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Montessori Schools: How and Why Do They Impact Student Relationships and Communication Skills?

Jacquelyn G. Zavala
Portland State University

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Montessori Schools: How and why do they impact student relationships and communication

skills?

by

Jacquelyn Zavala

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Thomas Kindermann, Ph.D.

Portland State University

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Abstract

Montessori schooling, created by physician and educator Maria Montessori, is a well-known alternative to the traditional style of teaching. Many researchers have focused on how the Montessori method can produce successful and well-rounded students, not only academically, but within the social realm as well. What is less known is the extent to which Montessori impacts the social development of children and their forming of peer relationships and why it does so. After looking into and discussing the previous literature written on this topic, this thesis project utilizes reviews with two individuals with experience in the primary level Montessori setting to further understand how the Montessori method can possibly benefit the students socially and draw connections between teacher experience and scholarly research. It was discovered that the responses of the participants generally paralleled the claims of previous literature, with specific emphasis being placed on the sense of responsibility and ownership students held in the environment and the reduction of the teacher's role in constructing how students utilize the environment and interact with one another.

Montessori Schools: How and why do they impact student relationships and communication skills?

Montessori schooling is one of the most successful and widespread forms of alternative education, not only in the United States, but globally (Lillard, 2019; Aljabreen, 2020). Created by Italian educator and physician Maria Montessori in the early 20th century, Montessori schooling focuses on self-guided learning and long amounts of independent study time, absence of grading, and an emphasis on hands-on materials (Aljabreen, 2020), differing greatly from the traditional public school classrooms of the United States. This form of schooling has brought about many benefits for its students, such as higher standardized test scores in comparison to children in traditional classrooms (Brown & Lewis, 2017; Culclasure et al, 2018; Ansari & Winsler, 2020) and better executive function and school readiness in preschoolers when compared to those in other forms of schooling (Lillard, 2012). Among these positive results, over the years researchers have also been largely interested in the ways that Montessori students develop social skills and interact with their peers and teachers, finding mainly positive connections between Montessori teaching and social development along with peer relationships (Baines & Snortum, 1973; Castellanos, 2002; Flynn 1991; Rathunde & Csikszentmihalyi, 2005; Simmons & Sands-Dudelczyk, 1983).

One explanation for this is the assumption that Montessori schools foster communication skills and especially structure how communication skills are used in interactions among peers **(a reference would be good here).** Although there has been a good amount of research on the extent to which Montessori is effective in fostering good communicative skills, less is known about the how or why of Montessori's effects, with researchers left to speculate on the exact reasoning for what they observed or what specific components of Montessori teaching may contribute to this. For this reason, this thesis focuses on the topic of Montessori schooling and the development of social skills and peer relationships, specifically asking the question "*How do Montessori classrooms affect children's communication skills and relationships with their peers,*

and what factors contribute to these effects?" This project aims to point out solutions for how some of the gaps left open from previous research could be filled and point out new connections between the strands of literature we already know. If Montessori teaching really does allow students to have more well-developed social skills and communication, it is essential that we understand how and why. Positive social skills can be crucial for student success (Lillard, 2012), so it is important that psychologists, educators, and others better understand what exactly is beneficial to social development.

The first part of this thesis project is a literature review, and its purpose is to summarize and connect the information already known about the Montessori method and the way said method impacts the development of children's communication skills along with their relationships with their fellow peers in the Montessori environment. Following the literature review, the second half of this thesis focuses on the qualitative research that was conducted in order to connect with and build upon what was learned in the literature review. Two people with experience as Montessori instructors, commonly known as guides in the Montessori classroom, were interviewed on what they have observed in their classrooms with the purpose of trying to connect interviewee answers to previous literature and pinpoint the components of Montessori they believe do the most for students in terms of fostering social development and positive peer relationships.

Literature Review

This literature review includes a couple of sections that give a general overview and understanding of Montessori schooling, including a general description of Montessori schooling, a comparison of Montessori's developmental assumptions to those of other developmental psychologists, and a discussion of how Montessori schools impact discipline and academic achievement. Those sections are followed by two sections that delve deeper into the question at hand regarding the development of social and communication skills and peer relationships, with multiple subsections diving into specific topics.

Description of Montessori Schooling

  Education in Montessori programs are what one could consider child-centered (Ansari & Winsler, 2020). For a large part of the day, children are engaged in self-directed learning and are free to utilize their classroom, peers, and teachers as needed to foster their understanding of a topic (Baines & Snortum, 1973). At least three hours are given each day for children to do independent work (Lillard, 2011; Vaughn, 2002). As opposed to being strictly directed by a teacher, students are given the opportunity to take in new information and learn at their own pace (Brown & Lewis, 2017). In fact, students are frequently encouraged to act as teachers for each other, whether that be by presenting information they've learned to a group or just helping a peer with something they may be struggling with (Humphryes, 1998; Rathunde & Csikszentmihalyi, 2005). Montessori instructors pay special attention to each student, making sure to introduce them to new topics when they believe they are ready or interested, but making sure to let students come to conclusions and work things out independently (Vaughn, 2002).

  Contrary to the majority of conventional schools, Montessori programs mainly employ a system in which students are placed in the same class for multiple years, with age groupings spanning three or four years (i.e. primary classrooms have children aged three to six, lower elementary have children aged six to nine, etc.) (Lillard et al, 2021). This type of classroom setup where children stay with certain instructors and peers for more than one year is also known as looping (Cistone & Shneyderman, 2004). The multi-age aspect of the classrooms also encourages children of different ages to work together, with older children potentially functioning as models for their younger classmates (Castellanos, 2002; Humphryes, 1998; Montessori, 1949).

  Montessori classrooms are usually supplied with a range of materials specifically designed by Maria Montessori to teach different concepts. These materials are displayed on low, organized, and open shelves that children can easily access, with children usually taking the materials and working on them at a table or on a mat they roll out on the floor (Cossentino,

2005; Lillard, 2011). The materials are usually organized based on difficulty, and students use the materials in a way that lets them progress through the understanding of a topic first in a more concrete way, and later in a way that is more abstract (Humphryes, 1998). When children are interested in a higher level material or a new material is introduced to the classroom, children are given small demonstrations about the material performed by the teacher, sometimes in small groups and other times as a whole class (Vaughn, 2002). Many of these materials are self-correcting (Humphryes, 1998; Lillard, 2011), meaning that the child can frequently figure out their own errors without the intervention of a teacher.

Children in Montessori classrooms are also much less likely to receive grades, though in some schools children can choose to receive grades, and tests are fairly uncommon in these programs (Lillard, 2011; Lillard et al, 2021; Rathunde & Csikszentmihalyi, 2005). Montessori believed the motivation to be a good student should come from intrinsic factors, mainly an innate love for learning and the "respect for self, others, and the environment," (Castellanos, 2002; Ervin et al, 2010; Hazel & Allen, 2013; Humphryes, 1998; Vaughn, 2002). Many Montessori guides refrain from appraising students' work, which Cossentino (2005) posits could help students to internalize the motivation to learn since it is no longer based solely on teacher feedback. The self-correcting materials also play a part in this aspect, as the student does not need outside criticism or evaluation against a rubric to understand their mistakes, which Humphryes (1998) argues also helps to protect the student's self-esteem.

The Montessori environment not only works to develop the academic skills of children, specifically reading and math, but it also attempts to produce strong practical life skills and cultural knowledge in students (Humphryes, 1998). Students take responsibility in caring for the classroom environment, helping to clean the classroom, prepare for meals, and even create classroom rules and events in later years (Angell, 1998; Angell, 2004; Lillard et al, 2021; Vaughn, 2002). Many of the primary classrooms have an area dedicated to the senses, where children can explore different sensory concepts, such as color (Humphryes, 1998). Multiple

Montessori classrooms dedicate space to learn about topics such as music, geography, art, and science as well in what is known as the Cultural Area (Humphryes, 1998). Within the realm of culture along with other parts of the classroom, children are also encouraged to learn about other cultures and find value in differences among their peers (Angell, 1998; Angell, 2004; Hazel & Allen, 2013; Humphryes, 1998).

Basic Assumptions About Development

Multiple researchers have drawn comparisons between the findings and methods of Maria Montessori and the findings of developmental psychologist Jean Piaget, with respect to both cognitive and social aspects of development (Castellanos, 2002; Humphryes, 1998). Within the Montessori classroom, especially at the primary level, a large focus is placed on the use of sensory materials and sensorimotor skills to gain an understanding of a variety of topics, as Montessori believed the use of the senses were important in cognitive development (Castellanos, 2002; Cossentino, 2005; Lillard, 2011). She also considered that birth to six years was one of the most developmentally important periods for children, as that is when children are supposedly utilizing their environment to create their understandings and conceptions of the world. This can be considered similar to Piaget's later ideas that children make use of their environment for learning and cognitive development and do so through repeated experiences within their surroundings that are then organized and categorized within the child's mind (Castellanos, 2002; Humphryes, 1998). Castellanos believes this extends to both of the psychologists' ideas of egocentrism and social development as well, with egocentrism diminishing in children over time through repeated interactions with their peers. Both Montessori and Piaget also found importance in the freedom of choice to facilitate learning, and they both believed students first think through concepts concretely and then later gain the ability to form more abstract understandings (Humphryes, 1998).

Rathunde and Csikszentmihalyi (2005) have also compared some of Montessori's ideas on development with those of psychologist Erik Erikson. Specifically they pinpointed that both

Erikson and Montessori spoke of a period during adolescence in which children start to view themselves as part of a wider social context and strive to understand what their place and identity is in relation to others. Along with this, Montessori's idea of "normalization" has been compared to Albert Bandura and Lev Vygotsky's conceptualizations of self-regulation, or a child's ability to be self-directed in working through problems and controlling their behavior and emotions which they develop over time (Ervin et al, 2010). It could also be argued that Montessori's conceptions of the child as simultaneously influencing and being influenced by their environment and being part of a greater system (Cossentino, 2005) are fairly similar to Bronfenbrenner's ecological systems theory of development (2005).

Academic Achievement and Discipline

In the realm of academics, Montessori schools have generally produced students who do well in their schoolwork and continue to do well after they leave a Montessori program. In their evaluation of students in public Montessori schools in South Carolina in contrast to conventional students, Culclasure and colleagues (2018) discovered that Montessori children were more likely to be proficient in or exceed state standards for math, science, social studies, and ELA. Some studies, however, have produced different results. Hazel and Allen (2013), for instance, found that Montessori elementary schoolers in their study were less proficient on standardized assessments than when compared to other programs in the study, although they did catch up by middle school. Montessori students in Culclasure and colleagues' 2018 study also demonstrated better attendance when compared with traditional students. It is understood that looping classrooms, which many Montessori classrooms are, can improve student attendance (Cistone & Shneyderman, 2004).

Montessori schooling has shown promising results for students of color and low-income students specifically. Brown and Lewis (2017) have found that Black Montessori students did significantly better on reading assessments at the third grade level when compared to three magnet schools in which two had traditional teaching styles and the third had a heavy focus on

STEM. Culclasure and colleagues (2018) also found a higher level of improvement in ELA and social studies for Black Montessori students contrary to their more conventional counterparts. Ansari and Winsler (2020), however, found no significant difference between Black students attending Montessori or conventional schools. Low-income Montessori students in Culclasure and colleagues' (2018) study scored higher on ELA, social studies, and math assessments compared to students in traditional schools. Another study also demonstrated that low-income Latine students who participated in Montessori programs at the pre-kindergarten level did better on math and reading assessments when they were in the third grade (Ansari & Winsler, 2020). Latine Montessori students in this study also improved to a higher degree in pre-academic skills when set against traditional pre-K students.

Montessori schools have also demonstrated a reduction in disciplinary events and suspensions in contrast to conventional schooling (Culclasure et al, 2018). One study has also shown that Montessori schooling can reduce the racial disparity in discipline many schools in the United States deal with (Brown & Steele, 2015). Through Brown and Steele's 2015 study comparing the rates of suspension for Black and White students in both conventional and Montessori schools, they found that while racial disparities still exist in Montessori schools, they show a large reduction in disproportion of punishment compared to the matched traditional schools. Although Black children were still two to three times more likely to be suspended than White children in Montessori schools, their counterparts in traditional schools were six to seven times more likely. This reduction in disproportionality seen in the Montessori school studied could be attributed to what Aljabreen (2020) considers an ability for Montessori classrooms to adapt comfortably to or better accommodate and understand a wide variety of cultures due to its international spread and focus from its early days.

Social Development

Existing studies on social development in Montessori schools pertain to prosocial behavior, social competence and skills, social problem solving, and classroom interactions.

Prosocial Behavior

As described by Vaughn (2002), the Montessori environment provides a way for children to work through the conflict of upholding one's own freedoms while also ensuring that their peers have the ability to do so as well. Children in Montessori classrooms must ensure that they treat others with the respect that they expect for themselves so that the class can continue functioning in a balanced way. Angell (1998) described that the way the Montessori method encourages children to discuss and talk things out and its multi-age classrooms may promote prosocial behavior among children as they begin to understand how to work with peers of different levels with potentially different goals.

Prosocial, positive, and friendly behavior is something that is expected of Montessori students (Castellanos, 2002), just as it is in many other types of classrooms. In fact, Castellanos (2002) found that Montessori and traditional students are not significantly different in their display of prosocial behaviors or evaluation of their own social self-efficacy. However, they did find that Montessori students were significantly less aggressive than their counterparts attending traditional schools, and this was correlated with their perceived capabilities to work with peers as a group. Along with that, Rathunde and Csikszentmihalyi (2005) observed that Montessori students reported a larger feeling of emotional safety in their schools. Lillard and colleagues (2021) found similar results for adults who had attended Montessori programs in their youth, with those who had spent time in Montessori programs having more of a sense of social trust and social engagement in adulthood, even when compared only to others who went to private programs as opposed to traditional public schools.

Social Competence and Skills

There have been mixed results regarding how well students in Montessori schools acquire social skills, though none have been completely negative. For instance, some studies have found no significant difference between the social skills of Montessori and conventional students (Culclasure et al, 2018; Ansari & Winsler, 2020). When Montessori elementary

students were administered tests to measure their social skills and were compared to traditional students in South Carolina, they did show somewhat higher scores, but these differences were not statistically significant (Culclasure et al, 2018). Ansari and Winsler (2020) also found no significant differences between Latine Montessori preschoolers and their traditional Latine peers with respect to social-behavior skills.

In spite of the mixed results, Maria Montessori did create a curriculum that intended to help students better adapt to social norms and skills expected by their surrounding culture and produce positive relationships with others in their community (Aljabreen, 2020; Humphryes, 1998; Lillard, 2011; Lillard et al, 2021; Rathunde & Csikszentmihalyi, 2005). Within the Montessori classroom, class guidelines and norms are presented in a manner that helps students understand they must follow them not because the teacher says so, but because following these guidelines will make the classroom environment better for all students involved (Montessori, 1949; Vaughn, 2002). One principal focal point of social guidelines in the Montessori classroom is being *courteous* to others. Students in the Montessori classroom learn to refrain from distracting or interrupting other students or the teacher by using certain techniques, such as lowering their volume when a student or teacher rings a bell and politely entering conversations when their peers or teacher have finished talking to someone else (Cossentino, 2005; Vaughn, 2002). Inside Montessori classrooms, it is expected that students begin to follow these rules out of an innate respect for others, not solely to avoid getting in trouble. It seems, to some extent, that students do find more order in a Montessori environment, with Montessori middle schoolers reporting fewer disruptions in the classroom (Rathunde & Csikszentmihalyi, 2005).

Social Problem Solving

Montessori guides use a way of problem solving that does not immediately discipline the child or have the teacher take charge, but instead tries to guide the child in what they can change or do better by themselves in the moment (Aljabreen, 2020; Montessori, 1949; Vaughn,

2002). Children in programs that employ the Montessori method may be less likely to seek help from an adult when met with a problem, first attempting to solve it on their own (Ervin et al, 2010; Simmons & Sands-Dudelczyk, 1983). Ervin and colleagues (2010) also observed that Montessori students at the first and second grade level reported that they would more frequently try to talk things out if a problem arose, whereas conventional students were more likely to walk away from the situation or get a teacher's help. Through interviews with Montessori students, Hazel and Allen (2013) did find that Montessori guides encourage students to talk things out and try to resolve problems on their own before getting a teacher involved. Multiple Montessori classrooms also utilize what is called a "peace table" in order to help students have a designated space to resolve conflicts (Ervin et al, 2010; Hazel & Allen, 2013). The Montessori guide's purpose is to be a facilitator when arguments occur between students; the teacher is not the one to provide an immediate solution, but instead helps to guide the students to a resolution or acts as a positive model for students (Humphryes, 1998).

When compared to children in supplemented Montessori and conventional programs at the end of the school year, preschool aged children who spent time in Montessori classrooms were more likely to speak of sharing or establishing fairness when asked how to confront a situation where two children wanted to read the same book (Lillard, 2012). This increase could be attributed to the fact that Montessori programs traditionally only have one set of each material, so Montessori students may have more experience with conflicts in which multiple students want to use the same material (Cossentino, 2005; Lillard, 2012; Montessori, 1949). Montessori (1949) notes that the use of limited materials in the classroom can foster further ideas of respect for one another as well. Children in Montessori classrooms also seem to have different conceptions of what it means to help someone when compared to their traditional peers. Through interviews with lower elementary Montessori and traditional students, researchers Ervin and colleagues (2010) found that Montessori students were more likely to view themselves as being helpful in a wider variety of tasks, while children in traditional

programs were more likely to view helpfulness in the context of assisting someone who got sick or hurt.

Classroom Interactions

Within the Montessori classroom, children are usually more likely to be working on schoolwork as individuals, in pairs, or in small groups rather than as a whole class (Angell, 2004; Baines & Snortum, 1973). Teachers in these classrooms are also more likely to work with students at an individual or small group level as opposed to lecturing all students at once. The Montessori environment works to foster group work and discussion among peers (Castellanos, 2002). At the middle school level, students reported spending less time engaged in passive listening and more time doing individual or group work than traditional middle schoolers (Rathunde & Csikszentmihalyi, 2005). The multi-year status of many Montessori classrooms may help to enable stronger relationships between teachers and students, also letting instructors further individualize their ways of guiding each student (Cistone & Shneyderman, 2004). Middle school Montessori students also reported spending more time interacting with the teacher than traditional students (Rathunde & Csikszentmihalyi, 2005). However, at the preschool level, Montessori students have been found to spend the least time interacting with teachers when compared to other preschool programs, though it is unclear whether this is solely due to the high student:teacher ratio of Montessori settings or another element of the Montessori method (Reuter & Yunik, 1973).

Peer Relationships

Existing literature on peer relationships in the Montessori setting pertains to peer interactions, cooperation and group work, peer understanding, peer groups and social status, and democracy.

Peer Interactions

Baines and Snortum (1973) have observed that Montessori children spend the largest chunk of their time working alone, at least at the elementary level. Despite this, students in

Montessori classrooms have also been observed to spend a good amount of time either helping other students learn and engage in academic topics or getting help from other students, more than traditional students typically would (Baines & Snortum, 1973). The multi-age classroom design also fosters organic interaction between younger students and older students, with both benefiting from the presence of the other (Flynn, 1991; Lillard 2019; Montessori, 1949).

Younger students within Montessori programs, such as those in the primary level, have been reported to do more individual or parallel work, while those at the elementary level become much more collaborative, which falls in line with the typical development of interactions between children (Humphryes, 1998; Lillard, 2019; Lillard et al, 2021). Older students at the middle school level reported spending more time engaged in academic work whereas traditional students reported spending more time just socializing, however both groups reported spending a similar amount of time with their friends while at school (Rathunde & Csikszentmihalyi, 2005). Children in Montessori classrooms have also been found to show stronger relationships with peers in correlation with the time spent in the program when compared to conventional students, and their perceived ability to make friends, at least with the same gender, seems to show greater improvement over time compared to children in traditional classrooms (Castellanos, 2002; Flynn, 1991). Eighth grade level Montessori students were more likely to report that their peers in the classroom were friends as well as classmates, while traditional eighth graders were more likely to view their peers as just classmates (Rathunde & Csikszentmihalyi, 2005).

Cooperation and Group Work

In the Montessori setting, it is less common for students to be driven by competition, with the Montessori method believing that competition should not be the principal motive for learning (Castellanos, 2002). Cooperation and collaboration are important elements in the Montessori classroom and are highly encouraged by Montessori guides (Ansari, 2020; Flynn, 1991; Rathunde & Csikszentmihalyi, 2005). Montessori students are encouraged to work together and

help each other as long as they are not interrupting the concentration of other students (Simmons & Sands-Dudelczyk, 1983; Vaughn, 2002). Students in Montessori classrooms have also been found to more frequently wait for a request for help or cooperation as opposed to spontaneously attempting to work with other students (Simmons & Sands-Dudelczyk, 1983). Montessori found that this ability to work uninterrupted fostered positive demeanors in addition to positive social interactions among students (Lillard, 2019; Montessori, 1949). Both teachers and students in the Montessori environment find value in ensuring that each student has the ability to concentrate on their work, making sure to let them work uninterrupted, and it does seem as though this produces more positive interactions and feelings of respect and cooperation among students (Angell, 1998; Cossentino, 2005)

A larger focus on cooperation as opposed to competition in the Montessori classroom may be attributed to the common absence of grading individual students as well. In their 2015 experiment, Hayek and colleagues discovered that grading may interfere with one's ability to cooperate with others. Students within the study who were told they would be graded individually on a project were less likely to share new information with their group members, instead mainly sharing information that was already known to the group as a whole. The same was true for students who were just primed to think of grades when compared to a control group, which the researchers attributed to a potential emphasis on social comparison as opposed to cooperation. Similarly, Domberg and colleagues (2018) uncovered that when children are put in competitive situations, they produce less arguments in general and also produce less well-rounded arguments than those in a cooperative condition, with possible reasoning being that they were more focused on their own success than that of their peer. In conjunction with these ideas, Butler and Ruzany (1993) have found that children in more cooperative settings are less likely to look to their peers for comparison and more likely to do so in order to learn from their peers. The absence of grading and focus on collaboration in a majority of Montessori schools may promote better cooperation in which children work together

to teach and share information with each other without the added pressure of teacher appraisal and social comparison, which Montessori (1949) believes could instead promote antisocial behavior.

Peer Understanding

With respect to understanding the thoughts and feelings of others and empathizing with peers, it seems as though Montessori children develop these skills similarly to children in other programs. Lillard (2012) specifically found that there is no significant difference between Montessori, supplemented Montessori, and conventional preschoolers with respect to theory of mind, or the ability to understand that another person's thoughts, beliefs, and feelings may differ from one's own. All three programs displayed improvement in theory of mind when scores from fall and spring of the school year were compared. In another study, Montessori students were more likely to change their wording in response to implicit social cues (Yussen et al, 1980). However, this result was only marginally significant, and both traditional and Montessori students still did better when given explicit cues. Yussen and colleagues did not find any significant difference in performance on emotion recognition tests as well. In contrast, Ervin and colleagues (2010) recorded that Montessori students showed improvement in the ability to "talk about the feelings of others" based on a parent survey while traditional children showed some regression.

Peer Groups and Social Status

Lillard (2019) notes that children in Montessori programs have the freedom to pursue the types of relationships they are developmentally ready for and can more freely choose who they want to work with if they decide to work with someone. Rathunde and Csikszentmihalyi (2005) also note that children in Montessori classrooms at the middle school level tend to be grouped together based on interests they share, as opposed to a certain skill or age level, which may foster more diverse groupings of students. Angell (1998) similarly observed her upper elementary level class grouping based on interests and not on age, with some students with

more experience on a topic assisting those who were still trying to learn it. The multi-year groupings commonly used in Montessori settings may help reduce feelings of disconnection between students, as many are likely to be returning to a classroom and already understand established rules and relationships between others (Cistone & Shneyderman, 2004). This can help reduce uneasiness in students, as they know they have trusted peers they can lean on when coming back to school. Multi-year groupings also mean that some students will have been in the classroom longer than others, letting them act as models or leaders for new students who may still be getting used to classroom norms (Angell, 1998).

The Montessori method strives to create an environment that has a sense of cohesion and community while also accounting for individual differences (Castellanos, 2002; Hazel & Allen, 2013; Humphryes, 1998). Like many other types of schooling, Montessori schools hope to create a sense of belonging for all students. Montessori guides work with the intent to promote love and care among students for both themselves and the people and objects around them (Cossentino, 2005). Angell (1998) argues that in contrast to the higher amounts of individualism found in traditional school programs, Montessori schools may also provide a better promotion of community and community values, especially among students that may come from diverse backgrounds.

Democracy

Psychologist Jonathan Cohen (2006) posited that in order for schools to produce students that actively participate in democracy and lead positive lives, educational programs must not focus solely on academic achievement, but on social and emotional learning as well. He also argues that educators must be respectful of the students in their classroom and teach them of the ways they can work together and work to improve their communities. As was discussed through the previous sections, the Montessori method does take into account the need to educate students on how to treat one another, and it takes care to respect and give value to each individual child while also conveying the importance of collaboration and problem

solving. Children in Montessori classrooms find their environments to be safe and welcoming, and in these programs they learn to take care of not only themselves, but their peers and their environment as well.

Civic responsibility and stewardship is one important element of Montessori education, especially as students grow older (Angell, 1998; Hazel & Allen, 2013; Vaughn, 2002). Cohen (2006) finds this active role of students in their school and wider community, also known as service learning, to be an integral part of promoting democracy in an educational setting. In certain Montessori schools, it is encouraged for students to interact with other classrooms and other members of the community or assist with duties at school (Angell, 1998). Another specific way that Montessori classrooms may help promote democracy is through the use of class councils and class meetings. Montessori found importance in having students be able to take part in creating the classroom guidelines, with students having "as much influence in the affairs of the commonwealth as the average member of the adult democracy" (quoted in Vaughn, 2002). Class meetings are held in many elementary level Montessori classrooms partially as a way to promote group decision-making and give a space for children to problem-solve or mediate conflicts as a group (Castellanos, 2002; Hazel & Allen, 2013).

Researcher and Montessori guide Ann V. Angell (1998; 2004) has conducted multiple qualitative studies documenting the way that students make use of class meetings and develop an understanding of communication and democracy in Montessori environments. The first study was conducted over three years in a private upper elementary class with children aged nine to twelve years, finding that students were less likely to utilize the weekly meetings to attempt to change class curriculum or guidelines set by the teacher, and instead used it to try and make a standard for classroom behavior among students, plan events, and share new information with peers. The children did initially struggle with voicing and listening to dissenting opinions or straying from the norm, however the continued use of council meetings as a space to safely discuss problems among students helped students to slowly get more comfortable with

disagreements and build ways to take into account diverse opinions and ideas. Angell states that "by exercising their role as citizens of the classroom, they practiced for their adult roles as citizens of a democratic nation, discovering that citizenship involves both individual rights and the responsibility for working together to achieve the goals of their group," (1998, p. 171). Angell's 2004 study was conducted over two years in the upper elementary classroom of a Montessori magnet school. Again, she found that children mainly used the class council meetings as a way to share information with each other and resolve problems between students, with this classroom also designating space to acknowledge good things that their peers did as well. The structure of the meetings as a safe place for discussion continued to help this group of students better learn to work together and create solutions for problems where many students may disagree on how to address them. These class meetings seem to not only help students get a better grasp of democracy and community participation, but also assist the students in developing positive relationships and problem solving skills, creating a more harmonious classroom environment.

Methods

The present review aims to add onto the previous literature that has delved into the topic of Montessori education and the fostering of social skills and positive relationships among peers through the use of interviews. Based on the literature review, I conducted interviews with Montessori teachers in order to find out about the extent to which Montessori assumptions actually permeate into real classrooms. Getting interviews directly from Montessori teachers should provide additional information about classroom organization, and should illuminate the connection between the mindsets and beliefs of the teachers, what teachers have seen in their classrooms, and what is reported about teaching practices in research articles. I was most interested in viewing what specific parts of the Montessori philosophy and what researchers have documented was also observed in the classrooms of the participants that were interviewed.

Multiple studies have done well in figuring out to what extent Montessori schooling impacts the social development of students, but have had lesser success in pinpointing exactly *why* Montessori classrooms generate these impacts, mainly sticking to speculation. Because of this, these interviews also had the goal to see whether the Montessori guides had more insight on what elements of Montessori education could be creating such differences or similarities between traditional and Montessori students with respect to social skills.

Participants

Two people who work in Montessori schools participated in the current study. One was a current Montessori guide, and the other had previous experience as a Montessori guide but was not currently serving as a guide. The two participants were both women who specifically had experience in primary level Montessori classrooms (approximately ages 3-6). Both were recruited via the researcher contacting Montessori schools within Oregon that indicated they employed Montessori instructors that were certified in Montessori teaching, whether that be through Association Montessori Internationale (AMI), American Montessori Society (AMS), or another Montessori-affiliated organization. The schools were given information regarding the thesis project and were given a chance to forward the information to their Montessori staff, who then contacted the researcher if they were interested in being interviewed. All participants in this study completed consent statements and later gave oral consent for their responses to be recorded and analyzed.

Procedure

Both participants were recruited by contacting Montessori schools within Oregon that indicated they employed Montessori instructors that were certified in Montessori teaching, whether that be through Association Montessori Internationale (AMI), the American Montessori Society (AMS), or another Montessori-affiliated organization. The schools were given information regarding the thesis project and were given a chance to forward the information to their Montessori staff, who then contacted the researcher if they were interested in being

interviewed. All participants in this study completed consent statements and later gave oral

consent for their responses to be recorded and analyzed. The study was approved by the

Portland State Human Subjects Research Review Committee.

Results

Many similarities were found between the responses given by both participants. One of

the subjects that remained prominent throughout both interviews was the notion that Montessori

guides attempt to meet children where they are in terms of both academic and social

development while giving the students respect, responsibility, and agency that frequently may

not be afforded to children in other classrooms. Within both interviews, an emphasis was placed

on how simply helping children develop their language skills greatly provided the foundation for

positive social interactions and well-developed communication skills, and for both participants,

making sure that adults did not dumb things down for the students, no matter how young they

were, was also very important. For one of the interviewees, this meant ensuring that both

parents and guides did not solely use baby talk around the children, and for the other

interviewee, this meant exposing children to vocabulary that others may think is too advanced

for them to understand. Both of the participants believed that children have a strong desire to

learn and will pursue the things that interest them, and teachers have a responsibility to let the

students explore topics without trying to simplify them too much. In relation to communication,

this meant that teachers in the Montessori setting acknowledged that children have the capacity

to understand complicated topics and solve problems on their own, knowing that learning would

help them to better express themselves and their feelings to others.

The two interviewees believed that it is not the guide's responsibility to fix a problem for

a student. Instead, it is their responsibility to model what is the correct thing to do and guide

children on the correct path if they find them to be struggling. Both participants also placed great

value in the fact that the Montessori method has a "friendliness with error," (Interviewee 1)

meaning that children were allowed to make mistakes without adverse consequences and still

be able to learn from them. In many cases, the Montessori teachers found it best to let the children try to figure things out on their own, only stepping in when children may have seemed too upset or disruptive to other students. In conjunction with this, Interviewee 1 believed that another strength of the Montessori environment was that a teacher stepping aside to work with one child does not disrupt the workflow of the rest of the class. Interviewee 2 made a similar point that the flow of the classroom and the multi-age setup keeps students from being singled out from their classmates, as they are not all expected to be at the same level developmentally and are not working on the same material all at once.

Overall, both participants believed that developing proper communication skills in young children was a very important component of the Montessori curriculum and that the Montessori method did well in helping children learn to communicate with each other, with Interviewee 1 stating that social-emotional learning seems to be imbued in every subject. The two participants did however employ some outside techniques that they believed worked well in conjunction with Montessori or helped the students transition comfortably into a Montessori setting and mindset. Interviewee 1 specifically believed that Marshall Rosenberg's nonviolent communication process was something that meshed well with the Montessori method. Interviewee 2 had experience working with kindergarteners in a traditional classroom setting before working in a Montessori classroom and found there were certain techniques that helped to engage children and also keep them calm. Once children are properly settled into the Montessori classroom, what the interviewee referred to as going from a collective to a normalized state, she found that these outside techniques were needed less and less. The guide found that some modifications helped reduce commotion in the classroom. A specific example she gave was that within her classroom, she opted to sing a song instead of hitting a chime to indicate that the three hour work period was over:

> Everybody got super excited and would try to put all their work away really fast, and
> everybody got kind of crazy… So now, what I do is I pick up my stool and I'll probably

walk through the classroom. I have three different songs that call children to the group.

And then they stop, and they've organically done that. They stop and listen or start

singing, and then when I stop singing, in a very, very low voice… we'll ask them to gently

put their work away with kind and gentle hands and come join me at the gathering.

(Interviewee 2)

Through the use of this method instead of the chime which is more characteristic of the typical

Montessori classroom, this teacher found that children more peacefully transition between

periods in the day and the moment is less hectic or stressful for everyone involved. Interviewee

2 believed that Montessori teacher training could benefit from more explanation of how to bring

children from the collective to the normalized state. Other than that, both teachers found the

Montessori method to be sufficient in helping the children learn to properly communicate and

interact with.

Within the classrooms, both participants reported that they saw a variety of interactions

and types of play between students, which they mainly attributed to the multi-age setup of the

classrooms. Interviewee 1 found that younger students typically worked alone and older children

were more collaborative, while Interviewee 2 observed that children of all age levels worked

cooperatively, but the focus of play for younger children was more concrete while play for older

children was more abstract and imaginative. Both also stated that the types of play or

communication children will be interested in varies from day to day or even within a work period.

Two types of interactions that came up frequently within the interviews were that of

children simply observing other students and children working collaboratively or helping one

another. Interviewee 2 found that students who may be new to the classroom or trying to

understand a more difficult material may refrain from jumping into collaborative work, instead

opting to observe other children. The participant believed that this not only helped students to

get a grasp on material they may not be ready to do themselves, but it also worked as a

stepping stone for creating relationships between students. When a child decides to observe

another child at work or participate in a lesson with them, they are building the beginnings of a relationship. This interaction is also found to be beneficial as it lets older children work as teachers or models for the younger students and lets the younger students know that there are other people in the classroom they can look to for help aside from the teacher. Both interviewees frequently observed children helping each other, with Interviewee 1 indicating that a common interaction between students was asking for help or giving help to other children. Interviewee 2 brought up an example in which a younger child spilled a box full of materials for making collages all over the floor. Viewing that the younger child was overwhelmed by the large mess, multiple older children rushed to help him. The interviewee expressed that in a Montessori classroom, students should ask to help because some students would rather solve problems on their own, but in this situation it was clear that the student was in need of assistance and the other children in the classroom felt obligated to help. Help between students was attributed to a feeling of responsibility in the classroom and a sense of care for peers.

Both of the participants stated that very few interactions were discouraged in the classroom, feeling it was important that children were free to choose who they interacted with and how they interacted with them. The youngest children were free to interact with the oldest, and the students were not forced to interact with others if they did not feel like doing so. Children, at least at the primary level, are not directly asked to work together, though if a child was found to be fairly isolated, the teacher may gently suggest for them to talk with or interact with another student. In most other cases, children organically come together and decide to work on something collaboratively. Interviewee 1 specifically gave the example of children deciding to put on a play. In this example, children were given full responsibility in creating the play, but they were not reprimanded if things did not come to fruition. Within the Montessori classroom, both interviewees emphasized that there are not many concrete goals that students must achieve, and they are allowed to take as much time on mastering something as they please, revisiting and relearning things as needed. When asked what purpose students usually

had for working together (question 4.a), one participant provided a response that very much

reflects this idea:

> I think that question really assumes that every child has a purpose or goal. That's really
>
> an adult perception. It's a way that adults attempt to perceive and analyze behavior. We
>
> are goal oriented. We look for the most expedient way to work. Not children. They're
>
> there to experience whatever they're working on. It's part of the process for them. The
>
> sequence, the actions, each action. (Interviewee 2)

In many instances, a teacher may not understand why a student is so interested in a particular

material, but they respect the child's desire to continue working with it or working with others on

it. The interviewees both acknowledged that no matter what they may be working on, the

material helps the student to build a range of skills, from motor to cognitive and social, and build

who they are.

The only types of interactions that the participants stated they discouraged were

interactions that would either disrupt the work of others or be harmful to someone else.

Common problems they reported in their classrooms were things like having trouble sharing or a

child putting their hands on someone when they were not supposed to. Both interviewees

specifically mentioned that pushing or being physical when trying to maneuver around the class

environment was something that many children were still struggling with. Pushing is the focal

point of a specific story Interviewee 1 decided to share, stating that they once witnessed a child

push another on the playground. When she attempted to act as a mediator for the students and

tried to guide them in a conversation, she found that the student who had been pushed was

reluctant to say that it affected them negatively, stating "that was an opportunity for me to be

reminded that not every child… is able to advocate for themselves yet," (Interviewee 1). This

situation highlighted not only a common conflict found in the classroom, but also how many

children at the primary level are still learning how to speak up for themselves and deal with

conflict. Both interviewees stated that a frequent role of the Montessori teacher is to be a

facilitator or role model and help to give children the words and tools necessary to problem solve on their own. Instantly reprimanding or taking something away from a child was something that both participants felt was a poor way of dealing with students that were being disruptive or having problems.

Other concepts that the Montessori guides found themselves helping students work through were permanence, friendship, egocentrism, and honesty. For instance, Interviewee 2 pointed out that when you ask a student to step away from something that may be causing a problem, they may not understand that stepping away is a temporary thing, instead believing that they may be barred from an activity forever. She indicated that it is important to help a child understand that they can always retry something tomorrow and give them the proper information or social tools to do so, so that the problem does not occur the next time. Interviewee 1 found that children at the primary level have different conceptions of friendship. Usually someone who played with you is someone who would be counted as a friend, so trouble arose when a student did not want to play with another student on a particular day, and it was important that the students learned that conflicting interests did not mean the loss of friendship. Interviewee 2 discussed something similar when speaking about how children at this age are still learning that others will frequently have different opinions, thoughts, and feelings than them. The Montessori teacher was said to play a role in helping a child overcome egocentric thinking, or the inability to understand that others' ideas about a subject will vary. Interviewee 1 also discussed the importance of differentiating between fact and fiction, as she found that multiple children at this age will frequently say things that are untrue. She stated that this may not particularly be a lie but instead something the child wishes were true, and that it is important to help the child understand this as well. Importantly, the child should not be labeled as a liar, but instead be guided in how to better communicate fact versus fiction or desire.

Aside from the roles that the teachers played in their classrooms, both guides found great importance in the way the classroom environment was set up in facilitating communication

and relationships between students. Interviewee 1 expressed that everything in the classroom is meaningful, and the way things are meticulously set up facilitates a wide range of learning experiences, where children may not even be aware of the fact that they are learning something. Interviewee 2 believed that when setting up a classroom, a very important aspect was the flow of traffic and making sure that children have the space and freedom to work and move objects comfortably without disrupting other students. She also found it important to designate spaces where children could work together and where they could be solitary if needed, also making sure that no unnecessary distractions or stress were placed on the students.

Both of the participants enthusiastically believed that Montessori schooling provided a sense of belonging and connection for the students. They both stated that the main component that fostered a sense of belonging was a feeling of ownership and responsibility in the classroom. "A key part of Montessori is really allowing the children to ground themselves in the space," Interviewee 1 explained. Interviewee 2 spoke similarly. "The classroom belongs to the children, not to the adults." Children are tasked with taking care of the classroom, whether that be by helping to sweep or watering the plants. Interviewee 2 spoke of how younger children just see these tasks as fun things to do or ways to let them participate in the classroom environment, but caring for the classroom also gave the older children a feeling of responsibility and agency in the space. Having a collective responsibility in caring for the classroom not only helped the students to feel like they belonged in the environment, but it also helped them to strengthen their bonds with their classmates as they all shared in the task of caring.

Discussion and Conclusion

The participant responses seem to parallel what has been found in previous studies, especially with regards to the focus placed on freedom, responsibility, and respect for the students. A big part of Montessori teaching seems to be that the children are not restricted in the same way traditional students usually are. They are free to work on whatever they find

interesting and whoever they are comfortable interacting with (Humphryes, 1998; Lillard, 2019). The research participants specifically believed the reduction in teacher involvement was something that contributed to this, focusing on the ways that teachers were responsible for being a positive model in the classroom but should not frequently intervene in the work or potential conflicts of the students. Montessori (1949) believed it was not the authority of the teacher to fix all problems presented to the students. Instead, they should step back and observe the children, only stepping in if things got too out of hand or were not being properly resolved by the students.

Like the teachers interviewed, Montessori (1949) also believed that the environment created by the Montessori guides was what helped the students to pick up on skills the most. The ability to work without fear of error or constant evaluation lets the children work through things at their own pace and feel more comfortable in their environment. Specifically, the multi-age component of the environment is what Montessori and many scholars posited may be a crucial element for fostering positive peer relationships and social development (Angell, 1998; Castellanos, 2002; Flynn, 1991; Humphryes, 1998; Lillard 2019), and the interview participants seemed to emphasize the same idea. The interviewees observed that younger children frequently observed, collaborated with, or got help from older children, and they expressed that this was one of the more important ways that children built relationships and learned to get along with each other. Older peers provide positive modeling, and Montessori (1949) explains that they also can understand the younger children better than an adult may be able to. The developmental gap between an adult and a three-year-old is very large, but that between a three- and six-year-old is much smaller. The older child can better understand the needs of the other and better pinpoint when to help the younger child or when to let them do things on their own.In fact, Montessori describes a story very similar to that of the one from Interviewee 2 in which children rushed to help the younger child who had spilled the collage materials when

usually students would wait for the student to ask for help. In her book *The Absorbent Mind* (1949), she states:

> There was once a child who had spread all the geometrical cards on the floor with all the geometrical insets. Suddenly there was music, a procession passing, all the children ran to look except the little fellow with all the material. He did not go, because he would not dream of leaving all the material about like that. It should be put away and normally nobody would help him, but there were tears in his eyes, because he too wanted to see the procession. The others realized the emergency and all came back and helped him. (pp. 337)

What the stories from the interviewees and Montessori also help us to understand is the amount of care children have for other students within these classrooms. Through the sense of care and responsibility students have for their peers and environment, "the class becomes a group cemented by compassion," (Montessori, 1949, pp. 333-4). This is also seen through the emphasis on student ownership in the classroom. While the Montessori guides are responsible for preparing the environment, it is the students' responsibility to take care of it throughout the day and establish it as a space that everyone can comfortably use, further promoting a sense of community and belonging. The significance of creating a space in which children are free to work and learn but also must take into consideration how they affect the space and other children also helps to bring children out of that state of egocentrism and into a state of being where they begin to understand the wants and needs of others more clearly.

One way in which the interviews differed from the literature was the importance that the interviewees placed on the actual act of learning to read, properly speak, and acquire vocabulary in developing positive social skills. Many articles fail to mention the potential ways Montessori classrooms could be promoting social skills through the earlier development of language skills. Montessori (1949) mentioned that simply the ways children learn and interact in

the classroom help to promote prosocial behavior, but it would be interesting to learn more about how the curriculum specifically interacts with the development of social skills.

Limitations and Further Research

The main limitation of the current study is the small sample size. Due to time constraints and low response to the recruitment procedures used, only two Montessori guides participated in the study, so the information gathered cannot be generalized to all Montessori schools. Both Montessori instructors had experiences at the primary level, so we also cannot draw inferences about children in elementary or middle and high school level Montessori classes. Along with that, only Montessori instructors were interviewed. Since no traditional teachers or teachers that utilized other methods of alternative schooling were interviewed, it is difficult to claim that what the Montessori guides experienced was actually different from what one may see in any other classroom. Further research could benefit from interviewing guides for higher grade levels and drawing more comparisons between the experiences of Montessori teachers and those who use other methods.

Fidelity is also an important factor that should have received more attention within this study. As explained by Lillard in her 2012 research paper, fidelity refers to how closely a Montessori program actually sticks to the Montessori method outlined by Maria Montessori. A Montessori program that makes little to no changes that would stray away from the Montessori method would be considered high fidelity, while a program that incorporates elements of conventional schooling so that the Montessori classroom does not feel as foreign to traditional students would be considered low fidelity. Lillard (2012) states that fidelity must be accounted for, as the mixed results found in multiple studies could possibly be attributed to programs that are labeled as Montessori but may not stick closely to the method. While question 2.a of the interview questions did try to get at this idea, it is hard to say whether the classrooms that were spoken of during the interviews were higher or lower fidelity, as the researcher did not have the

ability to visit them. Future research should take care to understand how fidelity may play a role in the findings of a study.

Lastly, this study did not employ an experimental design, so no causal inferences can be drawn between what the participants experienced in their classrooms and the elements of the Montessori method that they believe played a part in what they witnessed. However, the hope of the researcher is that the interviews in this study can be used as a point of inquiry for further research. Many points brought up by the interviewees, such as the emphasis on student freedom and responsibility in the classroom setting, the role of the Montessori guide as a facilitator, mediator, and model, or the refraining from direct or homogenous goals for the students, may be something to take a closer look at individually. Perhaps further pinpointing what exactly helps Montessori schools successfully create children who display adequate communication skills would not only benefit the Montessori schools, but other programs hoping to help children develop positive relationships with others. Knowing the reasoning behind the documented successes in previous literature could help society to implement the parts of Montessori that work into more widespread curricula, if not promoting the implementation of Montessori schooling as a whole, so that more students can successfully develop positive relationships and communication skills.

It is important to understand the ways in which different methods of schooling impact children's building of relationships, as it has been observed that a feeling of connectedness that a student has with their peers is more strongly associated with wellbeing in adulthood than their academic success is (Olsson et al, 2013). As noted by Lillard and colleagues (2021), features of Montessori teaching can have a long-lasting benefit for students, with Montessori education in childhood predicting greater social trust and contributions and feelings of social belonging later in adulthood. When better social skills and positive relationships among peers are emphasized at a young age, that produces better social implications for people as they grow. Without proper communication and strong relationships, isolation is generated and communities can fail to

create strong bonds needed to be successful or achieve common goals. With social skills comes understanding and respect for others, and this can help to create better bonds among people. Better knowing how Montessori schooling fits into the development of these skills is crucial.

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APPENDIX A: Interview Questions

1.   What do you believe are the potential advantages of Montessori education in terms of

        peer relationships and communication compared to other types of schooling?

a.   Do you have personal experiences or stories that you are willing to share?

2.   How much importance is placed on building relationships and communication skills in the

        Montessori classroom?

a.   How much of this is Montessori philosophy and how much of this is reflected in your own

        goals in the classroom? Do you go beyond the Montessori philosophy?

3.   What kinds of play (solitary, parallel, cooperative, etc) do you see carried out by children

        of different ages in the classroom? Are there any that you explicitly encourage or

        discourage in your classroom?

4.   Do students tend to generally be more solitary, or do they prefer working as a group?

a.   What is usually the purpose children have if they decide to work with their peers as

        opposed to solitarily?

5.   Is there a strong sense of belonging or connection in the classroom?

a.   How well do students cooperate in order to work towards common goals?

b.   How well do students understand the thoughts/feelings/opinions of their peers?

c.   Do you focus on fostering a sense of belonging, or does it develop by itself?

6.   What type of social problems usually arise in the classroom (for ex. failure to share, poor

        cooperation, teasing, bullying, etc)?

a.   How common are these problems?

b.   How do the students and/or other teachers deal with such problems?

c.   What about students who seem to prefer to stay by themselves, or students who are not well accepted by their classmates? Are there any? How do you or other teachers respond to these students?

7.   What aspects of the classroom environment do you think impact the way students interact with each other?

8.   (In conjunction with the previous question) What components of the curriculum do you believe impact the way students interact with each other?

9.   When you think about your work as a Montessori teacher, is there something I missed, or is there anything additional you would like to tell me?