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## The Impact of Social Inclusion from the Perspective of the Neurotypical Peer

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**The Impact of Social Inclusion from the Perspective of the Neurotypical Peer**

By

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A culminating thesis submitted to the faculty of Dominican University of California in partial fulfillment of the requirements for the degree of Master of Science in Education

Dominican University of California

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## **Abstract**

This research aims to understand the benefits and overall impact of social inclusion from the perspective of the neurotypical peer. My research analyzes three strategies that are widely used to promote the acquisition of social skills for children with Autism Spectrum Disorders; Social Skills Training, Peer-Network Implementation, and Pivotal Response Training. Currently, existing research fails to thoroughly investigate how social inclusion impacts the neurotypical peer, but rather focuses on the impact that social inclusion has on the individual with ASD. While this is vital information, it is also crucial to understand from the perspective of the neurotypical peer, as they play a significant role in providing authentic, social opportunities for individuals with ASD.

My research aims to close this gap and develop an understanding of social inclusion from multiple perspectives. I utilized a mixed methods approach using a combination of qualitative and quantitative data. I conducted focus group interviews, individual interviews, and observations. I included quantifiable measures such as a scale survey which was given to participants before and after the study. The ultimate goal of this study is to provide schools, and educators, with a greater understanding of social inclusion from a different perspective. As a result, we can move forward with providing our students with more meaningful inclusive opportunities.

This topic is important to study due to the emphasis on mainstreaming students with special needs in the general education classroom. I will be using elements from each of the strategies described above, to develop a training program for volunteers at Grove school. Grove is a school for children ages 5-22 with behavior challenges, Autism, Cerebral Palsy, and other disabilities. The purpose of this study is to explore and understand the impact of social inclusion from the perspective of the neurotypical peer.

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## **Chapter I: Introduction**

Social inclusion has been a long-debated topic within schools among administrators, teachers, and parents. Based on data from the Center for Disease Control and Prevention (2019), 1 in 59 children is diagnosed with Autism. With this growing number, more and more children on the spectrum are placed within the general education classrooms among our neurotypical peers. This research aims to understand how neurotypical students are affected by social inclusion, from their own perspective.

### **Statement of Purpose**

There have been several studies designed to identify the benefits of including peer models in teaching individuals with Autism social skills. Locke, Rotheram-Fuller and Kasari (2012), conducted a study geared towards understanding the social impact of acting as a peer model. This study identified several benefits such as high social network centrality, quality of friendships, and less loneliness.. Banda, Hart, and Liu Gitz (2009), conducted a study in order to understand the impact of training peer models and children with autism during structured activities and centers in an inclusive classroom. Banda et al. (2009) stated that there was significant improvement in social responses and initiations.

While these studies begin to provide us with valuable information about peer models, the results of these studies largely focus on the child with Autism. Locke et al. (2012) works to uncover the perspective of the neurotypical peer but utilizes a variety of scaled questionnaires and observations. Banda et al. (2009) even states that there is a growing need to provide students of all abilities with various opportunities for social inclusion during academic and non-academic times. There were various intentions and objectives to these studies, including the effectiveness

of the studies, impact on the individual with Autism, and more. Yet these studies fail to provide us with a comprehensive understanding of the neurotypical peer. The purpose of this research is to develop a greater understanding of the neurotypical peer and the impact of social inclusion by incorporating various measures to gain a holistic understanding.

### **Overview of Research Design**

This research study took place at the Grove After-School program in Petaluma, CA. This program serves students aged 5-22 with various disabilities, including; Autism, Cerebral Palsy, Downs Syndrome, and Emotional Disturbance. The ultimate goal of this research was to develop an understanding of the neurotypical peer, after exposure and reflection in the field. This research utilized a non-probability or convenience sample, using student volunteers from local high schools and universities. Volunteers who were interested in volunteering at Grove school were asked to participate in the study. There were 8 total participants, ages 14-18, that began to participate in the study (See Appendix A for a list of participants). Only 4 of these participants completed the study in its entirety. Participants were asked for a 6-week commitment, which began with a 1-hour focus group interview and scale survey (See Appendix B for survey statements). During this time, the researcher asked probing questions in order to determine each students' current level of experience, implemented role-playing activities, and presented the students with 3 research-based strategies- social praise, modeling, and showing interest. Over the course of the study, participants were asked to respond to weekly journal prompts reflecting on their learning and experiences, as well as share examples of implementation of research-based strategies (See Appendix C for a list of journal prompts). At the end of the 6-week period, participants completed a final interview and scale survey.

The researcher has acted in the field in a professional role since 2012 and is currently employed at the research site as an education specialist for a middle school classroom. The researcher is well aware of their positionality and potential biases, which is why it was of the utmost importance to employ a variety of sources for data collection and anonymity.

### **Significance of Research Findings and Implications**

This study found that neurotypical students self-reported an increase in empathy and understanding of individuals with special needs after participating in the 6-week volunteer program. Participants also self-reported an increase in their willingness and ability to welcome a friend with a disability. The researcher noted several overarching themes, participants gained an understanding of individuals with ASD as unique human beings, participants experienced and reported a shift in expectations, participants were positively impacted by the training process, participants also reported a lack of inclusive opportunities at their school sites. Based on the findings of this research, it is clear that neurotypical peers are positively impacted by social inclusion.

What does this mean for educators and society? It is time for us to take-action and increase opportunities for social inclusion. This must be a topic of conversation, not a conversation we avert. As educators, administrators, and parents, we must put in the work to ‘normalize’ disabilities and help our children to become advocates for social justice. We can all work together to advance social justice and equality by working to illuminate and empower this marginalized community of individuals with special needs. The intent of this research is to solidify the understanding that social inclusion benefits all parties involved, and prioritize these opportunities in order to cultivate a warm, accessible, and welcoming school community.

## Chapter II Literature Review

### **Introduction: The Inclusion Model of Education for Children with ASD**

My research aims to understand social inclusion and the impact from the perspective of the neurotypical peer. The definition of inclusion has evolved over time. In the 1990's, inclusion focused on the full-time placement of special education students in the mainstream classroom (Agran, 2014). Today, we are working towards reinventing this definition from simply placing students with special needs in a classroom towards creating a more inclusive school community. Yet while inclusion has remained a controversial topic among educators, administrators, and parents there has been little focus on how neurotypical peers in the classroom are personally affected. Undoubtedly, understanding social inclusion from the perspective of the neurotypical peer is vital. With the changing definition of inclusion and an increased demand for opportunities for social inclusion, we must understand the personal impact this experience has on neurotypical peers.

This literature review begins by providing an overview of the inclusion model for children with Autism Spectrum Disorders (ASD). In this section, the researcher discusses the importance of friendships and social interactions for all human beings, specifically individuals diagnosed with Autism Spectrum Disorders (ASD). The researcher will discuss historic legislative acts such as the Individuals with Disabilities Education Improvement Act (IDEIA), and how this was the inception of inclusion in education. The researcher will then discuss how the definition of inclusion has evolved over time and the shortcomings of inclusion. At the end of this section, the researcher will define social inclusion and discuss how teachers are currently implementing strategies in the classroom to support the development of social skills.

In the second section of the literature review, three research-based approaches for promoting social interaction for individuals with ASD are discussed: Pivotal Response Training, Social Skills Training, and Peer Mediated Intervention. PMI is an intervention where typical peers serve as a mentor in the classroom. This evidence based-practice is reported to improve a wide range of social skills. Social Skills training is an intervention focused on improving social competence and support to facilitate peer interactions. Pivotal response training is a naturalistic approach that focuses on generalization of social skills utilizing natural reinforcers.

At the end of this chapter, the researcher will discuss how peer models are being utilized in the classroom today. The researcher will discuss the benefits of including peer models in social skills interventions for both the student with ASD and the neurotypical student, and the potential outcomes for peer models.

Social interaction and friendships are vital to the mental health and overall quality of life of all human beings. Our ability to build relationships in the classroom, workplace, and community helps shape who we are as individuals. The ability to build relationships comes naturally for many. It requires a variety of skills and opportunities for interaction in order to build these friendships, as well as a flexible mindset (Agran, 2014). Children begin to develop these skills early-on through interactions with peers and their families. Children in schools benefit from access to positive, diverse, relationships with peers and adults. These connections promote success in school and enhance personal growth and overall well-being (Ladd & Ryan, 2012).

Friendships are equally essential to the overall happiness and well-being of children with ASD's. The Diagnostic and Statistical Manual of Mental Disorders-5 (2013) identifies diagnostic criteria for ASD as “persistent deficits in social communication and social

interaction.” In addition, many people with Autism engage in repetitive behaviors and patterns, often making it difficult to connect with typical peers. Since social interaction with peers may not necessarily be intrinsically motivating for individuals with ASD, explicit instruction is necessary in order to develop these skills (Harper, Symon, & Frea, 2007). These limitations restrict individuals diagnosed with Autism from acquiring skills necessary to build social skills and consequently, friendships. Despite these difficulties, the building and maintenance of relationships and social related skills help individuals with ASD in diverse ways. These skills can help individuals with ASD find and maintain a job in the future, helping them to be a more active member of their community. Simply existing in ones’ community is not enough, these skills help individuals with ASD build community through the connections they make with those around them. Relationships can also help to increase cultural competence by increasing understanding and awareness. Ultimately, friendships and relationships are a fundamental human right that all individuals require access to (Agran, 2014). Thus, increasing opportunities for social interaction with peers is vital to enhancing the overall experience of school for individuals with ASD.

### **Historical Legislative Acts**

Over time, societies view of individuals with special needs have shifted, and is continuing to support social integration/inclusion in our communities. *Brown v. Board of Education* was a pivotal legislative act that launched the Civil Rights Movement and a new societal view of acceptance of differences. This movement began to emphasize the need for equality among marginalized groups, primarily among racial and ethnic differences and people with disabilities. Disabled Americans advocated for inclusion and equality which eventually lead to the enactment of the Education of the Handicapped Act (EHA). This guaranteed access to



quality education, provided in the least restrictive environment (LRE) (Kirby, 2017). The enactment of the EHA lead to criteria that has shaped special education into a more inclusive system. Free and Public Education (FAPE) and Least Restrictive Environment (LRE) are two essential elements that promote equality and inclusion that derived from the EHA. Students are provided a free education in their identified least restrictive environment, the goal is to include students with disabilities with typical peers as much as possible. The EHA has undergone several reauthorizations and has been most recently been reauthorized in 2004 as Individuals with Disabilities Education Improvement Act (IDEIA). The Civil Rights Movement and the enactment of laws such as the IDEIA have paved the way for educators to promote inclusion within the classroom and school community (Kirby, 2016).

### **Inclusion, Then & Now**

Although legislative acts have provided us with a foundation for more inclusive practices within schools, the phrase ‘inclusion’ continues to adapt over time. Yet the term inclusion is broadly defined and is often left to the interpretation of the individual. The foundation of inclusion has always been to provide education to students with disabilities within the mainstream classroom alongside typical developing peers. Yet inclusion is a multidimensional term that can be lost in translation. Inclusive practices have, in the past, focused on moving students with disabilities from separate educational settings to the general education classroom. Legislative acts such as the IDEIA fought for inclusion for students with disabilities and focused on educating students in the mainstream classroom. Therefore, in the 1990’s, inclusion was primarily defined as simply providing education to special education students in the same classroom as their non-disabled peers (Agran, 2014). Yet, the term inclusion should be viewed from a variety of perspectives, and should expand beyond the walls of the classroom.

## **Full Inclusion**

Full inclusion benefits students with ASD in the acquisition of social skills and contributes to overall happiness and well-being (Agran, 2014). The term full inclusion expands the meaning of inclusion into all elements of a child's life. Instead of simply focusing on what occurs within the classroom during instruction, full inclusion aims to include individuals with special needs in day-to-day activities such as recess and lunch so the child is fully included within the school community. In order to be effective, however, teachers must utilize a variety of strategies in order to promote social skills development within the classroom. For example, teachers will often incorporate structured play groups, modeling, continuous adult prompting, and reinforcement to promote the acquisition of social skills (Banda et al., 2009). Locke et al. (2012) discusses the benefits of involving typical peers in social skills interventions for children with ASD. These include an increase in the use of social and communication skills.

While the general classroom climate has shifted to be more inclusive, educators often fall short in making inclusion work. Effective inclusion requires collaboration of team members, (including special education teacher, general education teachers, and specialists). The fact that team members lack time for collaboration often limits their ability to explore effective strategies. Furthermore, general education teachers are not provided with training on how to meet the needs of students with significant needs or behavioral challenges and are not given support to do so in the classroom.

Given these challenges, many general education teachers are required to spend a majority of their time focusing on classroom management rather than providing instruction (Gilmour, 2018). Gilmour (2018), discusses the controversy regarding peer outcomes in the inclusive classroom. Some teachers argue that typical peers in the general education classroom fall behind

due to the attention required to educating students with significant needs. As a result, neurotypical students may even miss out on instructional time. However, contrary to this perspective, current research indicates there are several benefits to full inclusion for the neurotypical peer. Typical peers are observed to have more friendships and connections with other children in the classroom and decreased feelings of sadness and loneliness (Locke et al., 2012).

Locke et al. (2012) recognizes that inclusion within the classroom, unaccompanied by other strategies, such as the use of peer models, is inadequate when we consider the long-term goal of inclusion. We must emphasize the importance of moving beyond the walls of the classroom and utilizing naturally occurring social opportunities such as recess and lunch time. We do not merely want our students to be able to passively sit in a classroom and absorb grade-level material whilst sitting alongside typical peers. We want our students to develop cultural competence by interacting with the people in their community and develop a sense of belonging.

Incorporating social opportunities beyond the classroom is key to building and maintaining social skills that are necessary to form friendships, which ultimately leads to a more positive school experience. The term full inclusion incorporates a focus on integrating children with special needs into the entire school community. However, in transforming the definition of inclusion educators must also increase opportunities for full inclusion by utilizing natural times throughout the school day and other extracurricular activities.

### **Social Skills Interventions**

There are several research-based approaches that have been found effective in promoting social skills in the school environment. Pivotal Response Training, Social Skills Training, and Peer Mediated Interventions are all strategies used to promote acquisition of social skills for

children with ASD. Each intervention contains elements that teachers incorporate into the classroom i.e. structured play groups, gaining attention, utilizing multiple cues, modeling, and social praise, and can be modified to each student and setting. All interventions require the assistance and participation of neurotypical peers.

**Pivotal response training (PRT).** Pivotal Response Training (PRT) is a scientifically based treatment based on the fundamental elements of Applied Behavioral Analysis (ABA). The ultimate goals of implementing PRT is developing communication/language skills, increasing positive social behavior, and decreasing disruptive/self-stimulatory behaviors. PRT has been applied to reduce behavior problems, teaching academic, and social skills. The main idea of PRT is that by modifying pivotal areas in individuals on the spectrum including motivation, response to multiple cues, self-management, and initiation of social interactions, there will consequently be positive effects in other domains of functioning (Cadogan & McCrimmon, 2015).

PRT is a naturalistic approach and can be implemented in a natural setting using activities based on the individual child's interest. PRT emphasizes the use of natural reinforcers such as tangible reinforcement or social praise. This strategy does not include irrelevant rewards such as candy etc. and rewards attempts made by the child to engage in social interactions.

While PRT treatment can be applied in a variety of settings to target different skills, PRT is commonly used to promote the acquisition of social skills. The goal of PRT is to develop the child's motivation in order to increase the use of language and frequency of social interactions. PRT is typically delivered in a 1:1 or small group setting, using known reinforcers specific to each individual, and social praise. There have been proven social-emotional and communicative benefits from the application of PRT. PRT has been proven effective in enhancing social

interactions for children with Autism, improving communication, play, and academic skills (Kuhn, Bodkin, Devlin, & Doggett, 2008).

**Social skills training (SST).** Social skills training (SST) is an intervention that utilizes elements from behavioral and learning techniques that focuses on teaching specific social skills (White, Keonig, & Scahill, 2007). This intervention teaches specific skills (i.e. maintaining eye contact, greetings, initiating conversations, and taking-turns.) SST interventions are typically conducted in a more clinical setting, researchers have noted limitations because of this and multiple studies have elected to incorporate generalization sessions in a more naturalistic setting. Researchers have previously utilized reinforcement techniques and include multiple communication partners to help with generalization of skills (Matthews, Erkfritz, Knight, Lancaster, & Kupzyk, 2013). Matthews et al. (2013) claims that the incorporation of peer models may increase motivation, friendships, and the overall effectiveness of the SST intervention.

**Peer mediated intervention (PMI).** Peer-mediated interventions are effective strategies implemented in schools to promote the development of social skills. This approach utilizes typical peers in the classroom who are trained to initiate, interact, and respond to social exchanges from peers with ASD. PMI is most effectively implemented when using a team approach. The involvement of all members of the IEP team is necessary, including; SLPs, OTs, general and special education teachers, and paraprofessionals (Bambara, Chovanes, & Cole, 2018). Each member of the team can help to provide valuable information when implementing this strategy. PMI is strategically implemented in a natural social setting such as during lunch time or during extracurricular activities. The careful selection of peer mentors is vital to the effectiveness of this strategy requiring teachers to select students with strong communication

skills with common interests. Another key component to effective implementation of PMI is communication between peers, students, and families.

One of the foundational components to PMI is peer training. It is important to explain to peer models what their role is and to discuss goals for students. Peers are also taught the importance of their presence and goals for students are typically discussed. When implementing a PMI approach, peer models are taught 1-2 specific skills per week and are given opportunities to role play (Bambara et al., 2018).

Banda et al. (2009) discusses the research findings that support the claim that teacher prompts help to increase frequency of initiations and the training of peers increased social responses from children with ASD. Children who participate in PMI interventions show notable progress interacting with peers, using social skills, and even reducing adult facilitation of social interactions and activities (Schaefer, Cannella-Malone, & Brock, 2018). According to Locke et al. (2012) PMI treatment is considered the best practice in the development of appropriate social skills among children with ASD.

### **The Use of Peer Models**

Each strategy discussed has overlapping elements that should be considered, especially the use of peer models. Including the use of peer models in social skills intervention has been proven effective in multiple settings. Locke et al. (2012) states that interventions mediated by peers are now one of the most refined interventions for children with ASD. Including peer models in teaching social skills provides children with ASD opportunities to practice social skills within unstructured social settings. Including peer models has shown to increase communication and social skills for students with ASD (Locke et al., 2012.) In order to be effective, however, it

is important to consider how social rules are applied in real life. Undoubtedly, social interactions often do not follow a clear cut set of rules making it difficult for students with ASD to generalize and adapt these skills.

While adult facilitation is vital to effective training of peer models and the implementation of strategies, adults may not be aware of social norms within a social group. Direct instruction may lead individuals with ASD to feel like an outsider (Bottema-Beutel, Mullins, Harvey, Gustafson, & Carter, 2015). The presence of an adult may come across as intrusive, hindering student participation and instinctive interactions (Bottema-Beutel et al., 2015). Frankly, peer models are simply more receptive, and there is natural opportunity to develop a friendship. Providing students with ASD opportunities to engage with peer models gives them an ally on the school campus, in turn, enhancing the overall school experience for the student with ASD.

There are positive and negative effects for the neurotypical peers in the classroom as a result of being in the role of a peer model. Locke et al. (2012) alludes to several potential challenges i.e. burnout on interacting with peers with ASD, and concern of negative social and academic outcomes. On the other hand, there are several positive outcomes for the neurotypical peer as well. Ezzamel & Bond (2017) discuss developed skills, increased sustained attention, and even making new friends with peers with ASD. Schaefer et al. (2017) identifies potential positive outcomes for peer mentors as developing communication skills, learning to interact with students with disabilities, and feeling a sense of accomplishment helping another student.

## Conclusion

The literature discussed in this literature review contributes to the field of education by discussing the subject of inclusion from multiple perspectives. By further working to define the term, we are bringing awareness to the term and providing educators with additional ideas for inclusive opportunities beyond the classroom. This research discusses several research based-strategies to promote the acquisition of social skills: PRT, SST, and PMI. These interventions utilize the support of peer models to teach students with ASD social skills. Provided the positive outcomes from the implementation of these strategies, it is vital that we work to understand how full inclusion impacts the neurotypical peer.

While the research briefly mentions the emotional, psychological benefits of inclusion for neurotypical peers, there is still research to be done. Perhaps most significantly, the existing research lacks information on the impact of inclusion on the typical peer from the students' own perspectives and, instead, analyzes perceived benefits according to the researcher. Moreover, since research on peer mediated interventions typically focuses on the benefits for students with ASD we must further develop our understanding by listening to the voice of the neurotypical peer.

There is a clear gap in knowledge around how social inclusion and acting as a peer mentor impacts the typical peer. My research will aim to further close this gap and understand how working with students with special needs affects neurotypical peers. I aim to understand the impact of social inclusion from the perspective of my participants which will further close the gap in understanding inclusion. The ability to build cultural competence and maintain social friendships is a basic human right. We must increase opportunities for individuals with ASD in order to develop these skills.



## **Chapter III: Methodology**

### **Research Questions**

The use of strategies involving neurotypical peers in the process of teaching social skills has been proven to benefit individuals with ASD with the maintenance and acquisition of social skills (Harper et al., 2008). However, the primary focus of this research is to identify the benefits of social inclusion from the perspective of the neurotypical peer. In looking at this topic initially, two central questions emerged as the catalyst to my study. The first question this research aims to unravel is "How does social inclusion benefit the neurotypical peer?" The secondary question my research hopes to address is "How can providing students with background knowledge and strategies to promote social interaction enhance the experience of inclusion for the neurotypical peer?" As the research began to evolve, several sub-questions emerged such as; "Can teaching neurotypical students about social inclusion provoke personal self-reflection?", and "how do neurotypical peers feel teachers could effectively include students with disabilities in everyday activities?". It was also important to analyze how neurotypical peers perceive individuals with disabilities before and after participating in the study.

### **Description and Rationale for Research Approach**

In designing my research, I identified that a combination of a humanistic research approach and a constructivist worldview was the most effective approach for interpreting mixed methods research data. When analyzing data, the researcher aimed to gain an insider point of view in order to understand the perspectives of the participants electing to participate in this study.

The use of mixed methods data collection is an effective way to develop a well-rounded answers to the research questions. Mixed methods research combines the use of qualitative and quantitative data. By analyzing a combination of numerical and qualitative data, I was able to understand the mindset of participants from a more holistic point of view. My research involved a combination of scale surveys and analyzing qualitative information from student journal responses, focus group interviews, and individual interviews. Focus group interviews were conducted before participating in the study while individual interviews took place after the study. It was crucial to utilize mixed methods research in order to fully understand the perspective of the neurotypical peer.

The humanistic approach emphasizes the importance of building reciprocal relationships with research participants. Moreover, the humanistic approach asserts the idea that by raising dialogic consciousness through relationship building, the participant feels valued by a worthy witness (Creswell, 2014). The humanistic research approach is intended for the benefit of marginalized communities. The participants of this study are high school and college students between the ages of 14-18, volunteering from local high schools and universities. It is important to incorporate a humanistic approach when working with students of varying backgrounds in order to consider their developmental maturity and sensitivity of the research topic. My goal was to provide student volunteers with a space to reflect on their experience and understand the impact of these opportunities so that they might develop a more well-established perspective and understanding of not only individuals with special needs, but also of themselves.

The constructivist approach asserts the idea that human perspectives are shaped through lived experiences and social interactions. Cresswell (2014) discusses the idea that as humans, we

generate meaning through our interactions with the human community (p.9). Therefore, individuals are constantly, actively developing their understanding and interpretations as they engage with the world and people around them. The constructivist worldview aims to develop a greater understanding of the world by incorporating multiple perspectives while analyzing data (Cresswell, 2014). The objective of this approach is to develop a greater understanding of the world, an object, or thing, by working to interpret the perspectives of people who are differently positioned in relation to the object of study. Therefore, participants will have different experiences and interpretations of the meaning of the object of study. Using the perspectives of neurotypical peers to develop a greater understanding of the impact of inclusion helps educators to further develop their understanding of social inclusion, encouraging them to look beyond the scope of the classroom and look to discover more effective ways to promote inclusion.

The ultimate goal of my research is to emphasize the need for additional opportunities for social inclusion by highlighting the benefits of social inclusion from the perspective of the neurotypical peer, for the neurotypical peer. By utilizing a mixed methods research design and incorporating elements from the humanistic and constructivist research approaches I was able to gain a unique perspective, and develop a more complete and holistic understanding of this mindset. Building relationships with student volunteers enhanced the experience for participants. The humanistic approach allowed students to feel valued and build a safe space for students to share their own self-reflections. The constructivist approach provided the researcher with the understanding that lived experience and social interactions shapes the mindset of the individual. Therefore, by providing student volunteers with opportunities to interact with individuals with disabilities and time for self-reflection, their understanding of social inclusion transformed.

Inserting mixed methods research supported the intention of developing a complete understanding of the individual by incorporating various forms of data collection. Employing a combination of mixed methods research, humanistic and constructivist research approaches ultimately allowed me the opportunity to work towards defining social inclusion from multiple perspectives.

## **Research Design**

### **Research Sites and Entry Into the Field**

The pseudonym “Grove” school will be used to ensure confidentiality of students and all members participating in this study, pseudonyms will be used throughout this research for all identifying information. Grove School in Northern California is a nonpublic school (NPS). The California Department of Education defines an NPS as a nonsectarian school that enrolls students with significant needs outlined in their Individualized Education Plan (IEP). Students who are referred to nonpublic schools have significant academic or behavioral needs that cannot be met in the public-school setting. When a student is referred to Grove school, or any nonpublic school, the district is held financially responsible for the students’ education as it is deemed the students’ least restrictive environment.

Grove school currently serves 70 students ages 5-22 with a wide range of disabilities and behavioral needs. The day program runs from Monday-Friday from 9:00am-2:30pm. The Grove school after-school program currently serves 35 students, 30 of these students are Grove school students and 5 students attend from local public-school special day classrooms. The after-school program runs Monday-Friday from 2:30-5:30pm. There are 2 campuses and 9 classrooms at Grove school that are designed to meet the needs of each individual student. Students are placed

in their classroom based on age, individual student need, ability, and communication. The primary campus serves students ages 5-16 while the secondary campus is comprised of students ages 16-22. Each classroom has one lead teacher and approximately 6 paraprofessional aides. Students typically work in a 1:1 or 1:2 ratio based on their behavioral needs and the services outlined in their Individualized Education Plan (IEP). The researcher began working as a coordinator for an APE program, designed for adults with disabilities. The researcher began employment at Grove school as a teacher's aide in 2014, and is currently an education specialist at Grove school for a middle school classroom. The researcher has previously worked with several students who participate in the Grove after-school program but did not know research participants (student volunteers) prior to conducting initial focus group interviews and trainings

Students attend Grove school with various diagnoses such as Autism, Cerebral Palsy, Downs Syndrome, and Emotional Disturbance. Each student referred to Grove school has a behavior intervention plan (BIP), to address maladaptive behaviors that the student may exhibit. Several students engage in Self-Injurious (SIB), aggressive, and noncompliant behaviors, which restricts them from accessing the content of curriculum in the public-school setting and interacting with their neurotypical peers. Grove school provides students with a wide range of services including specialized academic instruction, speech and language, and occupational therapy services. Grove school emphasizes the importance of learning beyond the classroom and participates in several community outings throughout the week. Students participate in community outings throughout the week and work on developing functional skills to increase their independence and abilities to become a functioning member of their community. Students

participate in store purchase outings, dance class, gymnastics, horseback riding, trips to the farm, and other excursions throughout the year.

This site was selected for the study due to the unique design of the Grove School After School program. The program provides students and volunteers with opportunities to build friendships beyond the walls of the classroom by increasing opportunities for students to be in the community. Students are able to participate in a variety of activities in the after-school program which include outings to the park, store, local animal shelter, and participation in a work program based on the Grove school campus. Volunteers are able to accompany students during this time and provide them with opportunities to practice social skills in each setting described above. Currently, the volunteer program lacks structure and consistency. Volunteers are able to schedule visits at any time throughout the semester and are not provided with training prior to participating in the Grove after school program. This is due to the unpredictable schedules of volunteers that have participated in the past.

### **Sampling Procedure**

All student volunteers who elect to volunteer at Grove school were asked to participate in the study. The Grove school volunteer coordinator had previously scheduled visits to local high schools and universities to recruit volunteers separate from this study. Participants were selected as a nonprobability or convenience sample based on their availability. Grove school maintains a positive, ongoing relationship with local schools in the community, therefore, students are often referred to Grove school in order to obtain volunteer hours and experience. The Grove school volunteer coordinator speaks to interested students about the program as a part of their recruitment process and interested students are encouraged to reach out via email. During these

scheduled visits the volunteer coordinator distributed consent forms to all interested students to review before visiting Grove school after-school program. Students under the age of 18 were required to provide parental consent (See Appendix D for IRB Approval Letter).

The participants who participated in the study were students from Sonoma County who elected to volunteer at Grove school. The students who participated were male and female, ages 14-18 years old. Many students volunteer for credit in a human interactions class, as part of their senior project, and/or show interest in the field of education, healthcare, or other service professions.

A total of 8 volunteers elected to volunteer at Grove school during the time this study was conducted. Due to scheduling conflicts, several no-shows, and failure to complete the requirements outlined in the study, only 4 of the 8 participants completed the study in its entirety. Each student volunteer at Grove was able to choose the length of time they volunteer, prior to the implementation of this training program. This ranged from a single visit to an entire semester (up to 6 months). As a part of this study, additional structure is required for student participants including a 6-week commitment, participation in an initial training, weekly reflections, and final interviews. Historically, student volunteers at Grove school have not received any training as a part of the program due to the unpredictable and inconsistent schedules of student volunteers.

## **Methods**

Student volunteers who chose to participate in the study completed a 1-hour face-to-face focus group interview, and a scale survey. The focus group interviews and trainings were scheduled at the beginning of each students' 6-week commitment at Grove school. There were 3 focus group interviews that were conducted at the beginning of this study, the first group was a

larger group of 6, the other 2 groups were individual ‘make up’ sessions due to scheduling conflicts and lack of student interest in these specific time slots and dates. Before leading the training, the researcher identified expected codes to analyze throughout the study. These codes were; benefits, perception, understanding, impact, and inclusion.

The training consisted of an overview of the school site and after-school program, defining Autism and Cerebral Palsy, and an overview of alternative modes of communication such as; Augmentative and Alternative Communication (AAC) devices, and Picture Exchange Communication Systems (PECS). Student volunteers were given a role-playing activity in order to develop an understanding of individuals with ASD, and an overview of behaviors and the functions of behaviors they were likely to witness during the after-school program. Volunteers were then introduced to research- based evidence on the importance of building friendships for individuals with ASD, and the benefits of peer mentors. Participants were introduced to the three research- based strategies- show interest, social praise, modeling, and given role playing activities to practice with their peers. Throughout the training, participants were encouraged to answer open ended questions in order to gauge their experience and mindset moving forward into the study.

Interviews were recorded on the researchers iPhone, and notes were transcribed from the training, omitting all identifying information (addresses, phone numbers, personal references). Students were asked open ended questions to identify previous knowledge and experience with individuals with special needs. These questions included; "What is your previous experience with individuals with special needs? (at school, in the community, friends, family, etc...)" and "If you have had previous experiences with students with special needs, what do you like about



working with people with disabilities?” These questions aimed to gain background knowledge to identify students’ initial thoughts and mindset when beginning the program. By providing students with opportunities to answer questions based on their perceptions of students with disabilities and self-reflections before and after the study, the researcher aimed to understand how the mindset of the participants evolved after participating in the study. After the focus group training, each participant was provided with a scale survey with 4 thought provoking statements, and asked to rate each statement using a scale of 1 (strongly disagree)- 4 (strongly agree).

During the 6-week period, participants were scheduled to volunteer at the after-school program for 2.5 hours per week. Participants accompanied students on various outings in the community, participated in games and activities on campus, and assisted students with participating in the work crew, where students learn vocational skills. Volunteers were able to assist students with daily living skills and vocational tasks such as; cooking projects, general maintenance of the school during work group, and practicing social skills during structured and unstructured turn-taking activities.

Throughout the 6-week period, participants were required to answer weekly journal prompts via email to reflect on their journey and learning. Students were prompted to reflect on research-based practices that were discussed and practiced during the initial training, and formulate ideas on how to support students with disabilities be better included in daily activities. The prompts outlined are designed to prompt students to process their learning as they participate in the volunteer program.

At the end of the 6-week period, participants completed individual face-to-face interviews with the researcher and were asked to complete a scale survey, which was also

completed at the beginning of the study. By prompting participants to answer similar questions, the researcher aimed to compare and contrast changes that developed throughout the course of the study.

### **Data Analysis**

After the completion of the six-week period, the researcher analyzed data that was collected throughout the study. The researcher organized and maintained data collected in chronological order. The researcher analyzed qualitative data by transcribing information from the initial focus group interviews, and final individual interviews, using a computer and Microsoft Word. The researcher used Microsoft Excel in order to analyze quantitative data provided by the scale surveys administered before and after the study. By creating comparison bar graphs, the researcher was able to quantitatively analyze changes based on student responses from before and after participating in the study.

Coding was used as a form of data management and organization of themes and elements that formed during this study. The researcher began by highlighting and segmenting the text into sections that helped to complete initial coding of the materials. The researcher began by coding data collected from the initial focus group training and initial scale surveys. A code that consistently emanated from the initial focus group interviews was ‘uncertainty.’ The researcher noted that there was a lack of student response and development of initial ideas when prompted by the researcher. Many students responded “I don’t know” (peer volunteer, personal communication, February 28, 2019) or nodded in agreement with brief statements made by their peers. Another code that consistently emerged from the initial focus group interviews was ‘learn’, students claimed they wanted to “learn more about them”, or “how can I learn to help

and be more comfortable” (peer volunteer, personal communication, February 26, 2019).

Information from initial scale surveys administered before the study was entered into a Microsoft Excel sheet and transferred to a bar graph for comparison with the same scale survey that was to be completed after the study.

The researcher identified expected codes such as benefits, inclusion, perception, understanding, and impact, before analyzing data from journal entries from participants. The researcher organized student journal responses in chronological order and began to highlight passages in order to develop additional and unexpected codes. Codes that emerged from analyzing data from participants journal entries were commonalities, expectations, understanding, and practices. Several students referred to the research-based practices discussed during the initial focus group training and stated “It was natural to use social praise with the students”, and “I was matching their excitement” (peer volunteer, personal communication, April 26, 2019).

After the study was completed, the researcher began to analyze data collected from the final group interviews and scale surveys. Codes were grouped according to similarities in order to answer the research questions identified at the beginning of this study. The researcher used the same approach in order to compare data from before and after the intervention. The individual interviews were transcribed using a computer and Microsoft Word, while scale survey questions were inputted into Microsoft Excel and included in a bar graph to compare with data that was collected at the beginning of the study. This information was used in order to analyze and compare data from the beginning and end of the study to understand participant meaning and growth. By connecting qualitative and quantitative data through concept mapping, the researcher

aimed to identify codes and themes in order to answer questions that surfaced at the beginning of this study.

### **Validity and Reliability**

In order to mitigate bias, the researcher aimed to triangulate various data sources of information by utilizing a mixed-methods approach. The researcher used a combination of qualitative and quantitative data by facilitating focus group and individual interviews before and after the study, surveys before and after the study, and journal responses throughout. Themes that were established from this study were a result of the analysis of several different data sources, including focus group interviews, individual interviews, surveys, and qualitative observations by the researcher. The researcher has also spent prolonged time in the field in order to develop a thorough understanding of participants and research findings.

### **Research Positionality**

The researcher is currently working to obtain a Master's of Science Degree in education at Dominican University of California and holds 2 California teaching credentials, multiple subject and special education. The researcher has been involved working in a professional role in the special needs' community since 2012. Personal experience growing up with a sibling on the Autism spectrum sparked interest in the field and this avenue of research. The researcher hoped to uncover answers and develop a better understanding of individuals with disabilities by exploring the perspective of the neurotypical peer. The researcher is aware that due to the experience and personal involvement at the research site, there could be potential bias moving forward with this research topic. It is reasonable to consider bias, due to the researcher's

positionality within the school. However, the researcher's awareness of their positionality and biases emphasized the importance of employing a variety of practices to ensure validity.

## **Chapter IV: Findings**

The goal of this research has been to further define and understand the term inclusion, from the perspective of the neurotypical peer. Current literature and studies indicate that the public schools have made progress by providing students with disabilities the resources they need to exist within the traditional classroom such as; 1:1 aides, scaffolded materials, accommodations and modifications to grade-level materials. While this progress is viewed as notable, it is simply not enough. And it certainly falls short based on the findings of this research and the perspectives of the research participants. The term “inclusion” has been broadly defined by parents, teachers, and researchers, but until this point has not considered the valued perspective of the peers that sit alongside our students with special needs.

The central question that this research aims to unravel is how does social inclusion impact the neurotypical peer? By utilizing both the humanistic and constructivist worldview approach, the researcher was able to gain comprehensive insight on the perspective of the neurotypical peer, and understand how inclusion personally impacts their overall well-being.

### **Central Findings**

In this chapter, the researcher will discuss the following 4 overarching themes that emerged in the study: developing an understanding of the individual with ASD, shift in expectations, the impact of training and opportunities for reflection, and lack of opportunities for inclusion.

## **Developing an Understanding of The Individual with ASD**

The first theme that quickly evolved was the participants ability and interest in developing an understanding of the individual with ASD. At the beginning of the study, participants made broad statements expressing an interest in learning more about individuals with ASD. At this point, participants did not ask questions about individual student interests or hobbies. This theme began to emerge during the study through opportunities for reflection in weekly journal entries. Throughout the study, participants shared several opportunities and stories about their interactions with the students. “They are definitely more talkative and verbal than I thought they would be. I didn’t think they would be as interested in us but they were. All they want to do is talk to us and hangout with us” (peer volunteer, personal communication, April 3, 2019). Participants shared about their interests and things they had in common with the students such as TV shows and sports.

At the final stage of this study participants shared their increased confidence in their knowledge and abilities claiming “I can interact better” (peer volunteer, personal communication, June 5, 2019). Participants shared their learning and stated “They are all unique and have different personalities” (peer volunteer, personal communication, June 6, 2019), implying a greater understanding of the individual beyond their disability.

After analyzing quantitative data using the scale surveys provided before and after the training, participants reported an increase in the likelihood of welcoming a friend with a disability and ability to demonstrate empathy and understanding for individuals with special needs (See Appendix E for comparison bar graphs). Based on these findings, it is clear that participants have begun to develop a more thorough understanding of the students as individual

human beings. They learned more about their individual characteristics and preferences, further developing their knowledge and experience appeared to help them in building more meaningful relationships with Grove students. These findings and new found understanding of the individual contributed to an overall shift in expectations for the participants.

### **Shift in Expectations**

At the beginning of the study, participants were asked to identify their expectations for the volunteer training program. Participants shared minimal information, claiming “I don’t know” (peer volunteer, personal communication, February 26, 2019). Participants made broad statements such as “Just understanding them would help” (peer volunteer, personal communication, February 26, 2019). As the study progressed, participants seemed unsure if their expectations had shifted or not. Participants discussed several observations claiming “I didn’t think they would be as interested in us but they were” (peer volunteer, personal communication, March 20, 2019) indicating a shift in expectations. The researcher claims that before interacting with the students, participants may have expected not to make connections with the students in the program. While participants shared minimal information at the initial interview, all participants claimed that they felt they would benefit from experience with individuals with special needs through the scaled survey.

Throughout the study, the researcher noted that participants began to expand on their explanations and began to incorporate personal stories of activities with the students and use more specific terms. The researcher noted that all participants touched on the idea of being excited and looking forward to their time at Grove school claiming it was “more fun than I thought” (peer volunteer, personal communication, March 24, 2019). Information gathered from



the journal entries throughout the study helped the researcher to further develop the expected codes and identify themes that derived from this study. At this point in the study, it seemed as though students were discovering things they had in common with people with special needs, evident by the statements made by participants in their journal entries. Overall, participants seemed to be more forthcoming with information and willing and eager to share their experiences with the researcher.

As the study continued to progress, participants shared several positive outcomes that were a result of their experience in the study. “My understanding of students with special needs has definitely grown. I understand more about them now and how they act” (peer volunteer, personal communication, June 5, 2019). Another participant shared “I don’t think I really had an understanding before and now I get that they are just people too” (peer volunteer, personal communication, June 5, 2019). The researcher observed participants to be more confident in their knowledge and abilities when answering final interview questions about their experience. Participants maintained a scaled rating of 4 (strongly agree) when asked to respond to the statement “I have personally benefitted from experience with individuals with special needs”. Based on the research findings, participants experienced a shift in their expectations through acquired knowledge and experience with individuals with special needs. This was largely due to the implementation of the training and provided opportunities for reflection.

### **Positive Impact of Training and Opportunities for Reflection.**

Participants reflected on their experience of the training throughout the study using weekly journal prompts. At the beginning of the study, the researcher noted a lack of response from participants. Participants claimed to lack experience and knowledge around this population

but expressed a strong desire to learn about those different from themselves “I want to learn more about what’s going on in their head” (peer volunteer, personal communication, February 26, 2019). During the training, participants were instructed to practice implementing each strategy by working with a peer. Participants were receptive to the activity but were observed to be uncomfortable when prompted to practice the strategies.

As the study progressed, participants were prompted to discuss the research-based strategies from the initial training. Participants referred to the research-based strategies, discussed at the initial focus group training stating “It felt natural to do” when discussing modeling (peer volunteer, personal communication, March 14, 2019). One participant even discussed modeling using an Augmentative and Alternative Communication (AAC) device with a student when completing daily living activities. Based on observation, the researcher noted that overall, participants benefitted from the initial focus group training and were able to implement the strategies naturally in order to develop a relationship with Grove students.

During the final interviews, participants shared their ideas for effective implementation of inclusive opportunities. One participant shared that they could be “better included in certain activities if they have already experienced them...it might help to have tried the activity before with someone they already are comfortable around” peer volunteer, personal communication, June 4, 2019). This signifies that the participant was able to take their learnings from the training, and begin to understand application of the strategies in the real world.

When analyzing the scale survey, the researcher noted an increase in self-identified experience working with individuals with special needs. When comparing the results, participants reported an overall increase from the baseline data.

### **Lack of Opportunities for Inclusion and Advocacy**

The final theme that emerged in the end stages of this study was a lack of inclusive opportunities available at the participants' school sites. At the initial stages of the study, this was not an expected code or area of targeted interest for the purpose of this study. Therefore, there was minimal data and information for comparison. At the focus group training, participants claimed to have "seen them around campus" (peer volunteer, personal communication, February 26, 2019), indicating a lack of opportunities to interact with students with disabilities. When participants were asked to share how individuals with special needs could be better included in day to day activities, each participant discussed the lack of opportunity and discussion at their school sites. Participants noted that the clubs for individuals with disabilities were separate and that it was an "untouched topic" (peer volunteer, personal communication, June 5, 2019).

One participant shared "There are clubs at school but it's not really a mix. Clubs could be more inclusive" (peer volunteer, personal communication, June 5, 2019). This was the first point in the study that participants referred to the word "inclusion" without being prompted by the researcher. All students claimed that their teachers and other school personnel "never" discussed disabilities and did not provide them with additional opportunities to socialize or interact with their peers with special needs on campus "it's not talked about". Participants claimed "they are just people too" and even shared frustration around lack of opportunity, "Why can't they be included and come out of the darkness?...They are just people who want to be accepted" (peer volunteer, personal communication, June 6, 2019). One participant even discussed the topic of bullying as "taboo" and discussed that by "keeping them (individuals with special needs) separate, it makes it "more taboo" (peer volunteer, personal communication, June 6, 2019).

One participant expressed an interest in continuing to explore volunteer opportunities and even advocate for individuals with special needs “It made me want to advocate for them because they are just people too” (peer volunteer, personal communication, June 5, 2019). Participants shared their insights on effective approaches that could be materialized by teachers and school administration. Participants shared the idea of providing students with opportunities to practice the activities beforehand. Ultimately, all 4 participants expressed that there was a lack of inclusive opportunities, and wished to seek out more at their school sites.

### **Conclusion**

The use of a combination of the humanistic and constructivist worldview approach to this research topic gave the researcher a holistic view of the perspective of the neurotypical peer. There were several identified research questions at the beginning of this study. The central research question this study aimed to untangle was how does social inclusion benefit the neurotypical peer? The researcher also attempted to understand if teaching neurotypical students about social inclusion would provoke personal self-reflection, and if providing participants with background knowledge about individuals with ASD would enhance the experience. The researcher then asked participants how they felt teachers could better include individuals with special needs in day to day activities. This section will review the main findings and refer to the original research questions identified at the beginning of the study.

Based on the findings of this study, inclusion provided participants with a meaningful and positive experience. Neurotypical peers were able to increase their development and self-report an increase in their understanding and empathy towards individuals with special needs. The researcher noted qualitative observations, and recognized a clear increase in confidence and communication skills among all 4 participants during the final interviews. Neurotypical peers

also benefitted by increasing their abilities to connect with those different from themselves, evident by their shift in expectations and ability to understand the individual being with ASD.

Can teaching neurotypical students about social inclusion provoke personal self-reflection? Participants claimed “I am a better person in general” (peer volunteer, personal communication, June 5, 2019), noting that they developed an understanding of themselves and developed a sense of appreciation for their own abilities. Participants exuded a sense of confidence and self-realization during the final interviews, stating “I have learned a lot about others, and more about myself as well” (peer volunteer, personal communication, June 4, 2019). Based on quantitative data taken from the scale surveys and observations from the researcher, teaching neurotypical students about inclusion helped to provoke more in depth and profound personal-self-reflection.

How can providing student with background knowledge and strategies to promote social interaction enhance the experience of inclusion for the neurotypical peer. Providing participants with background knowledge and strategies to aide in developing connections with individuals with ASD seemed to benefit all parties involved. While overall engagement from participants lacked enthusiasm and the information gained from the initial focus group training provided little information, it allowed participants to recognize and reflect on their own discomfort. This study also aimed to understand how neurotypical peers felt that teachers could better include individuals with disabilities in everyday activities. Based on the report made by participants, neurotypical peers were able to transfer their knowledge from the training, and connect it with effective ideas for implementation at their school sites. One participant shared that students may be better involved in day to day activities by practicing first with someone they were comfortable with, a reference to modeling.

Participants consistently stated, before and after the study, that experience with Based on these findings, it is clear that there is an urgent need for inclusive opportunities, not only for individuals with special needs, but for their neurotypical peers. Participants in this study developed a more stable foundation for understanding individuals with special needs and claimed to be more comfortable interacting. Participants self-reported that this experience benefitted them personally, supporting the original claim that experience with individuals with special needs benefits the neurotypical peer. In conclusion, this study further supports the need for inclusive opportunities by solidifying the claim that neurotypical peers are positively impacted by social inclusion.

## Chapter V: Discussion

### Introduction

The results of this research identified 4 overarching themes and findings. The first theme was the neurotypical peers' ability to develop an understanding of the individuals with ASD as a unique human being. The next findings were an overall shift in expectations and the positive impact of training and opportunities for reflection. The final theme that emerged during this study was a lack of inclusive opportunities at the participants current school sites.

Based on the research findings, it was clear that the research participants began to develop an understanding of the individuals with ASD as an individual. As participants began to develop an understanding, they were able to build relationships with the students at Grove school. By providing participants and Grove students with various settings and opportunities to interact, they were able to establish a level of comfort and familiarity with the students. I believe that it was simple, we were able to provide students with a space to be uncomfortable and ask questions, and they were able to gain more from the overall experience. They were able to spend more time learning about the unique and individual characteristics, consequently, building a relationship.

There was a clear shift in expectations, solely based on the conversational exchanges with the researcher. Participants shared minimal information at the beginning of the study, I believe this was an unconscious and almost mechanical action in order to maintain a level of political correctness. This seemed to be the first time that participants were given the opportunities to speak openly and honestly about these difficult topics, which in turn made it difficult to obtain an accurate baseline. The materialization of new codes and the evolution of expected codes helped

to identify patterns in the participants thought process and establish a shift in their expectations. Perhaps participants did not expect to find that they were able to build a relationship or have things in common with individuals on the spectrum due to the separation already present at their school sites. I believe that allowing participants the time to learn more about individuals with disabilities through the training process provided them with the knowledge to move forward and beyond the barriers set by society. Providing participants with opportunities for reflection during the interviews and weekly journal entries prompted them to reflect on their experience and streamline their learning experience. Participants may have passively participated in the study if they were not prompted to reflect on their experience through the journal prompts.

The final theme that emerged was the lack of inclusive opportunities at the participants school sites. This was an unexpected area of interest. Each participant expressed that the lack of opportunities was frustrating and one participant even expressed an interest in advocating for individuals with special needs. I found this to be a bit obscure, that the lack of inclusive opportunities did not come to light until the end of the study. Again, I felt that this could be due to an unconscious desire to remain politically correct. After participating in the study, it was clear that participants wished to seek out more opportunities.

### **Implications for the Literature**

Based on the research from the literature review and the findings of this study, there are 2 significant similarities that can be identified and further explored. This research supports the claim by Schaefer (2017), that peer mentors may develop communication skills and learn how to better interact with individuals with disabilities, as well as feeling a sense of accomplishment. This was evident in the final interviews. Participants of this study all claimed to feel more



comfortable interacting with students with ASD and demonstrated improved communication skills, based on the content of their conversations from before and after the study. Participants even stated “I can interact better” (peer volunteer, personal communication, June 4, 2019). I noticed that the participants exhibited a sense of accomplishment by further developing their knowledge and abilities. Their confidence showed in their final interviews and interactions after participating in the program.

Locke et. Al, (2012) stated that current inclusion practices are inadequate when we recognize the long-term goal of inclusion. This claim was supported by the overarching theme, lack of opportunities for inclusion. Participants seemed frustrated by this, and claimed that by keeping individuals separate it was more “taboo”. The separation by the school makes it uncomfortable and makes the topic even more unmentionable. The problem is the lack of discussion, preventing general education peers from pursuing opportunities for inclusion. The ultimate goal of inclusion is to have individuals with special needs participate in daily activities alongside their peers to the best of their abilities. Providing our school communities with these opportunities for inclusion naturally allows for increased opportunities in the world.

While there were several themes in the literature review that were supported by the research discussed in the literature review, the finding of this research helped to fill a gap in knowledge from previous studies. First and foremost, there has been a lack of research around the perspective of the neurotypical peer. While there has been research to identify perceived benefits for neurotypical peers, little was known about the experience of neurotypical peers. Previous research reported that inclusion had transformed over time, and the mainstreaming of students was prevalent in school communities. Participants reported the lack of inclusive

practices, and even stated that their peers in the classroom were separate. How much of inclusion is publicized versus how much is truly enforced? Based on these findings, it seems as though the quality of inclusive practices is not up to the standard we hope to achieve.

Previous studies did not provide students with opportunities for reflection, this allowed this study to begin exploration of inclusion from the perspective of the neurotypical peer. Peer volunteers expressed self-growth through their journal entries, which had not been discussed until now. The growth and awareness the participants experienced and reported was a critical and central finding to this study.

### **Implications for Practice and Policy**

This study altered Grove's volunteer program by providing meaningful content for individuals who may participate in the program. Grove provides select volunteers with a simplified version of the training. Grove does not consistently implement the training and it is provided on a case-by-case basis. Grove does not continue to assign weekly journal prompts or require a time commitment from those interested in participating in the program.

Based on the findings of this research, teachers can recognize that there is not only a benefit to social inclusion, but a desire for inclusion among neurotypical peers. By limiting access and discussion around the topic, we are providing our students a disservice by not preparing them with adequate learning and information.

Teachers can begin this process by implementing several practical, and nearly effortless, ideas within their classroom. Teachers can assign peer buddies to students with disabilities and use this time as a natural occurrence to practice social skills, practiced mastered tasks, model skills for new activities, and practice new skills in a more intimate and relaxed environment.

Teachers can also begin to facilitate open discussions including peers with disabilities, and provide students with the space to connect and ask questions. These conversations can be extended and work parallel to the classroom curriculum to help gain a better understanding of social justice and inclusion. Another idea to promote social inclusion would be to incorporate ice breaker activities, geared towards identifying shared interests and commonalities. The process of uncovering shared interests seemed to be a pivotal point in the study, that led to building a friendship.

These ideas are simple and provide teachers with a basis to begin incorporating discussions around inclusion and social justice within their own classrooms. We are breaking down barriers and pushing beyond our conventional expectations of inclusion, in order to provide our school communities with a more enriching, inclusive, and welcoming school environment.

### **Limitations to the Study**

There were several limitations to this study that were uncovered as the study progressed. First of all, there was a small sample of 4 participants who completed the study. It would have been beneficial to have a larger sample of participants to participate in the study. The large focus group interviews seemed to lack substance in eliciting valuable and honest information, I believe that providing participants with 1:1 or even virtual training may have revealed additional and authentic information to further developed the identified codes at the beginning of the study. Perhaps, even a facilitated group discussion in addition to the training. This would have given a more accurate baseline from which to compare data from. While all responses were kept anonymous, it is possible that participants felt the study lacked anonymity due to the small

number of participants. Again, it may have been beneficial to provide participants with the scale surveys and initial focus group interview virtually.

I believe that there were several elements missing from the final interviews and journal entries. For example, it would be important to include additional questions around self-reflection and how the training specifically transformed the experience for the participants. The journals lacked a measure for quantitative data, which would have been beneficial to evaluate the learning process of the participants. There was also baseline data missing from the overarching theme, lack of inclusive opportunities, due to the fact that this was not an area of expected interest and research.

Participants who completed the study were students at 1 local high school, and 1 local university, giving us a limited perspective of the neurotypical peer. While the Grove After-School program provided participants with a unique and immersive experience, it provided the researcher with limited findings specific to the research site, due to the severity and restrictive environment.

### **Direction for Future Research**

Research to understand effective inclusive practices is just beginning. This research uncovered several avenues for further research and exploration. It would be beneficial to further research effective teaching strategies, effective ways to promote inclusion at an administrative level, and exploration of peer designed ideas for inclusion.

While the training did benefit the participants, content could have been altered to elicit more meaningful conversations. It would be beneficial to understand and compare how content was delivered to peers, and evaluate the effectiveness of different types of trainings. It would be

important to research what types of education is available for administrators in order to plan and perform inclusive activities as a whole school community. While peers were briefly asked to share their ideas for how teachers could promote inclusion more effectively, it could be an area of high interest to further explore these ideas and help students with the development of these activities.

It is evident that there is a need to explore and effectively implement inclusive opportunities in our school and greater communities. For nearly 30 years, there has been improvement and progress around inclusion. This research begins to identify the missing pieces and lack of opportunities for our students. Since when are we content with mediocrity? The standard has been set, there is a need for improvement, it is time to take-action and prioritize inclusion as a benefit to our schools, and education as a whole.

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## **Appendix A**

Participant #:	Pseudonym:	Grade Level:	Gender:	Race/Ethnicity:	Volunteer Hours Per Week:	Length of Participation:
1	Samantha Ubarro	11 <sup>th</sup>	F	White/Caucasian	2.5	6 Weeks
2	Jennifer Hall	Yr. 1, University	F	White/Caucasian	2.5	6 Weeks
3	Sam Johnson	11 <sup>th</sup>	F	White/Caucasian	5	6 Weeks
4	Alyssa Mare	10 <sup>th</sup>	F	Hispanic/Latino	2.5	6 Weeks
5	Dylan Johnson	9 <sup>th</sup>	M	Hispanic/Latino	2.5	1 Week
6	Jaime Gomez	10 <sup>th</sup>	F	Hispanic/Latino	2.5	3 Weeks
7	Lily Herrera	10 <sup>th</sup>	F	White/Caucasian	2.5	1 Week
8	Amy Smith	11 <sup>th</sup>	F	Hispanic/Latino	2.5	1 Week

*Table 1- List of participants*

## **Appendix B**

## Survey Questions

*Please read the statement below. Indicate if you agree or disagree with the statement using the numerical scale (1- strongly disagree, 3- neutral, 5- strongly agree).*

At school, I would welcome a friend who has a disability. 1 2 3 4

I have experience working with individuals with special needs 1 2 3 4

I demonstrate empathy and understanding for individuals with special needs 1 2 3 4

I feel that experience with individuals with special needs will benefit me personally 1 2 3 4

## Appendix C

## Journal Prompts

Week 2: Describe an interaction you had with a student, have your expectations shifted in any working with this population?

Week 3: After interacting with a student without verbal skills, how do you think we can include students without verbal skills in social activities?

Week 4: What have you learned about students at Cypress during your time, so far, at Cypress?

Week 5: What have you learned about yourself after working with students at Cypress?

## **Appendix D**



November 29, 2018

Alexandra Zavaleta  
50 Acacia Avenue  
San Rafael, CA 94901

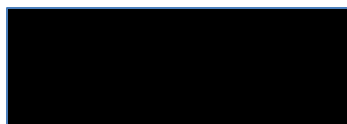
Dear Alexandra,

On behalf of the Dominican University of California Institutional Review Board for the Protection of Human Participants, I am pleased to inform you that your proposal entitled *Social Inclusion and the Benefits for Neurotypical Peers* (IRBPHP application #10733) has been approved.

In your final report or paper please indicate that your project was approved by the IRBPHP and indicate the identification number.

I wish you well in your very interesting research effort.

Sincerely,

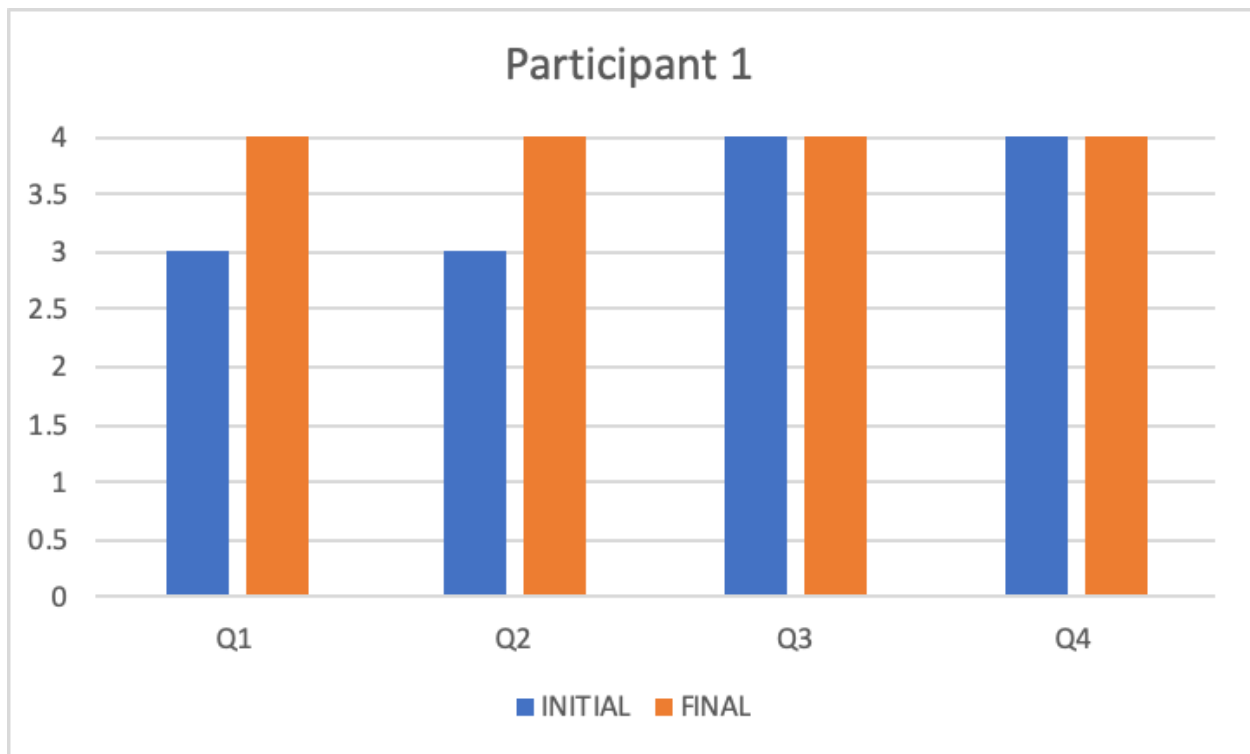


Randall Hall, PhD  
Chair, IRBPHP

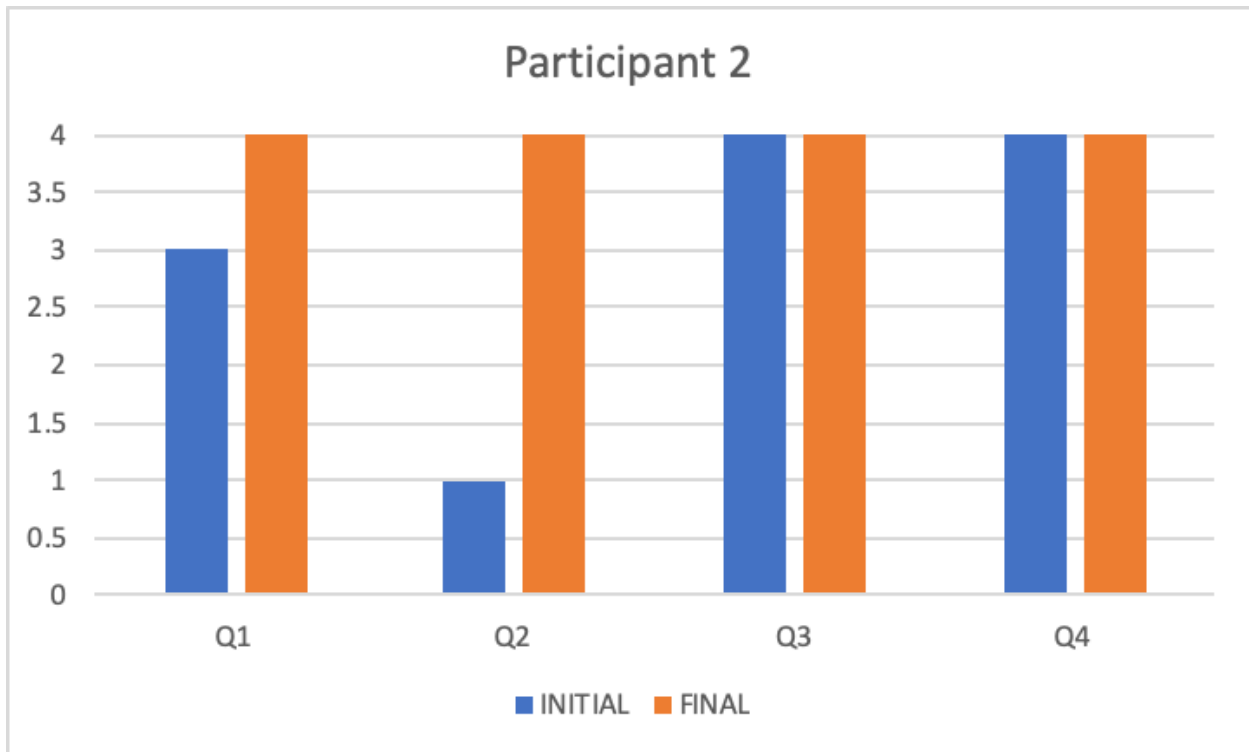
**Institutional Review Board for the Protection of Human Participants**  
Office of Academic Affairs | 50 Acacia Avenue, San Rafael, California 94901-2298 | [www.dominican.edu](http://www.dominican.edu)



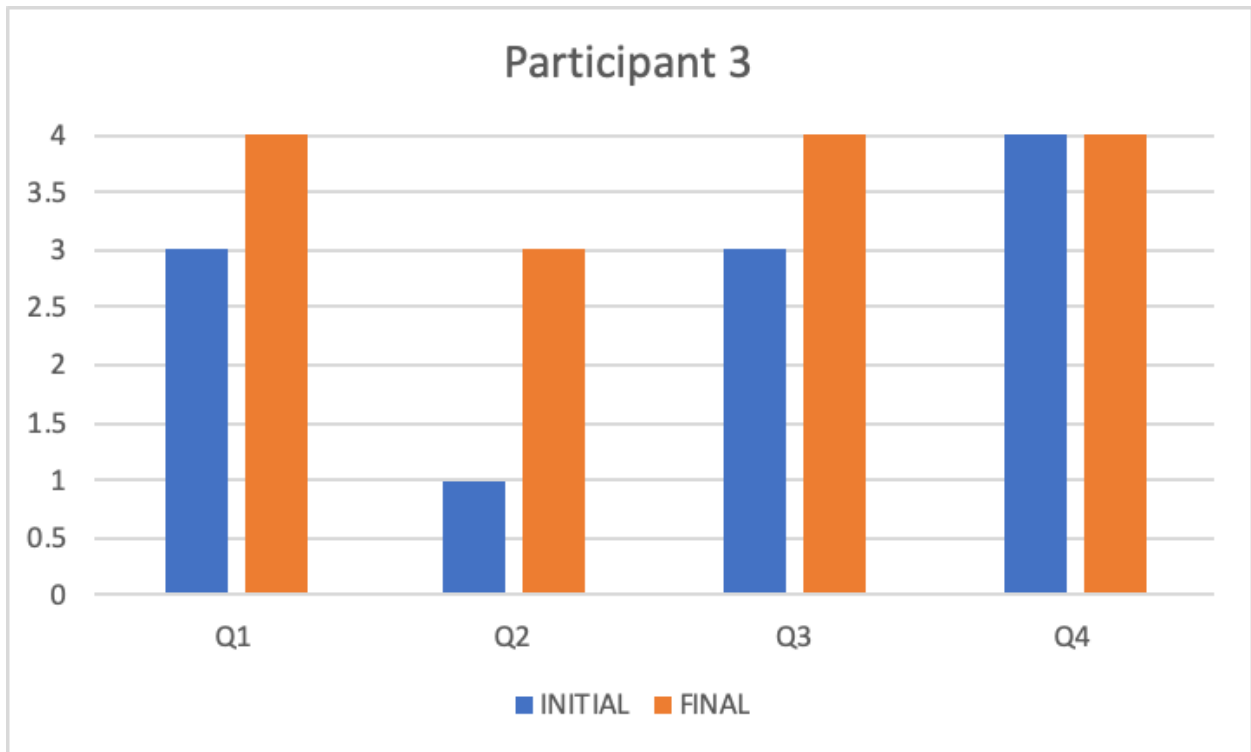
## Appendix E



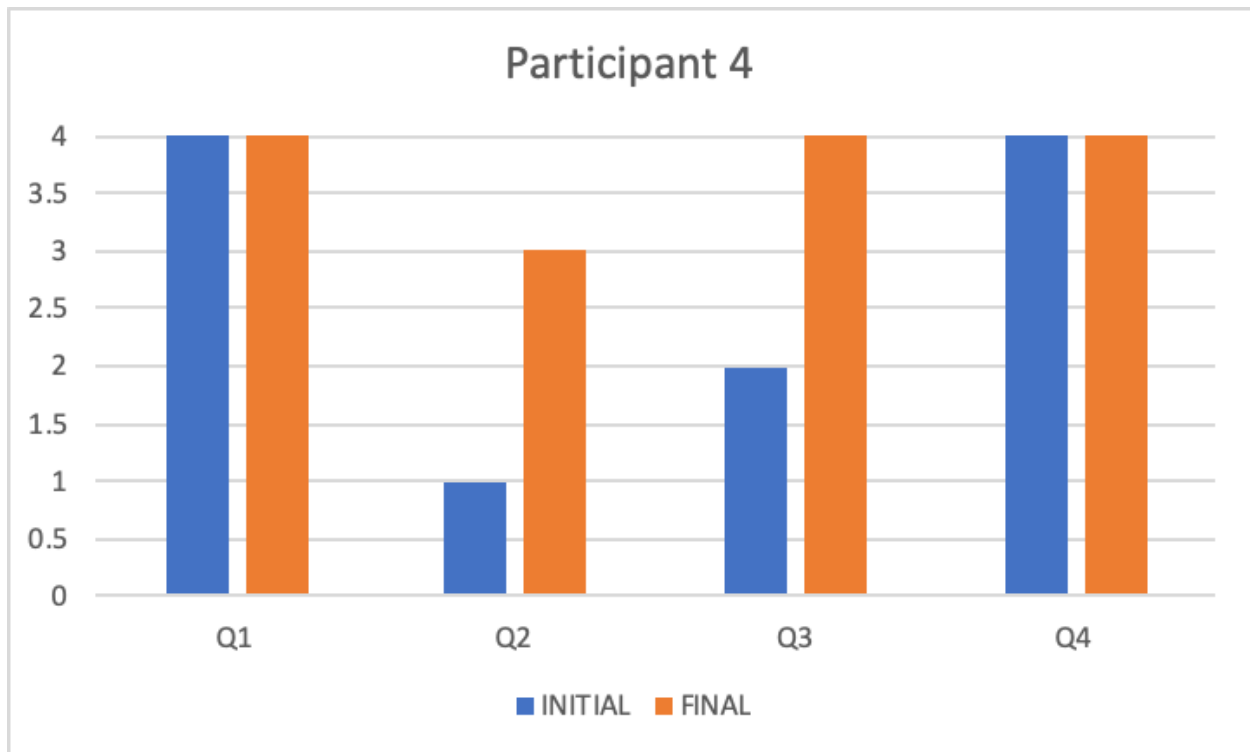
*Figure 1- Comparison bar graph of surveys completed before and after the study, participant 1.*



*Figure 2- Comparison bar graph of surveys completed before and after the study, participant 2.*



*Figure 3- Comparison bar graph of surveys completed before and after the study, participant 3.*



*Figure 4- Comparison bar graph of surveys completed before and after the study, participant 4.*