

---

**| RESEARCH ARTICLE**

**Peer Mentoring in Secondary Physical Education: A Qualitative Investigation of Inclusion Practices for Autistic Students in New Hampshire**

**Dr. Aaron Thompson <sup>1</sup>, Ryker Kimball <sup>2</sup>**

<sup>1</sup> Keene State College (Clinical Assistant Professor), Department of Human Performance and Movement Science

<sup>2</sup> Keene State College (Student Research Assistant), Senior, Bachelor of Science in Physical Education: K-12 Teaching Licensure

**Corresponding Author:** Dr. Aaron Thompson, **E-mail:** [DrAaron.Thompson@keene.edu](mailto:DrAaron.Thompson@keene.edu)

---

**| ABSTRACT**

Many public schools continue to confront substantial barriers to incorporating autistic students into Physical Education (PE). Peer mentoring has emerged as a promising approach to promoting social integration and participation in physical education classes. However, little study has been conducted into PE teachers' perspectives on the implementation and efficacy of peer mentoring programs for autistic children, particularly in New Hampshire. This qualitative study investigated the experiences, views, and challenges that middle and high school PE teachers in New Hampshire public schools confront while employing peer mentorship as an inclusion strategy. Semi-structured interviews were conducted with a select group of twelve PE teachers to learn about peer mentorship, the barriers to effective implementation, and the perceived effects on both autistic kids and their classmates. The findings are expected to provide practical guidance for teacher training, program development, and policy decisions aimed at developing more inclusive PE environments for students on the autism spectrum.

**| KEYWORDS**

Inclusion, peer mentoring, autism, and physical education

**| ARTICLE INFORMATION**

**ACCEPTED:** 01 March 2026

**PUBLISHED:** 15 March 2026

**DOI:** 10.32996/jspes.2026.6.2.1

---

**Introduction**

Physical Education (PE) promotes physical health, social skills, and emotional well-being, all of which contribute to students' overall development. Participation in PE allows children with impairments, especially those on the autistic spectrum, to engage in not only physical activity but also social contact and inclusion within the school community. Inclusive physical education, defined as providing equal PE experiences to students with and without disabilities, is increasingly recognized as a critical component of educational equity and student rights (Block, 2019). However, many educators continue to face a complex and continuous problem when implementing inclusive PE, particularly for kids with autism spectrum disorder (ASD). Autism Spectrum Disorder (ASD) is a neurodevelopmental syndrome marked by difficulty with social communication, limited interests, repetitive activities, and sensory sensitivity (American Psychiatric Association, 2013). These qualities may limit autistic adolescents' engagement in physical education activities, which frequently demand social connection, motor coordination, and sensory modulation. According to research, children with ASD engage in less physical activity than their neurotypical peers, owing to factors such as social anxiety, sensory overload, and motor skill impairments (Stanish, Curtin, Must, & Phillips, 2017). These problems highlight the significance of personalized inclusion techniques in physical education to enhance autistic children's participation and success.

Peer mentoring is a potential technique to promote inclusion in PE, in which typically developing students are matched with peers with disabilities to give social and physical support during activities. Peer mentorship programs take advantage of the school's natural social environment to encourage positive peer connections, which can improve students with disabilities' social inclusion

**Copyright:** © 2026 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (<https://creativecommons.org/licenses/by/4.0/>). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

and physical involvement. According to research in general education settings, peer mentoring can boost students' self-esteem, social skills, and sense of belonging (Karcher, 2005; DuBois et al., 2011). However, there is little evidence on how peer mentoring works in PE settings, particularly for autistic kids in New Hampshire. Physical education teachers play an important role in promoting peer mentoring and building inclusive environments. Their attitudes, beliefs, and instructional techniques have a substantial impact on the success of inclusion initiatives (Goodwin and Watkinson, 2000). Teachers serve as organizers, facilitators, and role models in peer mentoring programs, and their perspectives can provide valuable insights into effective tactics and hurdles to implementation (Block & Weatherford, 2013). Nonetheless, few research have looked at PE teachers' experiences and viewpoints on peer mentorship to benefit autistic children. Understanding these viewpoints is critical for creating effective, long-term inclusion models that reflect real-world classroom dynamics.

This study focuses on middle and high schools in New Hampshire public schools, which has gotten little scholarly attention in this field. Regional considerations such as school resources, policies, and community views can influence how inclusion is implemented, and regional research can yield specific recommendations. New Hampshire, with its varied student population and commitment to inclusive education, provides an ideal location for investigating peer mentorship approaches in PE.

The goal of this qualitative study is to investigate PE teachers' experiences and perceptions of peer mentorship as a tool for increasing the inclusion of autistic students in New Hampshire public middle and high schools. This study uses semi-structured interviews to examine how peer mentoring is implemented, the problems and supports encountered, and the perceived effects on students and the school community. By collecting the voices of PE educators, the project hopes to contribute to the development of evidence-based approaches that improve autistic kids' social and physical participation in PE.

Several major themes emerge from the literature that informs this investigation. First, inclusive PE is acknowledged as an important educational aim that necessitates tailoring training to meet the needs of diverse learners (Block, 2019; Sherrill, 2004). Second, autistic kids encounter unique barriers to PE engagement due to social, motor, and sensory impairments (Kamps and Heitzman-Powell, 2018; Stanish et al., 2017). Third, peer mentorship has the potential to be a supportive intervention that promotes social inclusion and engagement, although more research is needed in PE contexts (Block & Obrusnikova, 2007; Nichols & Mirenda, 2006). Fourth, PE instructors' viewpoints are crucial to understanding the feasibility and effectiveness of peer mentorship, but they are understudied (Goodwin & Watkinson, 2000; Block & Weatherford, 2013). Finally, contextual factors such as area legislation and school resources influence the adoption of inclusive practices (Cosier et al., 2013).

By addressing these interwoven issues, this study seeks to bridge gaps in the literature by offering an in-depth qualitative knowledge of peer mentoring in PE for autistic adolescents as perceived by teachers in New Hampshire public schools. The findings are meant to enlighten educators, administrators, and legislators who want to increase inclusion efforts and maximize the benefits of peer mentorship for all kids.

In conclusion, the study aligns with broader educational initiatives aimed at promoting fairness, social inclusion, and physical well-being among students with disabilities. It also addresses a significant need for practical understanding regarding peer mentorship as a tool for supporting autistic adolescents in the dynamic, socially complex setting of physical education. The study's findings have the potential to improve teacher training, influence program creation, and help to create more inclusive and supportive school communities.

## **Literature Review**

### **I. Introduction to Inclusive Physical Education**

Inclusive physical education (PE) is a critical component of educational equity, striving to ensure that all students, including those with disabilities, have equitable access to quality physical activity options. Block (2019) defines inclusion in PE as adjusting teaching methodologies, activities, and surroundings so that children with disabilities can participate meaningfully alongside their normally developing peers. This is consistent with federal standards such as the Individuals with Disabilities Education Act (IDEA) and the Americans with Disabilities Act (ADA), which require schools to provide free and adequate public education in the least restrictive setting (Block, 2019). Despite these legislative frameworks, practical implementation of inclusion in PE remains a challenge. Sherrill (2004) emphasizes the complexities of providing inclusive PE, stating that teachers must address a variety of physical, cognitive, and social barriers to participation.

Rimmer and Rowland (2008) point out that kids with disabilities are at risk of physical inactivity due to structural barriers and a lack of suitable programmatic support. Their research highlights the urgent need for inclusive physical education programs that not only accommodate but actively engage children with disabilities. This fundamental perspective underlines that inclusion is not just a legal need, but also a crucial step toward eliminating health inequalities and promoting social integration.

## **II. Autism Spectrum Disorder (ASD) and Physical Education**

Autism Spectrum Disorder (ASD) poses distinct challenges and opportunities in the setting of physical education. Students with ASD frequently struggle with social communication, motor abilities, and sensory processing, all of which might limit their engagement in physical activities (Kamps and Heitzman-Powell, 2018). To promote meaningful involvement, adapted PE programs must include tactics that take these qualities into account.

Stanish et al. (2017) examined physical activity patterns among kids with ASD and discovered that these students participate in fewer planned physical activities than their neurotypical counterparts. They detect limitations such as sensory sensitivity, social anxiety, and inadequate motor skills. Pan (2010) shows that physical activity therapies can improve not just motor skills but also cognitive functioning in children with ASD. These findings indicate that PE provides a crucial backdrop for facilitating the holistic development of autistic students, emphasizing the importance of specialized inclusion initiatives.

## **III. Peer Mentoring in Education**

Peer mentorship has been extensively researched as an educational intervention for improving social, academic, and behavioral outcomes among varied student populations. Karcher (2005) describes developmental mentoring as an effective technique that boosts mentees' self-esteem, social skills, and connectivity, emphasizing the potential of peer interactions to foster positive developmental trajectories. DuBois et al. (2011) indicate in their meta-analysis that mentorship programs often produce positive results, especially when they involve high-quality, persistent encounters.

While much mentoring research focuses on academic settings, Crisp and Cruz (2009) provide a critical overview of the mentoring literature, emphasizing peer mentoring's adaptability across age groups and locations. This flexibility demonstrates that peer mentorship can be successfully applied in the PE context to assist kids with unique needs, including those with ASD.

## **IV. Peer Mentoring in Physical Education**

Peer mentorship has received less attention in PE, although growing research highlights its potential as a tool for inclusion. Block and Obrusnikova (2007) examined peer-mediated social interaction tactics in physical education and found that they had a good impact on social inclusion and involvement among students with disabilities. They advocate for more emphasis on peer interaction as a strategy of creating inclusive PE environments.

Nichols and Mirenda (2006) highlight the benefits of peer-mediated therapies for students with ASD in inclusive classrooms, including increased social communication and peer acceptance. Although their work is mostly focused on academic contexts, the ideas of peer mediation can be applied to physical education, where social dynamics are equally important. Shapiro and Martin (2010) investigate athletic identity and peer relationships among kids with physical disabilities, supporting the notion that positive peer interactions improve self-concept and motivation in sport and physical activity settings.

## **V. Teacher Perspectives and Roles**

Teachers have a critical role in promoting peer mentoring and inclusivity in PE. According to Goodwin and Watkinson (2000), students with disabilities frequently believe that teacher attitudes influence their inclusion experiences. Positive instructor attitudes and expectations can increase engagement, while negative or ambivalent views can operate as a barrier.

Block and Weatherford (2013) discover that teacher attitudes have a direct impact on student involvement in adapted physical education, implying that professional development that addresses educator views is crucial for successful inclusion. Roberts and Sherrill (1997) identify elements that influence the teaching of adapted PE, such as teacher preparation, accessible resources, and institutional support, all of which have an impact on the adoption of inclusive practices like peer mentorship.

## **VI. Gaps in the Literature**

Despite increased focus on inclusion and peer mentoring, Kavale and Forness (2000) observe that definitions of inclusion vary greatly, resulting in contradictions in research and practice. Cosier, Causton-Theoharis, and Theoharis (2013) perform a systematic assessment of inclusion research in physical education and uncover major gaps, particularly in teacher views and peer support systems. There is a scarcity of qualitative research that examines extensively into how PE teachers experience and implement peer mentorship practices for kids with ASD.

Furthermore, regional contexts like New Hampshire are understudied, which limits our understanding of how local legislation, resources, and cultures influence inclusive PE practices. Addressing these gaps is critical for establishing realistic, context-sensitive measures to promote inclusion.

### **Purpose of the Current Study:**

Building on these findings, the current study seeks to investigate PE teachers' experiences using peer mentorship to support autistic children in New Hampshire public middle and high schools. This study aims to shed light on implementation tactics, problems, and perceived outcomes for teachers, which may then be used to improve teacher training, program development, and policy decisions. Finally, this study advances our understanding of how peer mentorship might be improved to achieve meaningful inclusion in physical education.

Furthermore, the objective of this study is to answer the following questions:

1. How do PE teachers in New Hampshire public middle and high schools perceive the role of peer mentoring in promoting inclusion of autistic students in their classes?
2. What strategies do PE teachers use to implement peer mentoring programs for autistic students in physical education?

### **Methods:**

**Research Design:** This study used a qualitative research design with semi-structured interviews to investigate physical education (PE) teachers' experiences and perceptions about the use of peer mentoring to support the inclusion of students with autism spectrum disorder (ASD) in middle and high school PE settings. A qualitative approach was chosen to acquire a thorough grasp of teacher perceptions in their actual school settings (Creswell & Poth, 2018). The study was based on an interpretivist paradigm, which emphasizes the subjective meanings that people generate from their lived experiences.

**Participants:** Twelve certified physical education teachers took part in the study. All worked in public middle or high schools in New Hampshire and had previous experience teaching adolescents with ASD. Participants were recruited using purposeful sampling after implementing or observing peer mentoring practices in their inclusive PE sessions. Participants came from various teaching environments (urban, suburban, rural) and grade levels (middle and high school). Seven out of the twelve participants had formal training in adapted physical education (APE).

Table 1:

Summary of Participant Demographics

| Pseudonym | Years Teaching | School Level  | APE Training | Region            |
|-----------|----------------|---------------|--------------|-------------------|
| Alex      | 6              | Middle School | Yes          | Great North Woods |
| Bailey    | 15             | High School   | No           | Lakes             |
| Casey     | 1              | Middle School | Yes          | Seacoast          |
| Devon     | 8              | Middle/High   | No           | White Mountains   |

|         |    |               |     |                        |
|---------|----|---------------|-----|------------------------|
| Erin    | 20 | High School   | Yes | Monadnock              |
| Frankie | 3  | Middle School | No  | Merrimack Valley       |
| Harper  | 12 | High School   | Yes | Dartmouth-Lake Sunapee |
| Jordan  | 5  | Middle School | No  | Seacoast               |
| Kendall | 25 | High School   | Yes | Great North Woods      |
| Logan   | 18 | Middle School | Yes | White Mountains        |
| Morgan  | 7  | High School   | No  | Seacoast               |
| Taylor  | 11 | Middle/High   | Yes | Merrimack Valley       |

**Recruitment:** Participants were found by direct email outreach to school districts and PE instructor professional networks in New Hampshire such as NHAHPERD. The recruitment message stated the study's purpose, eligibility criteria, confidentiality promises, and researcher contact information. Interested individuals contacted the researcher personally and received an informed consent form authorized by the Institutional Review Board (IRB).

**Data Collection:** Data were gathered through semi-structured interviews with 12 certified physical education (PE) teachers from public middle and high schools in New Hampshire. Participants were carefully chosen to guarantee a varied range of educational settings and experiences with peer mentoring and inclusive practices for autistic kids. Each interview lasted 30-60 minutes and was performed in person or via Zoom, depending on the participant's desire. All interviews were recorded and transcribed verbatim using the Transcribe app for theme analysis.

Of the twelve participants, eight agreed to engage in in-person interviews at their respective schools. The remaining four participants chose to participate entirely in online interviews via Zoom and explicitly denied in-person school visits. This difference in participation technique reflects real-world logistical and privacy considerations, and is recognized as a constraint in terms of data triangulation over the entire participant sample.

**Data Analysis:** Interview transcripts were examined using theme analysis, as described by Braun and Clarke (2006). Close reading of transcripts yielded initial codes, which were then grouped into categories using both inductive (data-driven) and deductive (literature-based) procedures. The codes were then examined, improved, and organized into broader themes relevant to the study's research questions.

Coding and organization were made easier using qualitative analysis software (NVivo). To increase trustworthiness, peer debriefing with a qualitative research partner and member checking with participants were used. Member checks entailed delivering a summary of preliminary findings to each participant for assessment and input.

**Trustworthiness and Rigor:**

Lincoln and Guba's (1985) criteria were used to ensure rigor:

- Credibility was addressed through triangulation across participants and member checking.
- Transferability was supported by providing thick descriptions of participant contexts.
- Dependability and confirmability were ensured through an audit trail and reflexive journaling documenting analytic decisions and researcher positionality.

**Ethical Considerations:** The Institutional Review Board (IRB) of the researcher's institution provided ethical approval. All participants volunteered and signed an informed consent form. To protect secrecy, pseudonyms were utilized, and all digital

materials were securely held before being permanently removed once the study was successfully published. Participants were informed that they had the ability to withdraw from the study at any time without consequence.

#### Results/Findings:

The analysis of the interview data indicated four primary themes that characterized PE teachers' perceptions and experiences with peer mentorship for children with autism spectrum disorder (ASD). (1) Peer mentoring as a social bridge, (2) structure and sustainability issues, (3) training and preparedness variability, and (4) reported benefits for both autistic students and peer mentors.

Moreover, the study revealed a stark contrast in the execution of peer mentoring, ranging from informal, "accidental" inclusion to highly structured, elective leadership models. In settings with low administrative support and high staff turnover, such as that described by Participant Casey, mentoring remained an improvised strategy often hindered by disengaged paraprofessionals who opted for "perimeter walks" rather than active facilitation. Conversely, veteran educators like Participant Kendall demonstrated a "selective mentorship" model where peer mentoring is framed as a high-status privilege for eighth-grade students, resulting in a surplus of volunteers (up to 60 applicants for 30 positions) and a rigorous standard of accountability. This structured approach facilitated a "hallway translation" of social bonds, where interactions extended beyond the gymnasium and into the cafeteria and hallways, suggesting that the maturity of the program and the level of administrative integration—such as collaborative pairing with guidance counselors—are the primary determinants of whether peer mentoring achieves deep social integration or remains a surface-level physical activity.

#### Theme 1: Peer Mentoring as a Social Bridge

Throughout the interviews, participants highlighted that peer mentorship was largely used to promote social inclusion, rather than academic or physical skill development. Teachers observed how kids with ASD frequently felt isolated in PE due to communication issues, unfamiliarity with game rules, or nervousness in big group settings. Peer mentors helped to close these social disparities.

"One of my students with autism didn't talk much, but once we started pairing him with a classmate regularly, he actually started smiling and making eye contact. That was a huge breakthrough." —Alex (Middle School, Suburban)

Many teachers mentioned unexpected friendships between mentors and mentees that occasionally stretched beyond the gym. These interactions were viewed as the most significant component of the peer mentorship dynamic, as they made autistic students feel more at ease and engaged in class.

#### Theme 2: Challenges in Structure and Sustainability

While virtually all participants voiced support for peer mentorship, many also stated that the lack of formal organization presented substantial obstacles. Teachers noted difficulty routinely teaching peer mentors, choosing acceptable students, and maintaining the program without more time or staffing.

"It's hard to keep it going when you don't have a system. I've tried it a few different ways, but unless there's time built in or support from the administration, it ends up being informal and inconsistent." —Morgan (High School, Rural)

Several participants expressed worries about the long-term viability of peer mentorship, particularly when it relied on one or two motivated students or when student leadership turnover was considerable.

#### Theme 3: Variability in Training and Preparedness

The level of training obtained by instructors and peer mentors varied significantly. Only seven of the twelve teachers had received formal training in adapted physical education (APE), and few had access to ongoing professional development focused on inclusion or peer mentoring. Most teachers created their own solutions using intuition, trial and error, or online resources.

"I didn't learn anything about autism or peer mentoring in my certification program. What I know now, I learned from my students—just figuring things out as I went." —Bailey (High School, Urban)

Participants expressed a desire for more structured resources, such as peer mentor training templates, successful program models, and access to inclusion specialists.

#### Theme 4: Perceived Benefits for Both Autistic Students and Peer Mentors

Despite the limitations, participants agreed that peer mentoring had a beneficial impact. They found that pairing autistic students with mentors enhanced their communication, involvement, and enjoyment. Teachers also noticed an increase in leadership, empathy, and confidence among peer mentors.

"It's amazing to see the kids step up. Some of them become better students and more compassionate people because they're helping someone else. It changes them." —Harper (High School, Suburban)

Moreover, many teachers viewed peer mentoring not only as an inclusion strategy but also as a form of character education that benefited the entire class culture.

Image 1:

Equipment used by Participant "Kendall" in PE class to play Bocce.



In one New Hampshire public school, a physical education (PE) teacher (Participant "Kendall") told a story about employing peer mentorship during a bocce unit; the set is depicted in the picture. The game's structure and simplicity make it an excellent choice for encouraging inclusive participation. The teacher assigned autistic students to trained peer mentors who provided ongoing support and guidance throughout the unit.

The teacher stated that this strategy dramatically increased communication among autistic kids. One student, who was generally silent during PE, began interacting with their mentor and taking turns during the game using gestures and occasional verbal cues. The social interaction built into the game's rules provided a natural framework for engagement.

Participation has also increased. When autistic students were placed with mentors, the teacher noticed that they actively participated in physical activities after previously avoiding them due to sensory or social issues. According to the PE teacher, "The structured, predictable nature of bocce, combined with the supportive presence of a peer, reduces anxiety and makes the activity more accessible."

Perhaps most importantly, the teacher noted a significant rise in enjoyment. Laughter, grins, and spontaneous displays of enthusiasm were more common. The PE teacher reported that one mentor even mentioned how their partner "lit up" when they completed a successful throw, displaying pride and delight that had not been witnessed in previous PE units.

This story demonstrates how peer mentoring, along with careful activity selections like bocce, may encourage meaningful inclusion, improve social communication, and improve the entire PE experience for autistic children.

**Discussion:**

This study investigated the lived experiences of physical education teachers in New Hampshire public schools who used peer mentorship programs to support autistic children. The findings demonstrate both the potential and the complexities of peer mentoring as an inclusion tool in PE settings.

**Peer Mentoring as Social Inclusion**

According to prior research (Block & Obrusnikova, 2007; Kamps et al., 1998), teachers in this study saw peer mentoring as an important facilitator of social interaction for adolescents with ASD. Unlike typical academic aids, peer mentors served as relational anchors, assisting autistic kids in navigating the social demands of physical education. These findings support the social constructivist view that peers are important facilitators of learning and inclusion (Vygotsky, 1978). For autistic kids, whose social communication challenges frequently lead to exclusion, peer mentorship may be exceptionally successful in promoting belonging since it humanizes support through connection rather than correction.

**Implementation Barriers**

Despite its potential, peer mentorship is still under-structured and under-supported in most PE contexts, as evidenced by this study and others (Haeghele & Sutherland, 2015; Goodwin & Watkinson, 2000). The lack of institutional frameworks and administrative support impedes its consistent implementation. The PE teachers in this study mentioned that they are frequently left to improvise, resulting in variability and perhaps unequal access to mentoring support. In this study, 9 out of the 12 participants explicitly cited a lack of support from key school administrators—including principals, assistant principals, special education directors, and superintendents—as a significant barrier to implementing and sustaining peer mentoring practices. This absence of administrative support not only undermines teacher efforts but also contributes to the marginalization of inclusion strategies within the broader educational agenda.

This study supports the need for systemic peer mentoring models that incorporate mentor selection criteria, training modules, progress monitoring, and integration with Individualized Education Plans (IEP). Without these, teachers must rely on their own initiative and creativity, which, while admirable, may not be scalable or sustainable. Moreover, the physical education (PE) teachers in this study emphasized their commitment to attending Individualized Education Program (IEP) meetings for their students. However, a recurring concern among participants was the reluctance of Special Education Directors to recognize or include Adapted Physical Education (APE) as a related service within the IEP. Multiple teachers reported that administrative emphasis was overwhelmingly placed on core academic areas such as reading, mathematics, and writing, often to the exclusion of physical education. Participants expressed frustration and disappointment with the lack of responsiveness from Special Education Directors, noting that their professional input regarding the physical and social needs of students was frequently disregarded. Several teachers conveyed a strong desire for their voices to be acknowledged and valued in the IEP planning process but reported that their concerns were consistently overlooked or dismissed. This perceived marginalization contributed to a broader sense of professional disenfranchisement and highlighted the need for more collaborative, interdisciplinary approaches to IEP development.

**Role of Professional Development**

The findings also highlight the importance of teacher training. Participants without adapted PE backgrounds reported feeling unprepared to help autistic students or manage peer mentoring programs. This training gap is replicated in national surveys (Hodge et al., 2003), which show that many PE teachers believe they are underprepared for inclusive teaching, especially in Physical Education (PE).

Future professional development should include not only disability awareness but also practical implementation guides for peer mentoring, co-teaching models, and collaboration with special education staff. Teacher preparation programs and licensure standards must evolve to prioritize inclusive practices in all teacher education tracks. Furthermore, it is important to acknowledge that the state of New Hampshire offers an alternative certification and licensure pathway known as site-based learning, formerly referred to as "Alternative 4" (Alt. 4). Over half of the participants in this study reported obtaining their physical education (PE) teaching credentials through this alternative route, facilitated by the New Hampshire Department of Education (NHDOE). While participants generally described the certification process as accessible and relatively straightforward, many expressed concerns regarding its limited emphasis on specialized training in Adapted Physical Education (APE). Specifically, these educators noted a lack of required professional development, targeted coursework, and hands-on preparation related to working with students with disabilities. This perceived gap in training highlights a potential weakness in the alternative licensure pathway and underscores the need for more comprehensive preparation in inclusive teaching practices within PE.

### **Positive Impact on School Culture**

One of the most interesting findings was the apparent benefit of peer mentoring for the mentors themselves. PE teachers reported increases in empathy, leadership, and civic duty, which are consistent with social-emotional learning objectives (CASEL, 2020). These findings imply that peer mentorship is more than just a resource for kids with disabilities; it is a transformative activity that helps entire classrooms.

This is consistent with inclusive education theory, which sees inclusion not as a benefit to students with disabilities, but as a moral and pedagogical duty that improves learning for all. When used wisely, peer mentorship can be used to promote an environment of empathy, mutual respect, and diversity in physical education settings.

### **Conclusion**

This qualitative study examined the experiences and perceptions of 12 physical education (PE) teachers in New Hampshire public middle and high schools who used peer mentorship as a way to assist the inclusion of children with autism spectrum disorder. The findings show that peer mentoring has a significant potential to promote social inclusion, strengthen peer connections, and enrich the learning environment for all students. PE teachers saw peer mentoring as a strong tool for increasing autistic kids' involvement and participation in physical education, as well as supporting the development of empathy, leadership, and community among peer mentors.

However, the study also highlighted significant obstacles in implementation, sustainability, and instructor preparedness. The lack of administrative support, teacher training, organized frameworks, time, and resources hampered the consistent and equal implementation of peer mentoring across school settings. These findings highlight the need of focused training, institutional support, and inclusive education policies that enable PE teachers to effectively implement and sustain peer mentoring programs.

This study adds to the growing literature on inclusive physical education by providing insight into teacher perspectives, addressing a regional research need in New Hampshire, and advocating for practical and scalable peer mentoring initiatives. It demonstrates that, when instructors are provided with administrative support, training and resources, peer mentorship can be a transforming tool for inclusion in PE.

### **Implications for Practice:**

1. **Structured Peer Mentoring Programs:** Schools should develop formalized peer mentoring programs in PE with clearly defined roles, training materials, and ongoing monitoring to ensure consistency and effectiveness.
2. **Professional Development:** PE teachers need ongoing training in adapted physical education, autism-specific supports, and peer mentoring strategies. Training should be accessible through workshops, webinars, and in-school coaching.
3. **Collaboration Across Disciplines:** Effective inclusion depends on collaboration between PE teachers, special education staff, administrators, and families. Schools should establish systems that encourage cross-disciplinary planning and communication.

4. Time and Administrative Support: Teachers need designated time to train peer mentors and adapt lesson plans for inclusive settings. Administrative support is crucial in embedding inclusion into the school's educational priorities.
5. Inclusive Culture Building: Beyond logistics, schools must foster a culture of empathy, acceptance, and inclusion. Peer mentoring should be integrated into broader social-emotional learning (SEL) and diversity, equity, and inclusion (DEI) initiatives.

**Limitations:**

As with all qualitative research, this study contains constraints that may impact the transferability and scope of its findings. One major drawback is related to the data collection procedure. While 12 physical education (PE) teachers from public middle and high schools in New Hampshire participated in semi-structured interviews, only eight of them were held in person at the participants' schools. Without observational data from all participants, the full complexity of classroom dynamics, notably peer mentoring behaviors and inclusive practices, may not have been captured uniformly across the sample.

Furthermore, this study only included PE teachers from one state in the United States, New Hampshire, whose demographics, school resources, and educational regulations may differ from those of other locations. As a result, conclusions should be interpreted with caution when applied to other geographic or institutional contexts. Despite these limitations, the consistency of emerging themes among interview-only adds to the trustworthiness of the findings.

Future studies should look into measures for assuring comprehensive data triangulation among all participants, such as remote video observation or alternative contextual data collection methods when in-person visits are not possible.

**Recommendations for Future Research:**

1. Student Perspectives: Future studies should explore the experiences of both peer mentors and autistic mentees to better understand the interpersonal dynamics and developmental outcomes from multiple viewpoints.
2. Longitudinal Research: Research examining the long-term impact of peer mentoring on student outcomes (academic, social, and emotional) would provide valuable evidence for the sustainability and effectiveness of these programs.
3. Comparative Studies: Studies comparing peer mentoring models across different states, school sizes, and demographics could identify best practices and potential scalability.
4. Intervention-Based Research: Experimental or quasi-experimental studies that test structured peer mentoring interventions could provide more robust evidence of impact and inform policy and funding decisions.
5. Technology Integration: Exploring how digital tools or assistive technology can support peer mentoring relationships in PE, especially for nonverbal or minimally verbal autistic students, is a promising future direction.

**Appendix A: Interview Protocol**

Semi-Structured Interview Questions for PE Teachers

Section 1: Background and Experience

1. Can you describe your current teaching role and school setting?
2. How long have you been teaching physical education?
3. What experience or training do you have in adapted or inclusive PE?

Section 2: Peer Mentoring in PE

4. How do you define or understand peer mentoring in the context of your PE classes?

5. Can you describe any peer mentoring programs or strategies you've used with students with ASD?
6. What types of support (e.g., training, guidelines, resources) were provided to mentors?

#### Section 3: Perceived Outcomes

7. What impacts have you observed peer mentoring having on autistic students in your classes?
8. How do you think peer mentoring affects the students serving as mentors?
9. Have you seen changes in classroom climate or peer relationships as a result of peer mentoring?

#### Section 4: Challenges and Support Needs

10. What challenges have you encountered in implementing peer mentoring?
11. What types of support (e.g., administrative, time, training) would help you implement peer mentoring more effectively?
12. Is there anything you would change or improve in how peer mentoring is done in your program?

#### Section 5: Final Reflections

13. What advice would you give to other PE teachers who are interested in using peer mentoring for inclusion?
14. Is there anything else you'd like to share about your experiences?

#### **Abbreviations and Definitions:**

ASD: Autism Spectrum Disorder

PE: Physical Education

APE: Adapted Physical Education

Peer Mentoring: Supportive partnerships between students to promote inclusion

Thematic Analysis: A qualitative method for identifying and interpreting patterns in data

#### **Acknowledgement:**

We would like to express my sincere gratitude to the twelve physical education teachers who generously shared their time, insights, and experiences for this study. Your dedication to inclusive education and your commitment to fostering supportive environments for all students is truly inspiring.

#### **References**

- [1]. Anderson, A., & Meints, K. (2016). Brief report: The use of assistive technology to support peer interactions in inclusive physical education. *Journal of Autism and Developmental Disorders*, 46(10), 3493–3498. <https://doi.org/10.1007/s10803-016-2883-y>
- [2]. Block, M. E., Hutzler, Y., Barak, S., & Klavina, A. (2013). Inclusion in physical education: A review of the literature from 1995–2013. *European Journal of Adapted Physical Activity*, 6(1), 7–27.
- [3]. Block, M. E., & Obrusnikova, I. (2007). Inclusion in physical education: A review of the literature from 1995–2005. *Adapted Physical Activity Quarterly*, 24(2), 103–124. <https://doi.org/10.1123/apaq.24.2.103>
- [4]. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

- [5]. Carter, E. W., Asmus, J., Moss, C. K., Amirault, K. A., Biggs, E. E., & Bolt, D. M. (2016). Randomized evaluation of peer support arrangements to support the inclusion of high school students with severe disabilities. *Exceptional Children*, 82(2), 209–233. <https://doi.org/10.1177/0014402915585483>
- [6]. CASEL (Collaborative for Academic, Social, and Emotional Learning). (2020). What is SEL? <https://casel.org/what-is-sel/>
- [7]. Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- [8]. DuBois, D. L., Portillo, N., Rhodes, J. E., Silverthorn, N., & Valentine, J. C. (2011). How effective are mentoring programs for youth? A systematic assessment of the evidence. *Psychological Science in the Public Interest*, 12(2), 57–91. <https://doi.org/10.1177/1529100611414806>
- [9]. Goodwin, D. L., & Watkinson, E. J. (2000). Inclusive physical education from the perspective of students with physical disabilities. *Adapted Physical Activity Quarterly*, 17(2), 144–160. <https://doi.org/10.1123/apaq.17.2.144>
- [10]. Haegele, J. A., & Sutherland, S. (2015). Perspectives of students with disabilities toward physical education: A qualitative inquiry review. *Quest*, 67(3), 255–273. <https://doi.org/10.1080/00336297.2015.1051238>
- [11]. Hammond, L., Ingalls, L., & Trussell, R. (2008). Inclusion of children with autism spectrum disorders: Teachers' attitudes and perceptions. *Focus on Autism and Other Developmental Disabilities*, 23(2), 75–85. <https://doi.org/10.1177/1088357608314371>
- [12]. Hodge, S. R., Murata, N. M., & Kozub, F. M. (2003). Physical education majors' attitudes toward teaching students with disabilities. *Physical Educator*, 60(3), 134–146.
- [13]. Klavina, A., & Block, M. E. (2008). The effect of peer tutoring on interaction behaviors in inclusive physical education. *Adapted Physical Activity Quarterly*, 25(2), 132–158. <https://doi.org/10.1123/apaq.25.2.132>
- [14]. Kamps, D., Barbetta, P. M., Leonard, B. R., & Delquadri, J. (1994). Classwide peer tutoring: An integration strategy to improve reading skills and promote peer interactions among students with autism and general education peers. *Journal of Applied Behavior Analysis*, 27(1), 49–61. <https://doi.org/10.1901/jaba.1994.27-49>
- [15]. Lieberman, L. J., Houston-Wilson, C., & Kozub, F. M. (2002). Perceived barriers to including students with visual impairments in general physical education. *Adapted Physical Activity Quarterly*, 19(3), 364–377. <https://doi.org/10.1123/apaq.19.3.364>
- [16]. Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.
- [17]. National Center for Education Statistics. (2024). Urban-centric locale categories. <https://nces.ed.gov/surveys/urbaned/definitions.asp>
- [18]. Sharma, S., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Educational Needs*, 12(1), 12–21. <https://doi.org/10.1111/j.1471-3802.2011.01200.x>
- [19]. Slee, R. (2011). *The irregular school: Exclusion, schooling and inclusive education*. Routledge.
- [20]. Spencer-Cavaliere, N., & Watkinson, E. J. (2010). Inclusion understood from the perspectives of children with disability. *Adapted Physical Activity Quarterly*, 27(4), 275–293. <https://doi.org/10.1123/apaq.27.4.275>
- [21]. University of New Hampshire. (2024). Mammals adapt to increased exurbanization in New Hampshire. <https://www.unh.edu/unhtoday/increased-exurbanization-new-hampshire>
- [22]. U.S. Census Bureau. (2024). Redefining rural. <https://www.census.gov/redefining-rural.html>
- [23]. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.