals make choices, the effort they dedicate, and how long they persevere to accomplish their goals (Bandura, 2006). Efficacy beliefs affect how the person feels, thinks, motivates

him/herself, and behaves (Bandura 1993). Furthermore, perceived self-efficacy is a crucial factor in the learning process (Ramdas&Zimmerman, 2008; Siegle&McCoach, 2007;Tschannen-Moran, Wool folk- Hoy, & Hoy, 1998; Usher & Pajares, 2008; Usher & Pajares, 2009).

The influence of the teachers' self-efficacy on the educational process has been the focus of researchers and educators. This interest is due to the significant relationship between teachers' self-efficacy and several important educational outcomes. Numerous studies indicated that teachers' self-efficacy was 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).

Other studies revealed that teachers with high self-efficacy demonstrated high sympathy, enthusiasm and commitment, a higher degree of planning and organization (Allinder, 1994), acceptance of new ideas, and willingness to try innovative methods to meet the students' needs (Guskey, 1988; Stein & Wang, 1988). Moreover, several studies indicated that teachers' self-efficacy significantly impacted how they treated students; teachers with high self-efficacy were more sensitive and expressed less criticism to students when they made mistakes (Ashton & Webb, 1986), worked harder and spent more time working with students experiencing learning difficulties, and the number of students they referred for special education was small (Meijer & Foster, 1988; Podell & Soodak, 1993).

In addition, several studies documented that teachers' self-efficacy in teaching students with disabilities in inclusive classrooms significantly impacted the implementation of inclusive education, and associated positively with their attitudes toward inclusion (Ahsan, Sharma & Deppeler, 2012; Avramidis, Balylliss, & Burden, 2000; Avramidis & Norwich, 2002; Barco, 2007; Emam & Mohamed, 2011; Loreman, Sharma, & Forlin, 2013; Sari, Celikoz & Secer, 2009; Wright, 2013).

Despite the large number of studies that focused on teachers' self-efficacy over the course of more than three decades, there have been a limited number of studies conducted on general education teachers' self-efficacy in teaching students with disabilities in the general education classrooms (Hsien, 2007; Kaner, 2010; Sharma, Loreman & Forlin, 2012).

The literature review revealed that the researchers agreed that the general education teacher plays a major role in developing and implementing inclusive education. Therefore, assessing the Omanis' regular education teachers' self-efficacy in teaching students with disabilities in inclusive classrooms is important.

The aims of the current study were the following: a) to determine general education teachers' self-efficacy in teaching students with disabilities in inclusive classrooms, b) to investigate whether general education teachers' levels of self-efficacy vary according to the domain of knowledge and skills, c) to examine the relationship between teachers' gender, school level taught and teaching experience and their self-efficacy, and d) to investigate the relationship between general education teachers' self-efficacy and their attitudes toward inclusion.

### **Context of the study**

Oman is located in the southeastern edge of the Arabian Peninsula and shares borders with Saudi Arabia, the United Arab Emirates, and Yemen. Oman has been in the process of reforming its educational system and significant efforts have been made towards achieving this goal. The Ministry of Education in Oman aims to implement inclusive education (Ministry of Education, 2008). Progress has been made: Oman signed the international agreement ensuring the rights of persons with disabilities an education in an inclusive educational setting. Currently the Ministry of Education provides educational services for students with disabilities in special education classes in many public schools as well as in special education schools (Al-Balushi, Al-Badi, and Ali, 2011; Weber, 2012).

The authors of the current study (2014) investigated Omanis general education teachers' preference of the best educational settings for the students with disabilities and their attitudes toward inclusive education. The findings showed that 48.1%, 33.3%, 9.9%, and 8.8% of the general education teachers selected separate setting, self-contained, resource room, and general education, respectively, as the best educational settings for educating students with disabilities. The results also indicated that the general education teachers held neutral behavior, cognitive, and affective attitudes toward inclusion.

## Method

### Participants

A total of 800 questionnaires were sent to the administrators of the public schools in Sultanate Oman in various provinces; 703 general education teachers volunteered to complete the questionnaires. The sample involved 140 basic education-cycle one teachers, 236 basic education- cycle two teachers, and 325 post basic education-cycle teachers. Finally, the range of teaching experience among the participants varied from 1 to 30 years, the average being 8.38 years with a standard deviation of 4.97. Table (1) shows the distribution of the regular education teachers who participated in the study according to province and gender.

Table 1. *Sample distribution according to province and gender.*

Province	Gender	
	Male	Female
Muscat	192	212
Al BatinahJanoob	46	10
Al BatinahShamal	37	41
Al Dakhiliyah	7	14
Ash SharqiyahJanoob	0	5
Ash SharqiyahShamal	17	9
Al Burimi	8	8
Al Dhirah	8	4
Dhofar	25	34
AL Wusta	11	0
Musandam	8	7
Total	359	344
Total	703	

### Measures

#### General education teacher's self-efficacy

This continuous variable was defined as participants' scores on each domain (special education, assessment, classroom management, and collaboration) of the general education teacher's self-efficacy scale in teaching students with disabilities in inclusive classrooms.

The teacher's self-efficacy scale for inclusive education (TSSIE) was developed by the first author to measure the general education teacher's self-appraisal of his/her ability for the knowledge and tasks necessary to teach students with disabilities with their peers in an inclusive classroom.

Based on the theoretical framework of Bandura's social cognitive theory, general education teachers' perceived self-efficacy literature (e.g. Bandura, 1977; Henson, 2001; Tschannen-Moran & Woolfolk Hoy, 2001; Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998) and the literature relevant to the knowledge and skills considered necessary for general education teachers to possess to teach students with disabilities effectively (e.g. Avramidis, Balykiss, & Burden, 2000; Dingle, Falvey, Givner, & Haager, 2004; Emam & Hassan, 2011; Hsien, 2007; Sharma, Loreman, & Forlin, 2012), four domains were identified: special education, assessment, classroom management and collaboration. Twenty two items were developed to represent these four domains.

Further investigation of the items content validity was examined by four experts, among them two experts in measurement and psychometric theory and two experts in special education. All the experts agreed that the 22 items were written in clear and precise language and represented the knowledge and skills necessary for regular classroom teachers to master the ability to teach students with disabilities in inclusive classrooms. The teacher perceived self-efficacy in mastering the knowledge and skill represented in each item was measured using a 3- point Likert scale (1 not at all, 2 partially, and 3 completely).

Moreover, the factor analysis was used to examine the factor structure of the TSSIE. The principal components analysis, eigenvalues greater than one, the scree test, and orthogonal rotation using Varimax method were performed on 544 participants' raw scores on all 22 items. The results indicated four factors with eigenvalues greater than one. Similarly, the results of the scree test indicated four underlying factors. The four factors after rotation accounted for 68.35% of the total variance: 19.41%, 16.88%, 16.42%, and 15.64%, respectively. The first factor consisted of seven items reflecting the knowledge and skills in special education, the second factor consisted of five items reflecting the knowledge and skills in class room management, the third factor consisted of five items reflecting the knowledge and skills in assessment, and the fourth factor consisted of five items reflecting the knowledge and skills in collaboration. The 22 items loaded significantly in the four factors they were intended to measure. All values of the items loading were higher than 0.55, which exceeds the recommended cutoff value 0.30 (Costello & Osborne, 2005).

Finally, the test-retest stability and internal consistency of TSSIE were examined. Test-retest stability was investigated by administering the scale twice to 50 general education teachers. The interval between test-retest was 10

days. Test-retest reliability coefficients for each factor were .85 for special education, .79 for class room management, .89 for assessment, .82 for collaboration, and .92 for overall self-efficacy. Internal consistency was established by computing the Cronbach's alpha for 544 participants' scores on the 22 items. The Cronbach's alpha reliability coefficients for each factor were .86 for special education, .91 for class room management, .91 for assessment, .88 for collaboration, and .93 for overall self-efficacy. These results indicate that the general education teacher's self-efficacy scale has adequate levels of internal consistency and temporal stability.

### **Attitudes toward inclusion**

This continuous variable was defined as participants' scores on each component of attitudes (cognitive, affective, and behavioral intentions) in the Attitudes Scale toward Inclusion (ASTI). The ASTI was designed by the authors (2014) to measure teachers' attitudes towards inclusion based on the definition of inclusion as teaching students with disabilities in regular neighborhood schools within the regular classrooms with their peers. Also, the scale was designed based on the conceptualization of attitudes as a tri component evaluation consisting of cognitive, affective, and behavioral intentions.

Eagly & Chaiken (1993) define attitude as tendencies to evaluate an entity with some degree of favor or disfavor, generally expressed in cognitive, affective, and behavioral responses. The cognitive response consists of thoughts and beliefs about the attitude object. The affective response includes moods, feelings or emotions in relation to the attitude object. The behavioral response involves intentions or overt actions towards the attitude object.

The ASTI consisted of 19 items: the first factor consisted of seven items reflecting cognitive beliefs response, the second factor consisted of seven items reflecting behavior or intention, and the third factor consisted of five items reflecting affective response. The participant's extent of the agreement with each item was measured by a 3- point Likert scale (1 disagree, 2 agree, and 3 strongly agree).

The experts' review revealed that the items were written in clear and precise language and measured the components intended to be measured, confirming the content validity of the scale. In addition, the principle components analysis was performed on 370 general education teachers' raw scores on 19 items. The results revealed that the three factors after rotation accounted for 66.92% of the total variance: 23.76%, 23.15%, and 20.02%,

respectively. The items loaded significantly in the three factors they were intended to measure. The 19 items loaded significantly in the three factors they were intended to measure. All values of the items loading were higher than .55 which exceeds the recommended cutoff value .30 (Costello & Osborne, 2005).

Furthermore, test-retest reliability coefficients (N=50) for each factor were .84 for cognitive, .85 for behavior, .85 for affective and .87 for global attitude. Cronbach's alpha coefficients (N=370) for each factor were: .91 for cognitive, .90 for behavior, .89 for affective and .96 for global attitude. All the coefficients values exceed the conventional minimum of .7 (Nunn ally and Bernstein 1994) and demonstrate high internal consistency and levels of temporal stability.

**School level taught.** This categorical variable involved three levels: Basic education- cycle one (1st grade to 4th grade), Basic education- cycle two (5th to 10th grade), and Post basic education(11th to 12th grade).

**Gender.** This categorical variable involved two levels: Male and female

**Teaching experience.** This variable was defined by the number of years the teacher taught.

### **Data analysis**

Data was analyzed using IBM SPSS Statistics 20 and IBM Amos 20. Descriptive statistics, chi-square test, paired sample t-test, principle components analysis, and multiple regressions were performed to analyze the data. In the current study, the data relevant to attitudes was analyzed based on the three components of attitudes; these were behavior, cognitive, and affective rather than overall attitudes composite. Similarly, the data relevant to self-efficacy was analyzed based on the four specific domains; these were knowledge and skill in special education, assessment, classroom management and collaboration rather than overall self-efficacy composite, because self-efficacy is not a global trait but rather a multidimensional one that varies according to the domain of functioning (Bandura, 2006; Herbert et al, 1997; Zimmerman, 2000). Therefore, it is not sufficient to measure self-efficacy globally; measurement instruments must be designed to assess a particular domain of functioning (Bandura, 2006).

## Results

### Descriptive statistics

Mean, standard deviation and percentage of teachers according to self-efficacy level for each domain were calculated and presented in Table 2. 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 criteria were used to classify the teachers' level of self-efficacy: the mean score (on a 3-point Likert scale) above 2.1 reflects high level, mean score between 1.5 and 2.1 reflects moderate level and mean score below 1.5 reflects low level.

The finding of the current study indicated that the teachers' mean scores on the domains were 1.48 for the special education, 2.02 for the collaboration, 2.26 for the classroom management, and 1.58 for the assessment. These results suggest that the general education teachers reported high level of self-efficacy in classroom management, moderate in collaboration and assessment, and low in special education.

The results also indicated that 7.3%, 19%, 40.6%, and 59.4%, of the general education teachers reported high level of self-efficacy in special education, assessment, collaboration, and classroom management, respectively. The results also indicated that 36.2%, 29.5%, 36.8%, and 22.7%, of the general education teachers reported moderate level of self-efficacy in special education, assessment, collaboration, and classroom management, respectively. Moreover, the results indicated that 56.5%, 51.5%, 22.6%, and 17.9%, of the general education teachers reported low level of self-efficacy in special education, assessment, collaboration, and classroom management, respectively.

Table 2. *Mean, Standard Deviation and Percentage of Teachers According Self-efficacy Level for each Domain*

	Domains			
	Special education	Assessment	Collaboration	Classroom management
Level of Self-efficacy	Percent	Percent	Percent	Percent
Low	56.5	51.5	22.6	17.9
Moderate	36.2	29.5	36.8	22.7
High	7.3	19.0	40.6	59.4
Mean	1.48	1.58	2.02	2.26
Std. Deviation	.44	.57	.59	.65



### **Chi-square test**

A chi-square test was performed to determine whether the percentages of general education teachers in the three levels of self-efficacy (low, moderate & high) were significantly different for each domain. The results of the chi-square test indicated that the differences on each domain were significant,  $X^2(2, N = 600) = 219.73, p < .001$ ,  $X^2(2, N = 701) = 115.80, p < .001$ ,  $X^2(2, N = 620) = 33.65, p < .001$ , and  $X^2(2, N = 700) = 216.98, p < .001$  for special education, assessment, collaboration, and classroom management respectively.

Moreover, a chi-square test was performed to test the differences between percentages of each pair of the level of self-efficacy for each domain. The Bonferroni adjustment for overall alpha level of .05 was used to control for Type I error across 3 tests; the adjusted level of significance is .017.

With regard to special education, the percentage of teachers who reported that their efficacy was low was significantly higher than the percentage of teachers who reported that their efficacy were moderate [ $X^2(1, N = 566) = 26.77, p = .000$ ] or high [ $X^2(1, N = 383) = 227.22, p = .000$ ], and the percentage of teachers who reported that their efficacy was moderate was significantly higher than percentage of teachers who reported that their efficacy was high [ $X^2(1, N = 261) = 114.67, p = .000$ ].

With regard to assessment, the percentage of teachers who reported that their efficacy was low was significantly higher than percentage of teachers who reported that their efficacy was moderate [ $X^2(1, N = 568) = 41.75, p = .000$ ] or high [ $X^2(1, N = 494) = 105.23, p = .000$ ], and the percentage of teachers who reported that their efficacy was moderate was significantly higher than percentage of teachers who reported that their efficacy was high [ $X^2(1, N = 340) = 16.11, p = .000$ ].

With regard to collaboration, the percentage of teachers who reported that their efficacy was low was significantly less than percentage of teachers who reported that their efficacy was moderate [ $X^2(1, N = 368) = 21.04, p = .000$ ] or high [ $X^2(1, N = 392) = 32, p = .000$ ]. However, there was no significant differences between the percentage of teachers who reported that their efficacy was moderate and the percentage of teachers who reported that their efficacy was high [ $X^2(1, N = 480) = 1.20, p = .273$ ].

With regard to classroom management, the percentage of teachers who reported that their efficacy was high was significantly higher than percentage of

teachers who reported that their efficacy was moderate [ $X^2 (1, N = 575) = 118.47, p = .000$ ] or low [ $X^2 (1, N = 541) = 156.53, p = .000$ ]. However, there was no significant difference between the percentage of teachers who reported that their efficacy was moderate and the percentage of teachers who reported that their efficacy was low [ $X^2 (1, N = 284) = 4.07, p = .04$ ].

**Paired sample t-test**

The variation in perception of general education teachers to their level of self-efficacy according to the domain of knowledge and skills was examined. Paired sample t-test was performed on each pair of self-efficacy domains and the results are summarized in table 3. The Bonferroni adjustment for overall alpha level of .05 was used to control for Type I error across 6 tests; the adjusted level of significance is .0085.

Based on these results teachers reported a significantly ( $p = 0.0000$ ) higher level of self-efficacy in classroom management than special education, collaboration, and assessment. Teachers also reported a significantly ( $p = 0.0000$ ) higher level of self-efficacy in collaboration than their self-efficacy in special education and assessment. Finally, teachers reported a significantly ( $p = 0.0000$ ) higher level of self-efficacy in assessment than their self-efficacy in special education.

Table 3. Mean Score Differences for each Pair of Self-efficacy Domains

Domains		Paired Differences			t	df	Sig. (2-tailed)
		Mean	SD	SD Error			
<b>Pair 1</b>	Special education Collaboration	-.55	.59	.02	-24.45	700	.000000
<b>Pair 2</b>	Special education Classroom Management	-.78	.66	.03	-31.16	699	.000000
<b>Pair 3</b>	Special education Assessment	-.10	.45	.02	-5.94	700	.000000
<b>Pair 4</b>	Collaboration Classroom Management	-.24	.59	.02	-10.52	699	.000000
<b>Pair 5</b>	Collaboration Assessment	.44	.59	.02	19.99	700	.000000
<b>Pair 6</b>	Classroom Management Assessment	.68	.61	.02	29.59	699	.000000

### Multiple regressions

The effect of teachers' gender, grade level taught, and teaching experience on their self-efficacy in teaching students with disabilities in inclusive classroom was examined. A multiple regression was performed using gender (male = 0, female = 1), school level taught (Basic education- cycle one, Basic education-cycle two and Post basic education) and teaching experience (number of years of teaching) as independent variables (predictors); and teachers' self-efficacy in teaching students with disabilities in inclusive classroom for each specific domain of teachers' self-efficacy as the dependent variable. The results of the four analyses using IBM Amos 20 are summarized in table 4.

The results indicate that male teachers reported significantly higher ( $p = .001$ ) level of self-efficacy in special education, assessment, classroom management, and collaboration than female teachers. Moreover, the findings indicate that teachers' teaching experience had a significant ( $p = .009$ ) positive relationship with their self-efficacies in classroom management only, while the relationships were not significant ( $p > .05$ ) with their self-efficacy in special education, assessment, and collaboration. Finally, the results indicate that teachers' school level taught had a significant ( $p = .006$ ) negative relationship with their self-efficacy in special education and classroom management, while the relationships were not significant ( $p > .05$ ) with their self-efficacy in assessment and collaboration.

Table 4. *Results of the Multiple Regression Analyses: Gender, Teaching Experience and School level taught (Predictors) and each Domain of Self-Efficacy (Dependent Variable)*

<b>Variables</b>		<b>Estimate</b>	<b>S.E.</b>	<b>C.R.</b>	<b>P</b>
<b>Special education</b>	Gender	-1.358	.255	-5.320	.001
	Teaching experience	.000	.023	.008	.994
	Grade level taught	-.445	.165	-2.690	.007
<b>Assessment</b>	Gender	-1.105	.233	-4.739	.001
	Teaching experience	.023	.021	1.099	.272
	Grade level taught	-.223	.151	-1.476	.140
<b>Classroom management</b>	Gender	-1.029	.270	-3.809	.001
	Teaching experience	.064	.025	2.596	.009
	Grade level taught	-.479	.175	-2.736	.006
<b>Collaboration</b>	Gender	-.898	.247	-3.637	.001
	Teaching experience	.003	.022	.123	.902
	Grade level taught	-.033	.160	-.208	.835

### Bivariate correlation

The correlation coefficients between self-efficacy domains on one hand and the three components of attitude on the other were computed and the results presented in Table 5. These results show significant positive correlations ( $p < 0.01$ ) between all the self-efficacy domains on one hand and the three components of attitudes on the other.

Table 5. *Correlation Coefficients between Self-efficacy Domains and Attitudes Components and Descriptive Statistics (N=701)*

Domains / Components	Behavior	Cognitive	Emotion
Special education	.34**	.32**	.41**
Collaboration	.33**	.26**	.28**
Classroom Management	.24**	.25**	.22**
Assessment	.25**	.22**	.23**

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

### Discussion

Sultanate Oman has been in the process of reforming its educational system and significant efforts have been made toward achieving this goal. The Ministry of Education in Oman aims to implement inclusive education for all students. Teaching students with disabilities in their neighborhood school within the general classrooms with their peers without disabilities increased the demands placed on the general education teachers and changed their educational responsibilities. This change required general education teachers to master the knowledge and skills necessary to teach the students with disabilities in inclusive classrooms.

The lack of indigenous research that identifies the challenges and appropriate solutions is one of the main obstacles in implementing inclusive education in developing nations (according to Walker, 2010, cited in Forlin, 2013). The objective of this study was to determine general education teachers' level of self-efficacy in teaching inclusive classrooms and to investigate whether general education teachers' levels of self-efficacy vary according to the domain of knowledge and skills. In addition, the current study examined the relationship between teachers' gender, school level taught, and teaching experience and their self-efficacy. Finally, this study explored the relationship between general education teachers' self-efficacy and their attitudes toward inclusion. Seven hundred three general education teachers participated in the current study. The findings are discussed below according to the objectives of the study.

The first objective was to investigate general education teachers' level of self-efficacy in teaching inclusive classrooms. The mean scores of the teachers on the self-efficacy domains suggest that they had a high level of perceived self-efficacy in classroom management, moderate level in collaboration and assessment, and low level in special education.

The findings also indicated the percentage of general education teachers according to their perceived level of self-efficacy in each domain as follows: 56.5%, 36.2%, and 7.3% reported low, moderate, high level respectively in special education; 51.5%, 29.5%, and 19.0% reported low, moderate, high level respectively in assessment; 22.6%, 36.8%, and 40.6% reported low, moderate, high level respectively in collaboration; and 17.9%, 22.7%, and 59.4% reported low, moderate, high level respectively in classroom management.

In addition, the findings of the chi-square test of the differences between percentages of each pair of the levels of self-efficacy for special education and assessment indicated that the percentage of teachers who reported that their efficacy was low was significantly higher than the percentage of teachers who reported that their efficacy was moderate or high, and the percentage of teachers who reported that their efficacy were moderate was significantly higher than the percentage of teachers who reported that their efficacy was high.

Moreover, the findings of the chi-square test in regard to collaboration and classroom management indicated that the percentage of teachers who reported that their efficacy was high was significantly higher than percentage of teachers who reported that their efficacy was moderate or low. However, there were no significant differences between the percentages of teachers who reported that their efficacy was moderate and the percentage of teachers who reported that their efficacy was low.

The findings of this study provide empirical data regarding the general education teachers' level of perceived self-efficacy in teaching students with disabilities in inclusive classrooms. This empirical data is highly beneficial for determining and planning training services needed for general education teachers in Oman.

Overall the findings indicated that a considerable number of general education teachers reported low to moderate levels of self-efficacy. As

mentioned previously, teachers' perceived self-efficacy is a crucial factor in the learning process, associates significantly with several important educational outcomes, and impacts significantly the implementation of inclusive education. Therefore, improving teachers' self-efficacy is important. Several researchers (e.g., Ahsan, Sharma & Deppeler, 2012; Bowlin, 2012; Das, Kuyini, & Desai, 2013; Loreman, Sharma, & Forlin, 2013) documented that participation in training programs in teaching in inclusive classrooms had a positive significant impact on self-efficacy. In-service training for Omani teachers in inclusive education and further investigation of their self-efficacy after the training is highly recommended. The findings of this study suggest the focus of an in-service training program should be on the knowledge and skills in special education, assessment, collaboration, and classroom management, respectively. In addition, courses in inclusive education and special education should be required in the universities and colleges for pre-service teachers.

The second objective was to investigate whether the students' perceived self-efficacy varied according to the domain of knowledge and skills. The findings indicated that the perception of general education teachers to their level of self-efficacy varied significantly according to the domain of knowledge and skills. Teachers' level of self-efficacy on the domains from the lowest to the highest is as follows: special education, assessment, collaboration and classroom management, respectively. This finding supports the notion of Bandura (2006); Herbert et al (1997); and Zimmerman (2000) that self-efficacy varies substantially according to the domain of functioning. These results also emphasized the importance of measuring and analyzing self-efficacy based on domain specific rather than a global dimension.

The third objective was to examine the effect of teachers' gender, grade level taught, and teaching experience on their self-efficacy in teaching students with disabilities in inclusive classrooms. The findings revealed that male teachers reported significantly higher level of self-efficacy in special education, assessment, classroom management, and collaboration than female teachers. The findings of previous studies were inconsistent with regard to the impact of teachers' gender on their self-efficacy in inclusive education. Loreman, Sharma, and Forlin (2013), and Tejeda-Delgado (2009) found no significant differences between male and female teachers in self-efficacy in teaching in inclusive classroom. Barco (2007) reported that female teachers expressed a higher level of self-efficacy in teaching inclusive classroom than male teachers. In contrast Ahsan, Sharma and Deppeler (2012) reported that male teachers expressed a higher level of self-efficacy in teaching in inclusive

classrooms than female teachers. The inconsistency in the findings of the previous studies may be due to cultural differences and using different instruments which reflect various constructs of self-efficacy in teaching in inclusive classrooms.

Moreover, the findings indicate that teachers' teaching experience had a significant positive relationship with their self-efficacies in classroom management only, while the relationships were not significant with their self-efficacy in special education, assessment, and collaboration. The insignificant impact of teachers' teaching experience on their self-efficacy in special education, assessment, and collaboration may be due the fact that the skills and knowledge in these domains is more specific to teaching students with disabilities in inclusive classrooms than the skills and knowledge represented in classroom management domain which overlap with non-inclusive classrooms. All the teachers who participated in the current study had no experience in teaching inclusive classrooms. Further investigation of the impact of teaching experience in inclusive classrooms on self-efficacy in inclusive education is recommended.

Finally, the results indicate 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. The findings of previous studies were inconsistent with regard to the of impact teachers' school level taught on their self-efficacy in inclusive education. Bowlin (2012) found that primary school teachers expressed higher levels of self-efficacy in teaching in inclusive classroom 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.

The fourth objective was to explore the relationship between general education teachers' self-efficacy and their attitudes toward inclusion. The results showed significant positive correlations between teachers' self-efficacy in teaching students with disabilities in inclusive classrooms and their attitudes towards inclusive education. These results are consistent with the findings of Ahsan, Sharma & Deppeler, 2012; Avramidis, Balyliiss & Burden, 2000 ; Barco, 2007; Bowlin, 2012; Emam & Mohamed, 2011; Loreman, Sharma & Forlin, 2013; Sari, Celikoz & Secer, 2009; and Wright, 2013.

In conclusion, this study provides indigenous empirical data regarding the Omani general education teachers' level of perceived self-efficacy in teaching students with disabilities in inclusive classrooms. This information is beneficiary for researchers and the decision makers in the educational institutions in the planning and implementing of inclusive education. The findings suggest developing a national education in-service training plan for the general education teachers program in inclusive education. The focus of an in-service training program should be on the knowledge and skills in special education, assessment, collaboration, and classroom management, respectively. Additionally, universities and colleges for pre-service teachers in Oman should meet the challenge of the significant change in the responsibilities of general education teachers in relation to inclusive education. The findings also provide evidence that the perception of general education teachers to their level of self-efficacy varied significantly according the domain of knowledge and skills. Therefore, it is highly recommended that teachers' self-efficacy be measured and analyzed as a multidimensional construct rather than a global trait. Finally, the results provide evidence that teachers' self-efficacy had positive impact on their attitudes towards inclusive education, confirming previous studies in various countries.

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