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Montessori and Non-Montessori Early Childhood Teachers' Attitudes Toward Inclusion and Access

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Abstract. Montessori and non-Montessori general education early childhood teachers were surveyed about their attitudes toward including children with disabilities and providing these students access to the curriculum. Both groups reported similar and positive system-wide supports for inclusion within their schools. Montessori teachers reported having less knowledge about inclusion and less special education professional development than their non-Montessori counterparts. Implications for professional development and teacher preparation are described.

Maria Montessori is called one of the pioneers of special education (Odom et al., 2005). Montessori began her method of education in the early 1900s with children with multiple disabilities residing in Italian institutions. She designed hands-on learning materials to help students with disabilities learn concepts and skills. When tested, these students with special needs outscored typically developing children who were educated in the traditional public schools (Wolfe, 2002). In 1907, Montessori developed a Children's House, educating at-risk young children living in low-income housing in the San Lorenzo district in Rome, Italy. Despite this rich history linking Montessori and special education, the Montessori approach has not been highlighted as a contemporary program for serving children with disabilities.

Montessori education is one approach that may provide an educational environment especially suitable to including students with disabilities. The curriculum in Montessori classrooms aligns closely with many early childhood, special-education-recommended practices. The Montessori Method incorporates hands-on, differentiated, self-paced learning in multiage classrooms (Cossentino, 2010). Multiage classrooms offer natural opportunities for peer support and peer tutoring. The scope and sequence of instruction in each Montessori classroom offers children a three-year span of curriculum, from introductory activities through advanced materials and concepts. The Montessori materials themselves provide opportunities for all children to learn and express their learning in different ways, aligning with the special education concept of universal design for learning (Kirk, Gallagher, Coleman, & Anastasiow, 2011). The materials offer multiple means of representation, expression, and engagement. Students manipulate objects, talk about the process, and write about it. For example, a child learning to spell a three-letter word might use a variety of materials, from more concrete to more abstract: the Montessori material called the Movable Alphabet, the chalkboard, or a clipboard with pencil and paper. Similarly, special educators typically use a differentiated or individualized approach to teaching, frequently through the use of multisensory and hands-on materials (Kirk et al., 2011). These tenets of Montessori education provide a good fit for students with disabilities (McKenzie & Zascavage, 2012; Pickering, 2008).

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The Montessori Approach in Practice

Today there are more than 4,000 Montessori schools in the United States, and more than 400 of these are public Montessori schools (American Montessori Society [AMS], 2015a). Although Montessori education is growing in public, charter, magnet, Head Start, and other quasipublic settings, this method of education is most commonly found in private or independent schools in the U.S. In private settings, inclusion is not a legal requirement, according to the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA). Therefore, including students with disabilities in private or independent Montessori schools may not be a high priority for administrators. In addition, there is limited research on Montessori and inclusion.

In one of the few studies on Montessori inclusion, Montessori teachers reported that their commitment to inclusion outweighed their reluctance and resistance to compromise their use of the Montessori Method (Epstein, 1997; 1998). Although teachers reported a fit between Montessori Methods and inclusion, they also expressed frustration regarding children with challenging behavior in their classes. "If children's needs required changes compromising Montessori Methods, [teachers] seriously questioned inclusion" (Epstein, 1997, p. 34). Within Montessori Early Childhood classrooms, gains in academic and social skills have been reported for both typically developing students (Lillard & Else-Quest, 2006) and children at risk for disabilities, as compared to other preschool programs (Miller, Dyer, Stevenson, & White, 1975; Pickering, 1992). These positive results suggest that social and academic gains might be demonstrated by students with disabilities attending Montessori schools as well.

The Evolution of Inclusion

In the field of early childhood special education, the definition for early childhood inclusion has been evolving for several decades (Odom, Buysse, & Soukakou, 2011). A joint position statement on early childhood inclusion was created in 2009 through the collaboration of two major early childhood organizations, the Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC). DEC/NAEYC (2009) made critical recommendations for early childhood programs, which include access to a wide range of learning opportunities and environments, participation through scaffolded learning, and provision of system-level supports as defining features of inclusion. This inclusion statement provides a framework for all schools, including Montessori schools, to apply within their program contexts.

This study focuses on access, one part of the DEC/NAEYC definition of inclusion. Access provides children with disabilities the means to successfully enter a learning environment and successfully take part in the learning activities (DEC/NAEYC, 2009). Access was selected because of its pivotal role in providing opportunities for children to gain entry to school, the learning environment, and the curriculum. Without access, children cannot participate in events, learn, or receive supports. Access means removing physical barriers and offering multiple ways to promote learning and development to provide a wide range of activities and environments for every child. In the DEC/NAEYC inclusion statement, examples of providing access include features such as assistive technology, universal design for learning (UDL), and modified learning activities for students. UDL is a concept that supports teaching through multiple methods of presentation, engagement, and response. Through UDL, children have the opportunity to learn in different ways, e.g., auditory, visual, and kinesthetic, and can demonstrate acquisition of skills through different ways (Kirk et al., 2011).

Research Questions

The purpose of this study was to compare Montessori and non-Montessori early childhood teacher attitudes toward inclusion. The study addressed two specific research questions: 1) What are early

childhood teachers' attitudes toward providing access for students with disabilities in their classrooms? and 2) How are the attitudes of Montessori and non-Montessori early childhood teachers different or similar?

Methods

An online survey platform, SurveyMonkey, was used to survey two groups of teachers—Montessori and non-Montessori—in a large Midwestern state. The first group included AMS-credentialed teachers working in AMS-affiliated or AMS-accredited programs in Early Childhood classrooms. The second group included early childhood state-certified, non-Montessori preschool teachers.

Recruitment Procedures: Montessori

The Montessori association for the large Midwestern state of interest emailed its member schools through its mailing list, which reaches over 100 Montessori schools, to invite participation. After receiving the email, principals and directors of a number of member schools agreed to forward the survey link by email to their early childhood teachers. Montessori events such as a local Montessori conference and announcements at the target state's Montessori organization's monthly meetings, as well as through its social networking page served as resources to reach potential participants. Eighty-two Montessori teachers completed the survey. Response rate cannot be determined because there is no reliable list of the population of credentialed Montessori Early Childhood teachers in this state.

Recruitment Procedures: Non-Montessori

The first author obtained the publicly available state-certified teacher list with a Freedom of Information Act request from the state's board of education. This list contained the names and school addresses for a total of 1,153 teachers who were state certified in early childhood education. A data checker used the information from this list to locate teachers' school and work email addresses online. Of the 1,153 early childhood teachers on the list, the data checker found 626 teachers with school email addresses. After sending an introductory email to those addresses, 503 email addresses were determined to be working and valid, and not belonging to users who had opted out from online surveys. The survey link was directly emailed from SurveyMonkey to these teachers to obtain their consent to participate in the study. One hundred sixty-eight non-Montessori participants completed the survey, a response rate of 33.4% non-Montessori teachers.

Participants

The 250 eligible respondents were grouped as either Montessori ($N = 82$) or non-Montessori ($N = 168$) early childhood teachers. Teachers self-identified as Montessori teachers or not during the survey process. Montessori teachers were slightly older, with a mean age of 46 (range: 27–68 years), than non-Montessori teachers, with a mean age of 42 (range: 25–63 years). Montessori and non-Montessori teachers indicated similar years of teaching experience, both having 13 years on average. As shown in Table 1, nearly all (99%) non-Montessori teachers and most (82%) Montessori teachers had experience teaching students with identified disabilities.

Table 1

Demographics of Participants

Demographics	Teachers			
	Montessori *N* = 82		Non-Montessori *N* = 168	
	Percentage	(*n*)	Percentage	(*n*)
Highest Education Level				
Doctorate	1.6%	(1)	1.3%	(2)
Master's	37.5%	(24)	61.7%	(95)
Bachelor's	60.9%	(39)	37.0%	(57)
Type of School				
Public	10.5%	(7)	97.3%	(146)
Charter / Magnet	6.0%	(4)	0.0%	(0)
Not-for-Profit	52.2%	(35)	1.3%	(2)
For-Profit	31.3%	(21)	0.0%	(0)
Head Start	0.0%	(0)	1.3%	(2)
Prior Experience with Children with Disabilities				
Yes	82.6%	(57)	99.4%	(153)
No	17.4%	(12)	0.7%	(1)
Family Member with a Disability				
Yes	44.9%	(31)	39.2%	(60)
No	50.7%	(35)	59.5%	(91)
Years Teaching Experience				
1–3	11.6%	(8)	5.9%	(9)
4–10	23.2%	(16)	36.0%	(55)
11–19	36.2%	(25)	30.7%	(47)
20+	26.0%	(20)	27.5%	(42)

The highest level of education varied significantly for Montessori and non-Montessori teachers. Most non-Montessori teachers (62%) held a master's degree as their highest degree. In contrast, the highest degree for most Montessori teachers (63%) was a bachelor's degree. The type of school also differed significantly across the two groups of teachers. Nearly all non-Montessori (96%) teachers worked in public schools. A majority of Montessori teachers (85%) worked in either nonprofit or for-profit private schools.

Instrument

We used an online survey design to contact a large number of teachers throughout the target state in a cost-effective way. The survey contained a total of 72 items developed by the first author. A skip-logic survey response path used participants' prior responses to determine the sequence and number of subsequent questions. The survey offered Likert-type scale items (n = 49), multiple-choice items (n = 17), and open-ended questions (n = 6) about teachers' perceptions and practices of inclusion. Based on time tests, the survey took an average of 20 minutes to complete. All institutional review board (IRB) requirements were followed.

Survey items measured (a) teachers' thoughts about inclusion, which included the ideas and beliefs they had about including students with disabilities in typical classrooms; (b) teachers' positive, negative, or neutral feelings about inclusion; and (c) teachers' behavior in inclusive classrooms, which focused on their teaching practices and instructional styles (Triandis, 1971).

Cognitive interviews, expert reviews, and a time test served to attest to the validity of the survey items. Montessori (n = 3) and non-Montessori (n = 15) practicing and preservice teachers completed cognitive interviews. One Montessori head of school and one Montessori teacher educator served as expert reviewers of the survey instrument. To improve clarity and ease of use, we revised the instrument based on

feedback from each phase of cognitive interviews and expert reviews. Two graduate students in special education completed time tests.

Data Analysis

Survey items measuring attitudes, feelings, knowledge, and behaviors about inclusion were subjected to principal component analysis (PCA) using SPSS version 21. Before performing PCA, we assessed the suitability of data for factor analysis. Initial inspection of the correlation matrix revealed the presence of many coefficients below 0.2. We decided to remove from the matrix survey items focused on the use of assistive technology, as they seemed to be outliers that measured another construct. Once these items were removed and the correlation matrix was run on the remaining survey items (n = 23), we saw many coefficients of 0.3 and above. The Kaiser–Meyer–Olkin value was .688, exceeding the recommended value of .6 (Kaiser, 1970; 1974). Bartlett's test of sphericity (Bartlett, 1954) reached statistical significance (0.00), supporting the factorability of the correlation matrix.

Principal component analysis revealed the presence of nine components with eigenvalues exceeding 1, explaining 17.5%, 11.5%, 7.5%, 6.6%, 6.3%, 5.7%, 4.8%, 4.7%, and 4.4% of the variance respectively. An inspection of the scree plot revealed a clear break after the third component. Using Cattell's scree test (1966), we decided to retain three components for further investigation.

The three-component solution explained a total of 36.5% of the variance, with Component 1 contributing 17.5%, Component 2 contributing 11.5%, and Component 3 contributing 7.5%. To aid in the interpretation of these three components, oblimin rotation was performed. The rotated solution revealed the presence of simple structure (Thurstone, 1947); all three components showed a number of strong loadings, and all variables loaded substantially on only one component. There was a weak negative correlation between Components 1 and 2 (r = –.05) and a weak positive correlation between Components 1 and 3 (r = .11) and Components 2 and 3 (r = .05). The results of this analysis clearly grouped survey items measuring knowledge and behaviors about inclusion (n = 7) in Component 1, supports for inclusion (n = 5) in Component 2, and feelings about inclusion (n = 8) in Component 3.

Table 2

Pattern and Structure Matrix for PCA with Oblimin Rotation of Three-Factor Solution of Survey Items

Item	Pattern coefficients			Structure coefficients			
	Component 1	Component 2	Component 3	Component 1	Component 2	Component 3	Communalities
Oftenuni	**.705**			**.674**			.518
Knowmod	**.699**			**.718**			.538
Knowuni	**.680**			**.655**			.484
Knowasst	**.664**			**.673**			.459
Oftenmod	**.664**			**.666**			.444
Oftenasst	**.638**			**.651**			.434
Support4		**.826**			**.820**		.714
Support3		**.757**			**.760**		.580
Support5		**.701**			**.702**		.492
Support2		**.689**			**.679**		.515
Support1		**.431**			**.434**		.192
Feelmod3			**.647**			**.665**	.487
Feelada3			**.567**			**.569**	.409
Feelada1			**.500**			**.497**	.280
Feelasst3			**.424**			**.462**	.380
Feelbelong			**.419**			**.426**	.199
Feelada4			**.416**			**.434**	.273
Feelasst1			**.346**			**.390**	.273
Feelmod1			**.339**			**.367**	.183

Note. Major loadings for each item are in boldface.

Results

Number of Students with Disabilities and Disability Type

Descriptive statistics were used to show differences between Montessori and non-Montessori teachers' current number of students with disabilities. As shown in Table 3, Montessori teachers, on average, served two children with IEPs or identified disabilities in their classrooms, while non-Montessori teachers served on average eight. Almost half (49.3%) of Montessori teachers had no children with disabilities in their current classrooms.

Table 3

Number of Students with Disabilities Included in Classrooms

How many students in your current classroom have an IEP or identified disability?	Teachers			
	Montessori *N* = 67 Percentage	(*n*)	Non-Montessori *N* = 152 Percentage	(*n*)
0	49.3%	(33)	2.0%	(3)
1	17.9%	(12)	5.3%	(8)
2–5	28.4%	(19)	16.4%	(25)
6–9	3.0%	(2)	33.2%	(49)
10+	1.5%	(1)	34.9%	(53)
Mean (*SD*)	2.2 (1.8)		7.8 (3.1)	

In general, non-Montessorians indicated a greater variety of disabilities represented in their classrooms than did teachers in Montessori classrooms. Montessori teachers on average indicated one or two types of disabilities represented in their classrooms, while non-Montessori teachers indicated on average four or five disability types. Non-Montessori teachers were much more likely to teach children identified as having a developmental delay (68%), speech or language impairment (82%), or other health impairment (20%) as compared to Montessori teachers (33%, 45%, and 0% respectively). The vast majority of non-Montessori teachers (82%) indicated working with a child with a speech or language impairment in their classrooms; speech and language impairments are the most frequently selected disability type for both groups of teachers. Neither group reported working with children who are deaf-blind. Few teachers across both groups served children with intellectual disabilities, traumatic brain injuries, or visual impairments.

Table 4

Types of Disabilities Represented in Classrooms

	Classrooms			
Of the students with IEPs and identified disabilities in your current classroom, what type(s) of disabilities are represented?	Montessori *N* = 49	(*n*)	Non-Montessori *N* = 165	(*n*)
Autism spectrum disorders	28.6%	(14)	44.2%	(73)
Deafness or hearing impairment	2.0%	(1)	3.7%	(11)
Deaf-blindness	0.0%	(0)	0.0%	(0)
Developmental delay	32.7%	(16)	67.9%	(112)
Emotional disturbance	14.3%	(7)	5.5%	(9)
Intellectual disability	2.0%	(1)	5.5%	(9)
Learning disability	16.3%	(8)	9.0%	(15)
Multiple disabilities	6.1%	(3)	10.3%	(17)
Orthopedic impairment	2.0%	(1)	14.5%	(24)
Other health impairment	0.0%	(0)	20.0%	(33)
Speech or language impairment	44.9%	(22)	81.8%	(135)
Traumatic brain injury	0.0%	(0)	1.8%	(3)
Visual impairment, including blindness	2.0%	(1)	5.5%	(9)
Total number of disabilities checked	151.0%	(74)	272.7%	(450)

Note. Respondents indicated all disabilities that apply in their classroom; therefore, the totals are more than 100%.

Regarding Table 4, it is important to note that numerous Montessori teachers ($n = 33$) and several non-Montessori teachers ($n = 3$) were ineligible to respond to this item because they had indicated earlier in the survey an absence of students with identified disabilities in their current classrooms. This result significantly reduced the number of Montessori teacher responses to this item.

Components

Survey results were analyzed between Montessori and non-Montessori teachers using survey items grouped by each of the three principal components.

Component 1: Knowledge of Inclusion

A one-way, between-groups, multivariate analysis of variance was performed to investigate teacher-type (Montessori or non-Montessori) differences in knowledge of inclusion. Six dependent variables were used: how often teachers modify learning activities, how often they use universal design for learning, how often they use assistive technology, how much they know about universal design for learning, how much they know about modifying learning activities, and how much they know about assistive technology. The independent variable was teacher type. There was a statistically significant difference between Montessori and non-Montessori teachers on the combined dependent variables: $F(6, 220) = 7.84$, $p = .000$; Wilks's lambda = .824; partial eta squared = .176. When the results for the dependent variables were considered separately, all differences reached statistically significant values, using a Bonferroni-adjusted alpha level of .008, except how often universal design for learning was used. An inspection of the

mean scores indicated that non-Montessori teachers reported higher levels of both inclusion knowledge and inclusion practice than did Montessori teachers.

Component 2: Supports for Inclusion

A one-way, between-groups, multivariate analysis of variance was performed to investigate teacher-type (Montessori or non-Montessori) differences in supports for inclusion. Five dependent variables were used: how important these types of supports are for students with identified disabilities, one-on-one adult support, support services, support from school administrators, collaborating within the classroom team, and support from families. The independent variable was teacher type. There was a statistically significant difference between Montessori and non-Montessori teachers on the five combined dependent variables: $F(5, 220) = 3.74$, $p = .003$; Wilks's lambda = .922; partial eta squared = .078. However, when the results for the dependent variables were considered separately, the only difference that reached statistical significance, using a Bonferroni-adjusted alpha level of .01, was support services. An inspection of the mean scores indicated that non-Montessori teachers value support services such as physical therapy, occupational therapy, and speech language pathology at a slightly higher level than do Montessori teachers. Both Montessori and non-Montessori teachers value at a similar, high level other supports such as one-on-one adult support, support from school administrators, collaborating within the classroom team, and support from families

Component 3: Feelings about Inclusion

A one-way, between-groups, multivariate analysis of variance was performed to investigate teacher-type (Montessori or non-Montessori) differences in feelings about inclusion. Eight dependent variables addressed teachers' feelings about student belonging (one variable), modification of materials (two variables), adapting the classroom environment (four variables), and assistive technology (one variable). The independent variable was teacher type. There was a statistically significant difference between Montessori and non-Montessori teachers on the combined dependent variables, $F(8, 206) = 3.88$, $p = .000$; Wilks's lambda = .869; partial eta squared = .131. When the results for the dependent variables were considered separately, no differences reached statistical significance, using a Bonferroni-adjusted alpha level of .006. Therefore, Montessori and non-Montessori teachers indicated similar feelings about student belonging, modifications of materials, adapting the classroom environment, and assistive technology.

Correlation Between Special Education Coursework and Knowledge of Inclusion

The relationship between completed special education coursework and knowledge of inclusion (Component 1, consisting of six survey items) was investigated using Pearson product-moment correlation coefficient. There was a strong, negative correlation between special education coursework and teacher-reported frequency of use of assistive technology in the classroom, $r = –.317$, $n = 219$, $p < .001$; extensive special education coursework was associated with lower use of assistive technology. There was a strong, positive correlation between special education coursework and how knowledgeable the teachers rated themselves on modifying learning activities, $r = .211$, $n = 217$, $p < .001$; greater special education coursework was associated with greater knowledge of modifying learning activities. There was a strong, positive correlation between special education coursework and how knowledgeable teachers rated themselves on the topic of assistive technology, $r = .278$, $n = 208$, $p < .001$, with higher levels of special education coursework associated with greater knowledge about assistive technology.

Table 5

Pearson Correlations Between Special Education Coursework and Knowledge of Inclusion

Survey Items in Component 1: Knowledge of Inclusion	Special Education Coursework
How often teachers modify learning activities	–.095
How often teachers use universal design for learning	–.080
How often teachers use assistive technology	–.317**
How much teachers know about universal design for learning	–.121
How much teachers know about modifying learning activities	.211**
How much teachers know about assistive technology	.278**

** $p < .01$ (two-tailed)

Discussion

This is the first known study on inclusion that directly compares early childhood teachers with Montessori credentials to teachers with other credentials. Results are consistent with studies on the Montessori-only population (Epstein, 1997; 1998), in which Montessori teachers indicated positive attitudes toward including students with special needs in their classrooms.

Similarities Between Montessori and Non-Montessori Teachers

Teacher responses were similar on many items within the survey. Interestingly, even though Montessori and non-Montessori teachers in this study worked in different types of schools (private and public), they both indicated that they valued similar, positive supports for inclusion within their schools. In public schools, legal requirements usually compel administrators to be well prepared for the inclusion of students with disabilities (with curricula, interventions, specialists, etc.) (IDEIA, 2004). Legally, private or independent schools must make reasonable accommodations for students with disabilities, but they are not required to include children whose needs would place an undue burden on the school. Even so, the Montessori teachers at private schools in this study expressed strong support for inclusion and responded similarly to non-Montessori teachers in public schools. This indication could show that private Montessori schools are welcoming and responsive to students with disabilities, consistent with recent survey results about students with disabilities in Montessori schools (Kahn, 2009).

Surprisingly, both groups also indicated similar positive feelings about inclusion. Both Montessori and non-Montessori teachers agreed with many statements about promoting all students' belonging, modifying classroom materials, adapting the environment to meet the needs of students in their classes, and using assistive technology for students with disabilities. Even though Montessori teachers in this study had less experience teaching children with disabilities, their feelings about inclusion remained positive. Montessori teachers' positive feelings about inclusion align with the observation that Montessori practices and materials are well suited for children to learn at their own rate, allow for repetition, and are congruent with many special education practices such as UDL (Cossentino, 2010).

In this study, we had originally intended to compare four groups: Montessori teachers with and without experience teaching students with disabilities and non-Montessori teachers with and without experience teaching students with disabilities. However, due to respondents' high responses indicating their experience teaching students with disabilities (82.3% for Montessori teachers and 98.8% for non-Montessori teachers), this comparison was not feasible. This finding was unexpected and may reflect the increasing placement of young children with disabilities into inclusive general education preschool

classrooms (Odom et al., 2011). Additionally, professionals with experience teaching students with disabilities may have been more inclined to participate in this survey, skewing the participant pool.

Differences Between Montessori and Non-Montessori Teachers

One important difference between the Montessori and non-Montessori groups was in the "knowledge about inclusion" component. Montessori teachers rated themselves significantly less knowledgeable about inclusion than did non-Montessori teachers. This finding could be due to the latter group's prior special education coursework and enrollment in teacher preparation programs. Non-Montessori teachers, on average, had completed more than three college courses in special education, whereas most Montessori teachers indicated they had had no special education college coursework but rather had attended workshops or seminars on the topic. Non-Montessori teachers often attend bachelor's level teacher-preparation programs in universities or colleges, where the completion of several special education courses may be required. Additionally, a majority of non-Montessori participants held master's degrees, which likely increased their opportunities to take additional coursework in special education.

In contrast, to become Montessori credentialed, teachers need a bachelor's degree in any field and then must attend a stand-alone, Montessori teacher-preparation program. Therefore, their undergraduate studies and Montessori training may or may not have included content in special education. Because of their more varied college educations, Montessori teachers may not recognize how closely the Montessori approach aligns with special-education-recommended practices.

Although a positive correlation was seen with special education coursework and knowledge of inclusion when looking at all teachers together, the correlation was no longer evident when teachers were grouped by Montessori and non-Montessori affiliation. This difference could be due to the low numbers of Montessori teachers with special education coursework. Also particularly puzzling was the negative correlation between special education coursework and use of assistive technology in the classroom. This relationship is particularly worrisome, as professional development for teachers should be designed to promote an increase in both knowledge and skills, ultimately promoting positive outcomes for children. In this study, teachers with more professional development in special education showed a positive change in knowledge about assistive technology, but not in skills or practice of that knowledge.

Another difference was the range of disability types and number of children with disabilities in Montessori and non-Montessori classrooms. The average number of children with disabilities in each Montessori class was two, compared with an average number of eight children with disabilities included in non-Montessori classrooms. This dissimilarity could be attributed to the teachers' school type. Montessori teachers were more likely to teach in private or independent schools, whereas most non-Montessori teachers taught in public schools, in which the numbers of children with disabilities is often greater due to legal mandates (IDEIA, 2004). Of the children with disabilities in these classrooms, non-Montessori teachers served more kinds of disabilities compared to Montessori teachers, perhaps also attributable to school type. Also interesting to note are the higher numbers of children with disabilities, e.g., emotional disturbances 14.3% (n = 7) and learning disabilities 16.3% (n = 8), tallied in Montessori classes compared with non-Montessori classes. Learning disabilities as well as emotional disturbances are generally diagnosed at older elementary grades, rather than at the preschool level (Kirk, Gallagher, Coleman, & Anastasiow, 2011). Therefore, these elevated numbers raise concerns as to whether the Montessori teachers, who have less experience and professional development in special education, are including in these totals children who do not have a diagnosed disability but whose challenging behavior causes teachers to suspect a disability.

Study Limitations

Several limitations are worthy of discussion. The sample size was limited to one state, with 250 respondents who were deemed eligible: 168 non-Montessori and 82 Montessori teachers. With no central

database or list of credentialed Montessori teachers in this state, it was challenging to contact Montessori teachers.

Special education language may have been novel to some participants. They may have been confused by special education terms such as *assistive technology*, which may have led to the variability in responses. Although DEC / NAEYC (2009) produced a position statement on inclusion that addresses concepts such as assistive technology and universal design for learning, this statement may not be widely distributed to nonmembers of these organizations. Montessori groups have not yet endorsed a similar statement on inclusion.

Future Directions

The results of this study are encouraging, for they are a first step in understanding how Montessori teachers understand and implement inclusive practices. There are many published studies on early childhood teachers and their attitudes toward inclusion (Baker-Ericzén, Garnand, & Shea, 2009; Burke & Sutherland, 2004; Buysse, Skinner, & Grant, 2001; Hurley & Horn, 2010; Knoche, Peterson, Edwards, & Jeon, 2006; Leatherman & Niemeyer, 2005). However, more research is needed on Montessori Early Childhood teachers.

According to the U.S. Department of Education (2009), more than half of preschool children with disabilities receive services in inclusive classrooms for at least part of the school day. Parents are increasingly seeking community-based neighborhood programs for their children with disabilities. Therefore, it is important to understand Montessori programs in general, as well as the particular advantages and supports of such programs, which may offer more opportunities for early education to families of children with disabilities. Offering a choice of preschool program, and access to the program, is an important first step to inclusion.

Furthering this study through exploratory qualitative studies could provide deeper understanding of the factors influencing Montessori teachers' attitudes toward inclusion. Montessori teachers' classroom actions to provide access to the general education curriculum could also be examined through observational research.

In terms of survey research, a larger sample size is needed to better understand important predictors of teachers' attitudes and to conduct advanced data analysis such as structural equation modeling. A national survey of Montessori teachers might be feasible, as their teacher preparation programs operate under national standards (AMS, 2015b; Montessori Accreditation Council for Teacher Education [MACTE], 2015), as opposed to state boards of education or state certification programs. However, as there are no public lists of Montessori teachers in the U.S., gaining access to this sample might prove to be challenging. Expanding the study nationally could provide more opportunities for comparisons between public and private Montessori teachers.

In summary, this study has shown that Montessori and non-Montessori teachers in one state are very similar in terms of perceived supports for inclusion and inclusive practices in their classrooms. Not surprisingly, Montessori teachers with less inclusion-related professional development felt less knowledgeable about inclusion. The Montessori participants of this study reported no or very little special education coursework or workshops in their training. Additional teacher preparation or professional development in the area of inclusive practices would be helpful for Montessori teachers. Integrating professional development on the topic of inclusion into Montessori teacher training or as part of in-service training is important to develop the skills and attitudes of Montessori teachers on the inclusion of children with disabilities.

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