General Education and Special Education Teachers' Attitudes Towards Inclusion

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Abstract

The purpose of this study was to examine the difference in general education and special education teachers' attitudes towards inclusion of students with disabilities and to ascertain if levels of self-efficacy, teacher type, and education level were predictors of teachers' attitudes towards inclusion. Data were collected from 118 elementary and middle school teachers using an online survey, and a 2-way ANOVA and multiple regression were conducted to answer the research questions. Results indicated that special education teachers' attitudes towards inclusion were significantly more positive than those of general education teachers and that teacher type and self-efficacy were predictors of teachers' attitudes towards inclusion. Higher levels of self-efficacy were associated with more positive attitudes towards inclusion. Change in practice may be achieved if school district administrators implement teacher training to improve teacher self-efficacy regarding inclusive practices, which could ultimately improve student outcomes and narrow the achievement gap.

General Education and Special Education Teachers' Attitudes Towards Inclusion

Prior to a wave of reform which started in 1975 with the passage of the Education for All Handicapped Children Act, students with disabilities had been effectively denied access to public education (Aron & Loprest, 2012). Less than 25 years later, the Individuals with Disabilities Education Act Amendments (IDEA) of 1997 and then the No Child Left Behind Act of 2001 (NCLB; 2002) required the integration of students with disabilities into regular education classrooms. This requirement was reiterated in the Every Student Succeeds Act (ESSA; 2015). In fact, the purpose of IDEA was to ensure that all students with disabilities were given equal opportunities to participate in their education in the least restrictive environment regardless of intellectual, physical, or emotional disability (Kimbrough & Mellen, 2012). While emphasizing high academic standards and accountability (Aron & Loprest, 2012), these laws were designed to promote the academic success of students with disabilities as defined by individual education plans (IEPs) designed to meet their unique needs and capabilities (Theoharis & Fitzpatrick, 2011). Students with IEPs are often fully included in the general education classroom (McLeskey, Landers, Williamson, & Hoppey, 2012). Inclusion is the process of providing students with disabilities "equitable opportunities to receive effective educational services, with the needed supplementary aids and support services, in age appropriate classrooms in their

neighborhood schools, in order to prepare students for productive lives as full members of society" (National Center on Educational Restructuring and Inclusion, 1995, p. 99).

Background and Research Questions

The practice of inclusion has generated both support and opposition. Proponents claim that inclusion provides an opportunity for students with disabilities and their general education peers to form and nurture friendships (Litvack, Ritchie, & Shore, 2011); gain social skills (Lamport, Graves, & Ward, 2012); acquire behavioral skills and develop a work ethic (Murawski & Hughes, 2009); and collaborate, which can promote academic success (Meadan & Monda-Amaya, 2008) and social awareness (Mastropieri, Scruggs, & Berkley, 2007).

Despite claims that inclusion offers benefits to students and teachers, Litvack et al. (2011) found that high-achieving students in general education classrooms felt that inclusive practices negatively impacted their learning, and Fletcher (2010) discovered that including students with emotional disabilities in kindergarten classes resulted in regular education students' reading and math performance decreasing by 10% by the beginning of the first grade. Other researchers have noted barriers to the implementation of inclusive practices in the general education classroom. For example, Fuchs (2010) found that the implementation of inclusive strategies is hindered by unrealistic responsibilities and expectations for general education teachers as well as a lack of support from administrators and special education staff. A number of researchers have identified lack of training as a barrier to inclusion (Allison, 2011; Cipkin & Rizza, 2010; Fuchs, 2010). Moreover, Orr (2009) suggested that general education teachers' negative attitudes towards inclusion, support staff's lack of knowledge of inclusion, and lack of administrative support for inclusion could serve as barriers to successful inclusion.

In addition, low levels of self-efficacy can foster poor teacher attitudes (cognitive process) and inhibit teacher motivation (motivational process) to persist in implementing inclusive strategies (Tschannen-Moran & Woolfolk Hoy, 2001). If teachers do not support the concept of inclusion, do not persist in their efforts to implement inclusive strategies, and fail to master the skills needed to appropriately implement inclusive strategies, those strategies will not be implemented. When inclusive strategies are not implemented or are not implemented properly, students with disabilities in the general education classrooms do not receive the support they need to reach their fullest potential. Ultimately, lack of teacher training in inclusive practices could have a negative impact on the academic (Fuchs, 2010) and social (Sayeski, 2009) success of students with disabilities.

In light of the importance of the social and academic success of students with disabilities who are included in the general education setting and variables shown in previous research to impact teacher attitude, the following two research questions were posed: Is there a difference in teachers' attitudes towards inclusion between teachers of differing teacher type (general education and special education) and education level (bachelor's, master's, and master's plus 30 units)? and Does teachers' sense of efficacy predict teachers' attitudes towards inclusion while controlling for teacher type and education level?

Theoretical Model

Teachers who have successful student academic and social outcomes are more confident in their capabilities to teach various types of students (Tschannen-Moran & Woolfolk Hoy, 2001). It is in this perspective that the value of self-efficacy was understood in this study. Self-efficacy is "the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations" (Bandura, 1997, p. 37). This belief affects behaviors and ultimately performance outcomes (Bandura, 1977).

There are four primary mechanisms for developing self-efficacy (Bandura, 1977). Mastery experiences, or performance accomplishments, serve as positive examples that shape perceptions about future capability to perform those or a similar tasks again (Bandura, 1977). Mastery experiences are the most effective way to develop a strong sense of efficacy (Bandura, 1982, 1986). Another way to develop self-efficacy is through vicarious experiences (Bandura, 1977); "observing others perform intimidating responses without adverse consequences can reduce fears and inhibitions" (Bandura & Barab, 1973, p. 1) to act and increase the belief that one's attempts at the same action would be successful (Bandura, 1977). A third way to develop self-efficacy is through verbal/social persuasion (Bandura, 1977). Through other's suggestions, people are prompted to believe that they have the capability to accomplish a task that they previously felt ill-equipped to accomplish (Bandura, 1977). The last way to develop self-efficacy is through physiological and affective states. Emotional arousal to stressful situations may promote fear and anxiety, which negatively influences performance and, in a reciprocal fashion, impacts physiological and affective states (Bandura, 1977).

The capacity for any outcome to be effected is dependent on both outcome expectations and efficacy expectations (Bandura, 1977). An outcome expectation is "a person's estimate that a given behavior will lead to certain outcomes. An efficacy expectation is the conviction that one can successfully execute the behavior required to produce the outcomes" (Bandura, 1977, p. 193). Thus, a person can believe that a certain behavior will have a certain outcome, but if the person seriously doubts his or her ability to successfully perform the activity, outcome expectancy will not influence his or her behavior (Bandura, 1977). This is particularly applicable to verbal persuasion, which will not be successful in influencing behavior unless a person's efficacy expectations match his or her outcome expectations.

Literature Review

Teacher Self-Efficacy

Teacher efficacy may refer to personal teaching efficacy, teachers' beliefs about their own ability to complete tasks necessary to promote student achievement, or general teaching efficacy, teachers' beliefs that teaching itself can generate learning (Gibson & Dembo, 1984). Personal and general teacher efficacy may be impacted by a combination of personal variables such as teacher experience, gender, and education level, and organizational variables such as principal influence, resource support, morale, and academic emphasis (Hoy & Woolfolk, 1993; Tschannen-Moran, Woolkfolk Hoy, & Hoy, 1998). As well, a teacher's overall sense of efficacy is influenced by years of teaching experience and grade level taught (Fives & Buehl, 2009).

Teacher efficacy can be impactful in the school setting. When multiple variables are combined as predictors, teacher efficacy in student engagement and teacher efficacy in classroom management together with teacher age and experience are the strongest predictors of student achievement (McGuire, 2011). Teachers with low levels of efficacy tend to become frustrated easily and give up quickly when they receive undesirable outcomes (Gibson & Dembo, 1984). Teachers with high levels of efficacy tend to be motivated (Swackhammer, Koellner, Basile, & Kimbrough, 2009); confident, persistent, and academically focused in the classroom (Gibson & Dembo, 1984); and dedicated to academic excellence (Hoy & Woolfolk, 1993).

Inclusion in the Public School Setting

Service models for students with disabilities vary depending on the type of institutional setting in which they function and may represent a spectrum of teaching arrangements, student placements, and levels of student IEP implementation (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). While some general education teachers have positive attitudes towards inclusion (O'Rourke & Houghton, 2009; Ross-Hill, 2009), others have been described as having negative attitudes towards both inclusive education (Orr, 2009) and included students (Cassady, 2011). Often these negative perspectives are unrelated to the teachers' confidence in their ability to teach in the inclusive setting (Cassady, 2011). Rather, teachers claim inclusive practices are time consuming (Horne & Timmons, 2009), disruptive to the instructional routine of the general education classroom (O'Rourke & Houghton, 2009), and not beneficial to all children (Cipkin & Rizza, 2010). Regardless of varying perspectives pertaining to inclusion, most teachers have reported believing that inclusion is beneficial for students with disabilities because it provides a means for equal educational opportunities (Allison, 2011) and provides social benefits (Hwang & Evans, 2011; Parker, 2009).

Results from the literature are mixed regarding the factors that may affect teacher attitude towards inclusive education. Some researchers have found that gender (Cipkin & Rizza, 2010), age (Hwang & Evans, 2011), years of teaching experience (Ross-Hill, 2009), and level of teacher confidence (Orr, 2009) can impact teachers' attitudes towards inclusion. Other researchers have found that gender and level of education (Buford & Casey, 2012), and grade level taught (Ross-Hill, 2009) do not impact teachers' attitudes towards inclusion.

One important benefit of inclusion is the opportunity for student socialization (Lamport et al., 2012; Litvack et al., 2011). Another important benefit of inclusion is improved student outcomes (Lamport et al., 2012). However, lack of collaboration between teachers can hinder effective teaching and student learning in inclusive settings (Murawski & Hughes, 2009; Sayeski, 2009). Other barriers to effective inclusion include poor relationships between special education teachers and general education teachers (Allison, 2011; Fuchs, 2010), lack of preparation to work with included students (Allday, Neilsen-Gatti, & Hudson, 2013; Cipkin & Rizza, 2010), lack of knowledge of and experience with included students (Sze, 2009), negative teacher attitude toward inclusion (Orr, 2009; Sze, 2009), and the disposition of teachers (Prather-Jones, 2011).

Methodology

The purpose of this study was to determine whether there was a difference between general education and special education teachers' attitudes towards inclusion and to determine whether

there was a relationship between teachers' self-efficacy and teachers' attitudes towards inclusion. A cross-sectional survey research design was used to gather data on the perspectives of both general and special education teachers' in a rural K-12 school district of South Carolina. E-mails were sent to all elementary and middle school teachers ($N = 296$) in the district explaining the purpose of the study, providing a URL link to the online survey, and inviting these teachers to participate. At the beginning of the third and fourth weeks of data collection, e-mails were sent reminding teachers of the study and again inviting them to participate.

Instrumentation

Two instruments were included in the online survey: the Scale of Teachers' Attitudes Toward Inclusive Classrooms (STATIC; Cochran, 1997) and the Teachers' Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001). The 20-item STATIC questionnaire yields data on a teacher's attitude towards the inclusion of special education students in the general education classroom, which are represented in the one overall STATIC scale and four subscales, Advantages and Disadvantage of Inclusion, Professional Issues of Inclusion (e.g., training and ability), Philosophical Issues of Inclusion (e.g., beliefs), and Logistical Issues of Inclusion (e.g., space, materials, and support). The 12-item TSES questionnaire yields data on a teacher's internal state regarding feelings of efficacy. Besides an overall general self-efficacy score, the TSES measures Self-Efficacy in Using Instructional Strategies, Self-Efficacy in Classroom Management, and Self-Efficacy in Student Engagement. Extensive psychometric testing indicates that both instruments are valid and reliable (Cochran 1997, 2000; Tschannen-Moran & Woolfolk Hoy, 2001).

Participants

A total of 118 teachers completed the survey, which is a response rate of 40%. The majority of the respondents were female, general education, elementary school teachers. A summary of the demographic data on the respondents is displayed in Table 1.

Findings

Prior to conducting the analyses required to answer the two research questions, the internal consistency of the two scales and seven subscales was evaluated. As reported in Table 2, a high alpha coefficient was obtained for the full STATIC scale and acceptable values for the STATIC subscales Advantages and Disadvantage of Inclusion, Professional Issues of Inclusion, and Logistical Issues of Inclusion. Because the Cronbach's alpha coefficient for the subscale Philosophical Issues of Inclusion was .46, well below the cut-off score of .70 suggested by George and Mallery (2003) to establish good scale reliability, this subscale was excluded from Table 2 and from any further analyses. For the TSES, high alpha coefficient scores were obtained for the full scale and three TSES subscales.

Table 1
*Gender, Highest Education Level, Teacher Type, and Grade Level Taught as a Percentage of Sample (*N = *118)*

Characteristic	*n*	%

Male	5	4.3
Female	112	95.7
Highest education level		
Bachelor's degree	19	16.1
Master's degree	38	32.2
Master's degree + 30	54	45.8
Doctoral degree	7	5.9
:vel taught[a]		
Elementary	88	75.2
Middle school	29	24.8
type		
General education teacher	85	72.0
Special education teacher	33	28.0

[a]One participant reported neither gender nor grade level taught, so $N = 117$.

The means, standard deviations, and ranges for the full STATIC scale, three STATIC subscales, full TSES scale, and the TSES subscales are also displayed in Table 2. The mean score for the full STATIC scale (70.19 out of a possible 100) indicated that overall, the participants held a largely positive attitude towards inclusion. Moreover, mean score of the full TSES scale (90.76 out of a possible 108) indicated that the sample had high overall self-efficacy.

Table 2
Alpha Coefficients, Means, Standard Deviations, and Ranges of the STATIC and TSES Scales and Subscales

					Range	
Scale	α	*n*	*M*	*SD*	Potential	Actual
Full STATIC scale	.85	97	70.19	11.83	0-100	35-94
STATIC subscales:						
Advantages and Disadvantages of Inclusion	.78	102	22.24	5.42	0-35	10-35
Professional Issues of Inclusion	.75	113	17.54	4.63	0-25	5-25
Logistical Issues of Inclusion[a]	.70	116	6.22	2.37	0-20	0-10
Full TSES scale	.94	107	90.76	12.00	12-108	57-108
TSES subscales:						
Efficacy in Instructional Strategies	.91	115	30.71	4.28	4-36	18-36

Efficacy for Classroom Management	.84	110	30.45	4.51	4-36	17-36
Efficacy for Student Engagement	.81	114	29.60	4.36	4-36	18-36

[a]Data presented for this subscale represent analyses based on two of the four original survey items. Two items were dropped to achieve internal consistency for the subscale.

Research Question 1

To answer the research question, Is there a difference in teachers' attitudes towards inclusion between teachers of differing teacher type and education level?, a two-way analysis of variance (ANOVA) was conducted to assess the main effects and any interactions of teacher type (general or special education) and level of education (bachelor's degree, master's degree, master's plus 30 units) on Teachers' Attitudes Toward Inclusion as measured by STATIC scale scores. Additionally, three separate two-way ANOVAs were conducted for the three STATIC subscales. Because too few participants reported holding doctoral degrees (<10% of the sample), this level of education was excluded from all analyses. The results of the two-way ANOVAs are presented in Table 3.

Table 3

ANOVAs for the Full STATIC Scale and the Three STATIC Subscales

Source	*df*	*MS*	*F*	*p*	η^2
	Scale of Teachers' Attitudes Toward Inclusion				
Teacher type	1	2,041.97	19.13	< .001	.19
Education level	2	153.77	1.44	.243	.03
Teacher type x education level	2	45.65	.43	.653	.01
Error	84	106.74			
	Advantages and Disadvantages of Inclusion subscale				
Teacher type	1	264.65	10.79	.001	.11
Education level	1	20.76	.85	.432	.02
Teacher type x education level	2	23.78	.97	.383	.02
Error	89	24.53			
	Professional Issues of Inclusion subscale				
Teacher type	1	575.55	44.10	< .001	.31
Education level	2	42.32	3.24	.043	.06
Teacher type x education level	2	8.56	.66	.521	.01
Error	100	13.05			
	Logistical Issues of Inclusion subscale				
Teacher type	1	3.56	.64	.426	.06
Education level	2	23.76	4.27	.017	.08
Teacher type x education level	2	3.61	.65	.525	.01
Error	103	5.57			

For the full STATIC scale, there was a significant main effect for teacher type, $F(1, 84) = 19.13$, $p < .001$. Special education teachers held significantly higher attitudes towards inclusion ($M = 79.74$, $SD = 7.27$) than general education teachers ($M = 66.90$, $SD = 11.32$). Teacher type had a large effect on attitudes, partial $\eta^2 = .19$, and explained 19% of the variance in attitudes.

For the Advantages and Disadvantages of Inclusion subscale, a significant main effect was found for teacher type, $F(1, 89) = 10.79$, $p = .001$. Special education teachers held significantly higher attitudes towards the advantages and disadvantages of inclusion ($M = 25.15$, $SD = 4.12$) than general education teachers ($M = 20.96$, $SD = 5.32$). Teacher type had a medium effect on attitudes towards the advantages and disadvantages of inclusion, partial $\eta^2 = .11$, and explained 11% of the variance in attitudes.

For the Professional Issues of Inclusion subscale, a significant main effect was found for teacher type, $F(1, 100) = 44.10$, $p < .001$. Special education teachers held significantly higher attitudes towards the professional issues of inclusion ($M = 22.21$, $SD = 2.42$) than general education teachers ($M = 15.87$, $SD = 4.09$). Teacher type had a large effect on attitudes towards professional issues of inclusion, partial $\eta^2 = .31$, and explained 30.6% of the variance in attitudes. Moreover, a significant main effect also was found for education level, $F(2, 100) = 3.24$, $p < .05$. Teachers who held bachelor's degrees ($M = 19.63$, $SD = 3.22$) and master's degrees plus 30 units ($M = 17.91$, $SD = 4.80$) had significantly higher attitudes towards professional issues on inclusion than teachers holding a master's degree ($M = 15.82$, $SD = 4.61$). Teacher education level had a moderate effect on attitudes towards professional issues on inclusion, partial $\eta^2 = .06$, and explained 6% of the variance in attitudes.

For the Logistical Issues of Inclusion subscale, a significant main effect was found for education level, $F(2, 103) = 4.27$, $p < .05$. Teachers who held master's degrees ($M = 6.57$, $SD = 2.21$) and master's plus 30 units ($M = 6.49$, $SD = 2.45$) had significantly higher attitudes towards logistical issues of inclusion than teachers with bachelor's degrees ($M = 4.89$, $SD = 2.40$). Teacher education level had a moderate effect on attitudes towards logistical issues of inclusion, partial $\eta^2 = .08$, and explained 8% of the variance in attitudes.

Research Question 2

To answer the research question, Does teachers' sense of efficacy predict teachers' attitudes towards inclusion while controlling for teacher type and education level?, two separate multiple regression analyses were conducted.

In the first model (see Table 4), both the TSES total scale and teacher type variables were found to be significant predictors of the STATIC total scale score—$F(5, 83) = 8.73$, $p < .001$. The higher the teachers' total self-efficacy, the more favorable attitude towards inclusion the teachers had. Additionally, special education teachers had more favorable attitudes towards inclusion than general education teachers. Combined, these two variables explained 31% (adjusted $R^2 = .31$) of the variance in teachers' attitudes towards inclusion.

Table 4
Multiple Regression Analysis: Effect of TSES Total Scale in Predicting the STATIC Total Scale Score While Controlling for Teacher Demographics

Variable	*B*	*SE B*	ß	*t*	*p*
TSES scale	.30	.09	.31	3.508	.001
Teacher type (general or special education)	12.18	2.35	.46	5.17	< .001
Education level					
Bachelor's	1.03	4.44	.03	.23	.817
Master's	-4.79	4.15	-.19	-1.15	.252
Master's plus 30 units	-1.83	3.95	-.08	-.46	.644

Note. $R = .59$, $R^2 = .35$, adjusted $R^2 = .31$, $F(5, 83) = 8.73$, $p < .001$.

In the second model, two variables, Efficacy in Instructional Strategies and teacher type, were found to be statistically significant predictors of STATIC total score—$F(6, 83) = 7.94$, $p < .001$ (see Table 5). The higher the teachers' Self-efficacy in Instructional Strategies, the more favorable attitude towards inclusion the teachers had. Additionally, special education teachers had more favorable attitudes towards inclusion than general education teachers. Combined, these two variables explained 32% (adjusted $R^2 = .32$) of the variance in teachers' attitudes towards inclusion.

Table 5
Multiple Regression Analysis: Effect of TSES Subscale Scores in Predicting the STATIC Total Scale Score While Controlling for Teacher Demographics

Variable	*B*	*SE B*	ß	*t*	*p*
Efficacy in instructional strategies	.90	.32	.33	2.79	.007
Efficacy for classroom management	.07	.30	.03	.22	.825
Teacher type (general or special education)	12.01	2.31	.46	5.19	< .001
Education level					
Bachelor's	1.73	4.40	.06	.39	.695
Master's	-3.81	4.15	-.15	-.92	.361
Master's plus 30 units	-1.49	3.89	-.07	-.38	.703

Note. $R = .60$, $R^2 = .37$, adjusted $R^2 = .32$, $F(6, 83) = 7.94$, $p < .001$. Efficacy of Student Engagement subscale was removed from the model due to multicollinearity.

Discussion

Although teachers overall generally had positive attitudes towards inclusion ($M = 70.19$, $SD = 11.83$) as measured by scores on the STATIC total scale (Research Question 1), special education teachers' attitudes towards inclusion ($M = 79.74$, $SD = 7.27$) were significantly more positive than those of general education teachers ($M = 66.90$, $SD = 11.32$) as demonstrated by a mean score difference of 12.84 on a 100-point scale. These results are supported in the literature.

Researchers have posited that special education teachers have more positive attitudes compared to general education teachers because they have specialized training in implementing inclusive strategies (Parker, 2009) and more experience in doing so (Malinen, Savolainen, & Xu, 2012). In fact, in Orr's (2009) study, special education teachers reported themselves as having more positive attitudes than their general education peers, citing their peers' lack of knowledge and preparation for the perceived difference in attitudes. In another study, general education teachers expressed confidence in their ability to implement IEPs, adapt lessons, and provide accommodations, but they still maintained their negative attitudes towards special education students (Cassady, 2011). However, while Ross-Hill (2009) did not compare teachers by type, results from her study indicated that general education teachers at the elementary and secondary levels were generally positive about inclusion.

Additionally, the analysis revealed that special education teachers had more positive attitudes towards advantages and disadvantages of inclusion and professional issues of inclusion (e.g., training and ability) than general education teachers had. These results also are supported in the literature. General education teachers reported that the design and delivery of specialized instruction required to teach special education students interferes with the instructional routine of the general education classroom (O'Rourke & Houghton, 2009) and is too time consuming (Horne & Timmons, 2009). In one study, regular education kindergarten students' reading and math performance decreased 10% by the beginning of first grade when special education students were included in the general education classroom (Fletcher, 2010). The results of these studies have shown that general education teachers find teaching special education students in the regular education classroom to be professionally challenging and a disadvantage to general education students.

With regard to education level, the results showed that teachers who held bachelor's degrees and master's degrees plus 30 units had significantly higher attitudes towards professional issues on inclusion than teachers holding a master's degree. This result is hard to explain based on the varying results in the literature. Because teachers can begin professional practice with a bachelor's degree and later obtain a master's degree to move up the salary schedule (Clotfelter, Ladd, & Vigdor, 2007), more teachers who have bachelor's degrees are likely to be young and inexperienced compared to teachers with master's degrees. (Younger teachers naturally have less experience than older teachers although not all older teachers necessarily have more experience.) While Berry (2010) found that less experienced teachers were more positive towards inclusion and more experienced teachers were less likely to be positive, Ross-Hill (2009) did not find significant differences in overall teacher attitude between groups of teachers based on experience. Similarly, Buford and Casey (2012) found that as years of experience increased, teacher attitudes appeared to remain generally positive. Moreover, Buford and Casey also found that teachers who are younger often are more positive about inclusion than are teachers who are older.

For Research Question 2, the TSES scale, the subscale Efficacy in Instructional Strategies, and teacher type were found to be significant predictors of overall teachers' attitudes towards inclusion. These results are supported in the literature. Malinen et al. (2012) noted that teacher self-efficacy did predict teacher attitudes towards inclusion. Likewise, Sokal and Sharma (2014) found that training in special education and a teacher's level of confidence in teaching students

with disabilities predicted teacher attitudes towards inclusion. Confidence in teaching students with disabilities is similar in nature to overall self-efficacy measured by the TSES scale in this study, and training in special education is equivalent to teacher type: special education.

Limitations

The choice to use convenience sampling to recruit participants limits the ability to generalize these results to the larger population of teachers in other school districts in the state or at the national level. An additional limitation was the small sample size. Small samples may overestimate the magnitude of the association or effect size between the independent and dependent variables in regression models. Despite this study's limitations, the results provide a valuable addition to the body of literature on inclusion of special education students in the general education classroom.

Implications for Practice

The results of this study have practical application in the educational setting. Sze (2009) asserted that teacher attitude is an important predictor of teacher effectiveness with regard to the capacity to facilitate the integration of students with disabilities into the general education setting. Specifically, teachers with negative attitudes are less effective than those with positive attitudes (Sze, 2009). Ultimately then, a teacher's attitude towards inclusion can be an integral part of the successful implementation of inclusive practices, which can contribute to student achievement (Hwang & Evans, 2011). Results of this study demonstrated that general education teachers in the schools of the focus district have less positive attitudes than special education teachers have. Based on Sze's assertions, these teachers presumably are less effective than they could be with regard to inclusive practices in the educational setting, which means that special education students may not be receiving the level of support they need to be successful in the general education classroom. School administrators, however, have the potential to initiate change. By helping teachers improve their attitudes towards inclusion, administrators can help teachers become more effective with regard to implementing inclusive strategies and, ultimately, improving student outcomes.

Also, the results showed that overall teacher efficacy, Efficacy in Instructional Strategies, and teacher type were predictors of teachers' attitudes towards inclusion and that higher levels of self-efficacy were associated with more positive attitudes towards inclusion. Based on these results, teachers' attitudes towards inclusion potentially could be improved by improving teacher levels of self-efficacy. School administrators could do this by implementing training not only in instructional strategies but in inclusive practices as well. By doing so, teachers' levels of self-efficacy could be improved, which could help improve teachers' attitudes towards inclusion, again with the potential to improve student outcomes and reduce the learning gap between students with disabilities and those without.

Future Research

Future research on this topic is warranted. It would be beneficial to explore differences in teachers' attitudes towards inclusion at various grade levels. It is possible that the duties associated with inclusive practices and/or the unique needs of students with disabilities at various age levels impact teachers' attitudes differently. Additional research should be conducted to explore other variables that may be related to teachers' attitudes towards inclusion such as the

impact of collective teacher efficacy, efficacy for implementing inclusive strategies in the classroom, age, and years of teaching experience. Because there were too few teacher responses to analyze the data for gender and the educational level doctoral degree in the current study, future research should consider these personal teacher characteristics as well.

Conclusion

Inclusion is a requirement of NCLB (2002), IDEA (2004), and ESSA (2015); therefore, administrators, general education teachers, and special education teachers involved in educating students with disabilities are mandated to modify instruction and provide instructional strategies to accommodate students with disabilities. When teachers have low levels of self-efficacy with regard to inclusive practices, they are not likely to actively put forth effort to implement these strategies. However, by improving teacher self-efficacy and attitudes towards inclusion among the teachers, the amount and quality of inclusive practices implemented in the classroom may be improved and, ultimately, student outcomes may be improved.

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