

Examining Preservice Teacher Attitudes and Efficacy about Inclusive Education

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The purpose of this study was to examine pre-service teacher self-efficacy and attitudes towards inclusion. Participants included pre-service teachers ($N = 68$) who were all enrolled in a freshman education course. Researchers administered two scales including the Teacher Efficacy for Inclusive Practices scale (TEIP; Sharma, Loreman & Forlin, 2012) and Scale of Teacher's Attitudes towards Inclusive Classrooms (STATIC; Cochran, 1997). Results indicate preservice teachers have high self-efficacy and positive attitudes towards teaching students with disabilities.

Introduction

The need for inclusive education has increased over the last decade as students with disabilities are now being included more in general education classrooms as a part of their daily educational routine. In fact, almost two-thirds of students with disabilities are served in the general education classroom for at least 80% of the school day ("Individuals with Disabilities Act," 2020). Therefore, both general and special educators are now required to effectively teach *all* students regardless of ability (McNamee, 2016). Because of this, it is critical teachers are prepared and trained to teach diverse learners. This preparation may need to begin in teacher preparation programs (TPPs) with preservice teachers.

Literature Review

Inclusion, or inclusive education, refers to providing all learners in a classroom access to the general education curriculum. This includes students who have diagnosed disabilities. Notably, inclusion means far more than just physical access to general education classroom (Garwood & Van Loan, 2018). Instead, it means that educators are also responsible for providing access to the curriculum (Garwood & Van Loan, 2018). That is, all educators must provide quality instruction and curriculum, as well as possibly implement accommodations in order for students to gain true access to the general education classroom. Importantly, this provides the opportunity for students with disabilities to become "full members of a classroom community, thus allowing them

to develop both academically and socially” (p. 171; Shady et al., 2013). Therefore, general and special educators should have the necessary training to provide supports for the needs of every student (Ajuwon et al., 2012).

Some research has been conducted about the need for preservice teachers to learn about inclusion during the completion of their coursework and other experiences while enrolled in a TPP. Olson and Roberts (2018) noted that how teacher educators, or instructors in the TPPs, view inclusion themselves may impact the views of the preservice teachers enrolled in their programs. They argue that “teacher educators play an influential role in the development of preservice teachers’ knowledge, beliefs, practices, and definitions of access to the general curriculum” (p. 367; Olson & Roberts, 2018). This is likely because the teacher educators help design curriculum. Therefore, it is essential teacher educators prioritize the inclusion of all students in their coursework.

Allday and colleagues (2013) note “[m]eeting the needs of diverse abilities requires teachers to have attitudes and skills that can lead to positive changes in students’ academic and social behavior” (p. 299). Thus, teachers need both the knowledge and skills, as well as the attitude for successful inclusion. Although this refers to current practicing teachers, researchers can use this same philosophy when working with preservice teachers.

Preservice teachers may feel ill-equipped to teach in an inclusive classroom. Often, preservice teachers feel unprepared, to some degree, to teach in a classroom with students both with and without disabilities (Stites, et al., 2018). In fact, Stites et al. (2018) found that both early childhood and elementary education majors believed they were not prepared to teach inclusively. Thus, preservice teachers often have a negative

view of inclusion as they lack the training needed to teach students with disabilities (Nishimura & Busse, 2016).

This may negatively impact preservice teachers’ attitudes towards inclusion. Researchers noted that although the majority of the preservice teachers (88%) felt students with disabilities should be in general education classrooms with their same-aged peers, almost half (44%) noted that teaching students with disabilities may be burdensome (Stites, et al., 2018). Importantly, for an inclusive education program to be effective, teachers must have a positive view of inclusion (Stites, et al., 2018). McNamee (2016) noted that teachers’ attitudes play a significant role in the success of inclusive classrooms.

Moreover, preservice teachers must feel efficacious about teaching students with disabilities in order to be effective. Loreman et al. (2013) noted that a teacher’s perception of their teaching self-efficacy directly impacts their attitude towards a situation, and their attitude towards successfully teaching in an inclusive classroom. Therefore, TPPs may need to consider providing preservice teachers with opportunities to positively shape attitudes towards inclusive education.

Researchers also noted that negative feelings towards inclusive education can be changed through significant experiences, such as working directly with students both with and without disabilities and with knowledgeable mentors throughout their time in their TPP (Gilligan & Thomas, 2019). Moreover, Lang (2014) noted that students who participated in practicum experiences along with their coursework had better attitudes towards inclusion. Loreman and colleagues (2013) had similar findings as they noted simply interacting with students with disabilities had a positive effect on preservice teacher attitudes. Thus, TPPs may need to provide both opportunities for preservice teachers: coursework and hands-

on experience working with students with disabilities.

It is critical TPPs prepare preservice teachers to teach students with disabilities in methods coursework and experiences. This may include purposeful planning in terms of coursework and practicum experiences. The purpose of this study was to examine preservice teacher attitudes and efficacy regarding teaching students with disabilities.

Methodology

Participants & Setting

All participants ($N=68$) were enrolled in a freshman education course in a teacher education program at a public comprehensive college. The first and second authors of this article were also the instructors of this education course. Table 1 describes the characteristics of the participants, who were all preservice teachers. The participants had a mean age of 18.52 years ($SD = 0.91$) and the majority were female (94.1%). The

Table 1

Participant Characteristics (N = 68)

Variable	<i>n</i> (%)
Gender	
Male	3 (4.4)
Female	64 (94.1)
Other	1 (1.5)
Major	
Childhood Education	3 (4.4)
Childhood Education and Special Education	54 (79.4)
Childhood Education and Literacy	7 (10.3)
Other	4 (5.9)
Amount of education courses completed or enrolled in	
1	7 (10.3)
2	51 (75.0)
3	3 (4.4)
4	2 (2.9)
5 or more	5 (7.4)

majority were enrolled in the major of Childhood Education combined with Special Education (79.4%) and were in their second education class (75%). Participants reported none (4.4%), some (51.5%), or much (44.1%) interaction with students or people with disabilities. Participants reported none (33.8%), some (58.8%), or much (at least 40 hours) (7.4%) training in working with or educating students with disabilities. Participants reported none (33.8%), some (52.9%), or high (30 days or more) (13.2%) experience teaching students with disabilities.

Procedures

In order to assess the attitudes and efficacy related to inclusive education, participants were asked to complete two dependent measures. Participant's efficacy related to inclusive practices was measured using the Teacher Efficacy for Inclusive Practices scale (TEIP; Sharma, Loreman & Forlin, 2012). The TEIP has high internal consistency for both the full scale ($\alpha = 0.977$) and each of the three domain-specific factors: efficacy to use inclusive instruction ($\alpha = 0.929$), efficacy in collaboration ($\alpha = 0.953$), and efficacy in managing behavior ($\alpha = 0.944$) (Park et al., 2016). Participants were asked to rate 18 items aligned to the three factors of teacher efficacy using a six-point Likert-type scale (1= "strongly disagree", 6= "strongly agree"). The five items that measured efficacy to use inclusive instruction asked participants to rate their perceived ability to adjust instruction, learning tasks, and assessment to meet the individual needs of their future students. The six items that measured efficacy in collaboration asked participants to rate their perceived ability to work collaboratively with families and colleagues to meet the needs of students with disabilities. The seven items that measured efficacy in managing behavior asked participants to rate their perceived ability to

manage a classroom and respond to challenging student behavior. The scoring of the teacher efficacy scale included a total score with a maximum possible score of 108. The maximum possible subscale scores for each of the three factors of teacher efficacy were 30 for efficacy to use inclusive instruction, 36 for efficacy in collaboration, and 42 for efficacy in managing behavior.

A modified version of the Scale of Teacher's Attitudes towards Inclusive Classrooms (STATIC; Cochran, 1997) was used to measure preservice teacher attitudes about inclusion. The original STATIC consists of 20 items using a 5-point Likert-type scale (1= "strongly disagree", 5= "strongly agree") with five reverse coded items. The total score of the 20 items represents teachers' attitudes towards inclusion with higher scores indicating positive attitudes and lower scores indicating negative attitudes. The scale has high internal consistency ($\alpha = .89$) and high temporal stability ($r = .99$) (Nishimura & Busse, 2015).

For this study, eight items were removed from the STATIC because these items pertained to teachers who had classroom teaching experience. The modified version of the STATIC for this study was therefore reduced to 12 items with three reverse coded items. The 12 items were aligned to five factors of teacher attitudes towards inclusive classrooms identified by Nishimura and Busse (2015). The five factors were beliefs in inclusive education, ability and confidence in working with students with disabilities, making progress toward inclusive education, supporting inclusive education, and general education perspective on inclusion. The scoring of the modified STATIC included a total score with a maximum possible score of 60. The maximum possible subscale scores for each of the five factors of the STATIC were 30 for beliefs in inclusive education, five for ability

and confidence in working with students with disabilities, 15 for making progress toward inclusive education, five for supporting inclusive education, and five for general education perspective on inclusion.

Demographic information and questions aiming to explore participants' experience related to students with disabilities were collected after the preservice teachers responded to the two surveys. For the demographic questions, preservice teachers provided their age, gender, major, and number of education courses completed. Preservice teachers' experience related to students with disabilities consisted of three questions, the amount of interaction with people with disabilities, the amount of training related to students with disabilities, and the amount of experience teaching students with disabilities. Preservice teachers responded to these three questions on a three point scale (None, Some, Much/High).

To administer both scales and the demographic questions, participants were first given codes. Then, students met in a computer lab on campus during a class period of an education course during their freshman year. Both instruments were administered electronically. Students were given a link with their specific code and asked to complete the survey in the computer lab. This occurred towards the end of the semester. Throughout this freshmen-level course, students learned about the history of education including as it related to teaching diverse students. Thus, students had exposure to the academic language needed to complete both instruments.

Results

Researchers analyzed the instruments using means of the sub-scales and overall efficacy and attitudes. Additionally,

correlational analyses were conducted to examine these constructs.

Teacher Efficacy for Inclusive Practices

The average total score on the TEIP was high ($M = 85.75$, $SD = 10.967$) given the maximum possible score of 108. Preservice teachers also demonstrated high scores on each of the three subscales of the TEIP; efficacy to use inclusive instruction ($M = 23.75$, $SD = 3.178$), efficacy in collaboration ($M = 28.99$, $SD = 4.454$), and efficacy in managing behavior ($M = 33.01$, $SD = 4.537$) with maximum scores of 30, 36, and 42 respectively. Individual item analyses revealed the preservice teachers scored the highest on the question: *I am able to work jointly with other professionals and staff (e.g., aides, other teachers) to teach students with disabilities in the classroom* ($M = 5.19$, $SD = 0.918$). The preservice teachers scored the lowest on the question: *I am confident when dealing with students who are physically aggressive* ($M = 4.00$, $SD = 1.246$).
Teacher Attitudes towards Inclusive Classrooms

The average total score on the STATIC was on the high end ($M = 42.62$, $SD = 4.306$) given the maximum total score of 60. Preservice teachers also demonstrated high ratings for the five subscales of the STATIC: beliefs in inclusive education ($M = 19.76$, $SD = 2.871$), ability and confidence in working with students with disabilities ($M = 3.56$, $SD = 0.817$), making progress toward inclusive education ($M = 12.56$, $SD = 1.250$), supporting inclusive education ($M = 3.22$, $SD = 0.944$), and general education perspective on inclusion ($M = 3.51$, $SD = 0.819$) with maximum score of 30, 5, 15, 5, and 5 respectively. Individual item analyses revealed that preservice teachers scored the highest on the question: *I believe that academic progress is possible for students with disabilities* ($M = 4.74$, $SD = 0.477$). The preservice teachers scored the lowest on the reverse coded question: *I believe that*

students with disabilities should be placed in special education classes ($M = 2.75$, $SD = 0.799$) where 5=strongly disagree and 1=strongly agree.

Correlations

Pearson correlations were conducted to analyze the relationship between the TEIP, STATIC, and demographic variables (Appendix A). The significant positive correlation between the total scores for the STATIC and TEIP indicates that the more preservice teachers valued inclusive practices, the higher their efficacy for inclusive practices, $r(66) = .392$, $p = .002$. Additional significant positive correlations were found between the individual factors of the TEIP and STATIC (Appendix A).

Several significant positive correlations were found between participant variables and scores on the TEIP and STATIC. The significant positive correlation between the total STATIC score and age indicates that the older the preservice teachers, the more they valued inclusive practices, $r(66) = .362$, $p = .003$. The more training the preservice teachers reported related to working with or educating students with disabilities, the higher their total score for STATIC, $r(66) = .342$, $p = .004$. The more interaction the preservice teachers had with students or people with disabilities, the higher their beliefs in inclusive education (STATIC factor 1) score, $r(66) = .282$, $p = .020$, and ability and confidence in working with students with disabilities (STATIC factor 2) score, $r(66) = .329$, $p = .006$. Additionally, the more experience the preservice teachers had with teaching students with disabilities, the higher their ability and confidence in working with students with disabilities (STATIC factor 2) score, $r(66) = .327$, $p = .006$, and efficacy in collaboration score (TEIP factor 2), $r(66) = .279$, $p = .021$ (Appendix A).

Discussion

The aim of this study was to examine the relationship between preservice teacher attitudes and efficacy regarding teaching students with disabilities. The results of this study indicate a positive relationship between preservice teachers attitudes and self-efficacy toward inclusive practices. This aligns with past research demonstrating that teacher's self-efficacy impacts their attitudes (Loreman et al., 2013).

The results also suggest that the more interaction and experience the preservice teachers had with students or people with disabilities, the higher their beliefs in inclusive education, ability and confidence in working with students with disabilities, and efficacy in collaboration. This finding supports past research which indicates interacting with students with disabilities can improve preservice teachers attitudes towards inclusion (Gilligan & Thomas, 2019; Lang, 2014; Loreman et al., 2013). Therefore, further supporting the call for TPP to provide both opportunities for preservice teachers to have direct experience working with students with disabilities.

The preservice teachers in the current study reported high levels of positive attitudes and efficacy regarding teaching students with disabilities. These results differ from past research showing preservice teachers had low efficacy (Stites et al., 2018) and negative view of inclusion (Nishimura & Busse, 2016). The discrepancy in findings may be attributed to the limitations of the study discussed below.

Because the researchers of this study were also the participants' instructors in a TPP, these results were also beneficial on a practitioner level. The authors used the results of this study to plan for future experiences and practicums during the next two semesters. These participants completed several courses about teaching diverse

learners. The instructors were able to tailor the assignments and activities to provide more opportunities for the preservice teachers to learn more about inclusion.

As with many correlational studies, some limitations were found. First, the sample size was small ($N=68$), which likely impacted the generalizability of these results. Additionally, all participants were enrolled in their freshman year of coursework in a TPP. Because freshmen often have little experience working with students with disabilities, they may use past experiences as a basis for their attitudes and efficacy. Perhaps these former experiences (maybe in high school) were effective and ones that promoted inclusion. Other students, however, may have had negative experiences. These factors may have influenced their attitudes and efficacy. Future research may explore the relationship between attitudes and self-efficacy and the specific types of former experiences of the students. This can be accomplished through a mixed-methods design incorporating the scales used in the current study and interviews with the students. Additionally, it may be beneficial for researchers to administer the same scales after the participants completed all coursework (as a post-) to determine if courses and practicum experiences impacted preservice teachers' beliefs.

Now, perhaps more than ever, preservice teachers need to feel comfortable and prepared to work in an inclusive environment upon completion of their TPP. This is due to the large percentage of students with disabilities who are served in the general education classroom for the majority of the day. TPPs may need to explicitly plan for preservice teachers to have experience working with students with disabilities in both coursework and practicum opportunities as research often notes this positively impacts their attitudes and efficacy towards inclusion.

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Appendix A

Preservice Teachers' STATIC, TEIP, and Demographics: Correlations and Descriptive Statistics (N = 68)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.STATIC	-														
2.STATIC Factor 1	.798**	-													
3.STATIC Factor 2	.562**	0.114	-												
4.STATIC Factor 3	.581**	0.208	.391**	-											
5.STATIC Factor 4	.495**	0.080	.612**	0.223	-										
6.STATIC Factor 5	.442**	0.166	.255*	0.152	0.218	-									
7.TEIP	.362**	0.078	.389**	.380**	.444**	0.151	-								
8.TEIP Factor 1	.296*	0.101	.313**	.261*	.382**	0.050	.936**	-							
9.TEIP Factor 2	.418**	0.153	.412**	.355**	.459**	0.182	.896**	.819**	-						
10.TEIP Factor 3	.257*	-0.033	.316**	.388**	.355**	0.151	.882**	.758**	.612**	-					
11.Age	.362**	.366**	0.176	0.055	0.118	0.223	0.102	0.103	0.137	0.040	-				
12.Gender	0.089	0.054	0.009	0.104	0.029	0.077	0.087	0.126	0.055	0.068	-0.201	-			
13.Interact	0.116	-0.069	.282*	.329**	0.111	-0.060	0.051	0.006	0.089	0.032	-0.139	0.085	-		

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
14.Train	.342**	0.139	.374**	.325**	.295*	0.101	0.114	0.052	0.124	0.119	0.110	0.154	.534**	-	
15.Exp	0.177	0.053	.327**	0.178	0.170	-0.050	0.216	0.139	.279*	0.151	-0.107	0.055	.493**	.396**	-
Max Score	60	30	5	15	5	5	108	30	36	42	-	-	2	2	2
M	42.62	19.76	3.56	12.56	3.22	3.51	85.75	23.75	28.99	33.01	18.52	-	1.40	0.74	0.79
SD	4.31	2.87	0.82	1.25	0.94	0.82	10.97	3.18	4.45	4.54	0.91	-	0.58	0.59	0.66

Note. STATIC Factor 1 is beliefs in inclusive education, STATIC Factor 2 is ability and confidence in working with students with disabilities, STATIC Factor 3 is making progress toward inclusive education, STATIC Factor 4 is supporting inclusive education, STATIC Factor 5 is general education perspective on inclusion, TEIP Factor 1 is efficacy to use inclusive instruction, TEIP Factor 2 is efficacy in collaboration, TEIP Factor 3 is efficacy in managing behavior. Gender: 0= male, 1= female, 2=other. Interact is: How much interaction have you had with students or people with disabilities? (none=0; some=1; much=2). Train is: How much training have you received in working with or educating students with disabilities? (0=none; 1=some; 2=much (at least 40 hours)). Exp is: How much experience do you have teaching students with disabilities? (0=none; 1=some; 2=high (at least 30 days)).

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

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