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SCRAPBOOK INTERVIEWING: EXPLORING CHILDREN WITH AUTISM SPECTRUM
DISORDER'S EXPERIENCES IN PHYSICAL EDUCATION

by

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ABSTRACT

SCRAPBOOK INTERVIEWING: EXPLORING STUDENTS WITH AUTISM SPECTRUM DISORDER'S EXPERIENCES IN PHYSICAL EDUCATION

Amanda Yessick
Old Dominion University, 2018
Director: Dr. Justin A. Haegele

The purpose of this study was to explore the meaning that students with autism spectrum disorder (ASD) ascribed to their experiences in self-contained physical education (PE) classes. Four participants with a primary diagnosis of ASD who attended a self-contained PE class in a separate public day school were purposively selected for this study. Data were collected through semi-structured interviews, observational field notes, and reflective notes. Methodological triangulation, researcher reflexivity, and peer debriefing were utilized to support trustworthiness. After interview transcription, thematic development was conducted using a three-step analytic process informed by the purpose and research approach adopted in this study. Overall, the participants' experiences in PE were positive and meaningful, and three interrelated themes emerged from the data. The first theme, "They care about my feelings": Teachers' attitudes in PE, highlighted participants' descriptions of why their physical educators played a critical role in shaping their experiences. The second theme, "My friends make it more meaningful": Importance of positive peer interactions, revealed the significance the participants ascribed to participating in PE with their peers. Finally, the third theme "Oh, but the noise": Structural and sensory considerations, describe accommodations within PE the participants attributed to a more enjoyable and successful PE experience. Additionally, sensory sensitivities described hyper- and hypo-sensitive sensory stimulations the participants experienced in PE. The themes highlight several contributing factors influencing participants' positive PE experiences which should be considered by PE teachers to enhance the quality of education for students with ASD.

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CHAPTER I: INTRODUCTION

Background

Benefits associated with being physically active have been well-documented and are universal for all individuals. Chronic, noncommunicable diseases are currently responsible for more than half of all deaths in the United States (Booth, Roberts, & Laye, 2012; Cardinal, Kang, Farnsworth II, & Welk, 2015). To reduce the risk of many of these chronic diseases, regular participation in physical activity is recommended (Centers for Disease Control & Prevention [CDC], 2014). Because engaging in a physically active lifestyle is important for disease prevention, the U.S. Department of Health and Human Services (USDHHS, 2008) recommends that children and adolescents between the age of six and 17 years engage in one or more hours of physical activity each day.

School-aged children with disabilities are less likely to engage in daily physical activity than children without disabilities (Stanish et al., 2015). Due to inadequate participation in physical activities, individuals with disabilities are at higher risk for developing health-related conditions (USDHHS, 2008). Specifically, research has found that children and adolescents with autism spectrum disorder (ASD) tend to engage in less physical activity (Memari et al., 2013) and more sedentary behaviors (Must et al., 2014) than peers without disabilities. Because children with ASD tend to be inactive, they are also more likely to be overweight and obese than age-matched peers without disabilities (Curtin, Anderson, Must, & Bandini, 2010; Egan, Dreyer, Odar, Beckwith, & Garrison, 2013; Zuckerman, Hill, Guion, Voltolina, & Fombonne, 2014). For example, Curtin and colleagues (2010) found that the prevalence of obesity in children with ASD was 30.4% compared to 23.6% of children without ASD.

The most likely environment for youth with disabilities, including those with ASD, to safely and effectively learn about and participate in physical activity is during well-designed, school-based physical education (PE) classes (Haegele, Zhu, Lee, & Lieberman, 2016). Although sometimes challenging, PE must be made available to children with disabilities as mandated by the Individuals with Disabilities Education Improvement Act (IDEIA; 2004). Students with ASD, in particular, have identified difficulties they face during integrated PE experiences (Healy, Msetfi, & Gallagher, 2013). Healy and colleagues (2013) found that students with ASD in integrated PE often had negative experiences attributed to sensory challenges, bullying, and exclusion. Therefore, self-contained PE for this population may prove to be more effective (Blagrove, 2017; Healy et al., 2013). Blagrove's (2017) study focused on a self-contained PE class within a public school and resulted in generally positive experiences from the participants. However, participants still faced some challenges within those settings, such as negative peer interactions and sensory issues. The current study was unique in that the participants were enrolled in a separate public day program where they received self-contained PE in an environment specifically constructed for students with ASD. The purpose of this study was to explore the meaning that students with ASD ascribed to their experiences in self-contained PE classes. Understanding the feelings and responses of this specific population can impact how and what they are taught in PE.

Research Question

- What meaning do students with autism spectrum disorder ascribe to their PE experiences?

Definition of Terms

Autism Spectrum Disorder. A neuro-developmental disability that can cause significant social, communication and behavioral challenges. People with ASD may communicate, interact, behave, and learn in ways that are different from most other people. The learning, thinking, and problem-solving abilities of people with ASD can range from gifted to severely challenged (CDC, 2016)

Individuals with Disabilities Education Improvement Act (IDEIA). A federal law ensuring services to children with disabilities throughout the nation. IDEIA governs how states and public agencies provide early intervention, special education and related services to more than 6.5 million eligible infants, toddlers, children and youth with disabilities (IDEIA, 2004).

Least Restrictive Environment. Whenever possible and appropriate, students with disabilities should attend general education classes, including PE, with their non-disabled peers.

Self-contained PE. A PE class in which all students have disabilities.

Students with Disabilities. A student with disabilities is defined as a child having autism spectrum disorder, deaf-blindness, deafness or other hearing impairment, emotional disturbance, intellectual disability, multiple disabilities, orthopedic impairment, learning disability, speech or language impairment, traumatic brain injury, blindness or other visual impairment, or other health impairment that require special education and related services (U.S. Department of Education, 2016).

Limitations

1. Some may argue that children with ASD have difficulties expressing feelings sufficiently enough to be able to complete a phenomenological study, however, studies from the perspectives of children with ASD were successfully completed in

the past (Blagrove, 2017; Dewinter, Parys, Vermeiren, & Nieuwenhuizen, 2017; Healy et al., 2013).

2. The participants in this study attended physical education twice a week which may have limited the amount of data collected.
3. The participants may display a characteristic known as echolalia. Echolalia is the repetition, or echoing, of verbal words or utterances made by another person (Grenier, 2014). This characteristic may influence the participants responses during the interview due to common words or phrase used by the PE teacher concerning certain activities or equipment during class.

Delimitations

1. The participants being selected for the study were from a self-contained PE setting within a separate public day school. Therefore, these findings may not be generalizable to children with ASD in an integrated setting.
2. The participants selected for this study were capable of verbal communication and may not represent all children with ASD.
3. Excluded from this study were students who communicated exclusively with an assistive device. Assisted communication does not adhere to the data collection method and therefore outside the scope of this study.

Significance of the Study

According to the Autism and Developmental Disabilities Monitoring (ADDM) Network (2014), the prevalence of ASD has grown rapidly in the United States from one in 150 in 2002 to one in 68 in 2010. Unfortunately, very little literature exists researching the personal perspectives of children with ASD in their PE settings. Exploring their experiences and whether

or not these experiences can be attributed to the meaningfulness of PE can be a significant contribution to the field of adapted physical education (APE). It can be used to educate physical educators and similar professionals about how their student(s) with ASD feel about a specific lesson, activity, or PE in general.

CHAPTER II: REVIEW OF LITERATURE

The purpose of this chapter was to present a review of the significant literature pertaining to research in the following areas: ASD, importance of physical activity for youth with ASD, PE experiences for children with ASD, and listening to the voices of children with disabilities in PE.

Autism Spectrum Disorder

The American Psychiatric Association (APA; 2013) defines ASD as persistent deficits in social communication and social interaction across multiple contexts and restricted, repetitive patterns of behavior, interests, or activities. According to the Center for Disease Control and Prevention (CDC, 2014), approximately one in 68 children are diagnosed with ASD. That ratio has almost doubled since 2000 (CDC, 2014), meaning more students with ASD are being educated within public schools each year (National Center for Educational Statistics [NCES], 2014). Specifically, from 2000 to 2014, the number of students with ASD being served under the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) increased from 93 out of 6,296 to 538 out of 6,464 (NCES, 2014). Thus, more teachers are interacting with students with ASD within their PE settings than ever before. It is imperative that teachers understand the characteristics related to ASD, and how those characteristics impact the experiences of students with ASD within PE. Characteristics often associated with ASD may include, but are not limited to, difficulties understanding social cues, repetitive movements, lack of eye contact, trouble adapting to changes in routine, problems engaging in sharing/turn-taking, sensory overload, sensory aversion, or over-focused sensory inputs (APA, 2013).

Importance of Physical Activity for Youth with Autism Spectrum Disorder

Benefits associated with being physically active have been well-documented and are equally important for all children. Specifically, the benefits of physical activity for children

include weight control, strengthening of muscles and bones, improved ability to complete daily activities, and reduced risk of developing non-communicable diseases such as cardiovascular disease, type 2 diabetes, and some cancers (CDC, 2015). Because of the benefits associated with engaging in a physically active lifestyle, the USDHHS developed guidelines for American children and adolescents to follow. The Physical Activity Guidelines for Americans, issued by the USDHHS (2008), recommended that children and adolescents aged six-17 years should engage in one hour or more of physical activity each day. However, according to the CDC (2013), only 27.1% of adolescents in the United States achieve one hour or more of moderate- and/or vigorous-intensity physical activity daily. Studies have found that children and youth with ASD are even less active than their typically developing peers, which puts them at a higher risk of being overweight and obese (Curtin, Anderson, Must, & Bandini, 2010; Egan, Dreyer, Odar, Beckwith, & Garrison, 2013).

Research suggests the challenges that youth with ASD face (e.g. poor eye contact, difficulty understanding social cues, troubles with sharing and turn taking) may negatively impact their participation physical activities (Pan & Frey, 2006) and motor skill development (Lloyd, MacDonald, & Lord, 2011). These challenges could be linked to a number of factors including frequent engagement in sedentary behaviors (e.g., videos games and television; Laurson, Lee, Gentile, Walsh, & Eisenmann, 2014), avoiding activities due to increased social and/or sensory overload, and being prescribed certain medications that cause weight gain (Curtin, Jojic, & Bandini, 2014). Fortunately, studies examining exercise interventions for participants with ASD have seen decreases in stereotypic tendencies, aggression, off-task behavior, and elopement (Lang et al., 2010; Oriel, George, Peckus, & Semon, 2011; Petrus et al., 2008). Presumably, by engaging in regular physical activity, children with ASD may display an

increase in the occurrence of on-task behavior and decreased stereotypic tendencies.

Additionally, physical activity has been shown to improve the amount of correct responses in the classroom and, sequentially enhance academic performance (Nicholson, Kehle, Bray, & Heest, 2011; Oriel et al., 2011).

Physical Education Experiences for Youth with Autism Spectrum Disorder

Research focusing on students with ASD has typically explored the perspectives of the stakeholders, such as PE teachers (Obrusnikova & Dillon, 2011) and parents (Lee, Haegele, & Chang, 2016). This line of inquiry has demonstrated several barriers that may be found within PE for students with ASD. For example, Obrusnikova and Dillon (2011) sought to understand the challenges PE teachers face when educating students with ASD in their respective PE classes. Forty-three in-service teachers (29 females, and 14 males) from across the United States completed two online questionnaires. A background questionnaire was administered to obtain demographic information, teaching education and experience, and current placement setting (i.e. integrated PE, self-contained PE, or a combination of the two). Additionally, an elicitation questionnaire, consisting of a narrative, elicitation questions, and elicitation definitions, was given to inform the researchers about participants' perceptions of challenges that occurred when teaching students with ASD in their classes. This study revealed a number of teaching challenges associated with working with students with ASD, including "inattentive and hyperactive behaviors, social impairment, inability to understand and perform physical education tasks, impairment in emotional regulation, narrow interest, and inflexible adherence to routines and structure" (Obrusnikova & Dillon, 2011, p. 126). Participants stated that competitive and cooperative activities made these challenges occur more often, because similar students "(a) perceived or had their performance compared with that of their classmates and (b) had to interact

with others” (Obrusnikova & Dillon, 2011, p. 127). The teachers also reported challenges faced in relation to the classmates’ behaviors as well the amount of support available to the student.

Similarly, parents have been a source of research evaluating their child’s PE experiences. For example, Lee, Haegele, and Chang (2016) conducted a study that examined the satisfaction of parents of children with ASD toward PE and variables in relation to their satisfaction. Thirty-four parents completed an online survey that included 22 items separated into three sections: The Parent Satisfaction Toward Adapted Physical Education Teachers (PPTAPET) survey (Columna, Cook, Foley, & Baily, 2014), parent demographics, and child demographics. The PPTAPET survey explores satisfaction toward communication, rapport, and qualifications of PE teachers. The survey revealed 17 parents (50%) were strongly satisfied or satisfied with the communication of the PE teacher and 18 parents (52%) were strongly satisfied or satisfied with the rapport of the PE teacher. However, only 12 parents (35%) expressed satisfaction with the qualifications of said teachers. Clearly, the qualifications of teachers can significantly impact the students’ experiences, especially those with ASD. Additionally, the parents’ satisfaction increased when the students were educated in a more individualized setting, supporting the notion that an integrated setting may not always be the LRE for students with ASD.

Because the rate of diagnosis of ASD is continuing to increase (CDC, 2014) there is a higher possibility that PE teachers will interact with this population within their classes. Therefore, understanding the wants and needs of the students with ASD can help identify strategies to improve instruction and, in turn, those experiences. However, only two studies, to the knowledge of the author, were located that explored students with ASD’s experiences within PE. Healy and colleagues (2013) interviewed twelve students (eleven males; one female) with ASD concerning their experiences in an integrated PE setting without supports (e.g. a

paraprofessional or teaching assistant). The participants revealed personal difficulties that were then categorized into three themes: individual challenges, peer interactions, and exclusion. Individual challenges expressed by the participants included physical ability levels (n=10), sensory issues (n=3), and fear of injury (n=4). Participants also stated relationships with peers (n=11), initiation of friendships (n=2), negative peer interactions (n=5), and negative social comparison (n=4) played a key role within the peer interactions theme. Participants voiced their experiences of exclusion through the teacher not allowing them to participate (n=2), lower ability levels (n=5), or upon personal request (n=4). Healy and colleagues' (2013) research supports previous articles (Breslin & Liu, 2015; Lee & Haegele, 2016) regarding the challenges students with ASD encounter in PE.

Blagrave (2017) conducted a study in a self-contained PE setting within an integrated public school which included teachers as well as paraprofessionals. Data were collected from participants (N=10; nine males and one female) through drawings, observations in their PE settings, and interviews. The first theme, enjoyment in participation, revealed that all participants (n=10) reported having positive experiences and spoke positively about their teachers and paraprofessionals. Many participants (n=6) expressed "feeling good" and "having fun" during PE as well as smiling when speaking about their APE teacher. The second theme, influence of peers and family members, disclosed positive and negative influences from peers. One participant enjoyed "playing basketball" with his/her peers. However, two other participants expressed negative peer interactions saying they had "no friends" and wished teammates "will not always be taunting." Sensory experience in PE, the third theme, described the participants' positive and negative sensory experiences. Many participants (n=7) explained that they "got too hot" and

“sweaty” in PE and “wished it were cooler.” Conversely, one participant stated that he liked how PE “made him feel heavy,” describing it as a positive feeling but was unable to explain why.

Listening to the Voices of Youth with Disabilities in PE

It has been stated that there is a “need for ‘insider accounts’ by individuals with ASD to increase understanding and drive positive change in schools” (Humphrey & Lewis, 2008, p. 42). Research has revealed that PE experiences for children with disabilities in integrated settings typically result in negative perceptions of physical education and physical activity (Bredahl, 2013; Byrnes & Rickards, 2011; Fitzgerald, 2005; Haegle & Sutherland, 2015), including for youth with ASD (Healy et al., 2013). Healy and colleagues (2013) stated “there is a need for research that recognizes PE as an individualized experience and transforms the position of students with disabilities from passive to active experts on their own lives” (p. 222). Understanding what participants with ASD experience in their PE setting is an important and missing piece of ASD research. By listening to the voices of students with disabilities, researchers and teachers alike can gain a better understanding of how they experience PE and help identify strategies to improve instruction and, in turn, those experiences (Coates, 2011). Studies have examined personal experiences of individuals with disabilities in their respective PE settings by utilizing various interview strategies to elicit responses, and those students have expressed negative PE experiences attributed to “not being listened to” (Bredahl, 2013).

Individuals with ASD have been characterized as having difficulties communicating personal feelings and emotions (Kana, Libero, Hu, Deshpande, & Colburn, 2014; Loukusa, Mäkinen, Kuusikko-Gauffin, Ebeling, & Moilanen, 2014; Moran et al., 2011). However, current literature has been successful in eliciting meaningful responses from participants with ASD (Ashburner, Bennett, Rodger, & Ziviani, 2013; Bauminger, Shulman, & Agam, 2003; Blagrove

2017; Dewinter et al., 2017; Healy et al., 2013; Humphrey & Lewis, 2008; Jones, Zahl, & Huws, 2001; Jones, Quigney, & Huws, 2003; Obrusnikova & Cavalier, 2010; Preece & Jordan, 2010). Existing research has utilized various interviewing strategies to elicit meaningful responses from the participants with ASD (e.g. semi-structured interviews, drawings, and photos). In addition, published narratives of adults with ASD have consistently shown that this population is able to express their experiences clearly (Fleischmann 2012; Grandin, 2011; Higashida, 2013; Prince-Hughes, 2004; Robison, 2008; Tammet, 2007; Williams, 2007). Youth with ASD have also shown to be capable of communicating their perceptions of their lived experiences in a meaningful way regarding a variety of topics, including the experiences of being bullied (Humphrey & Symes, 2010), social challenges and supports (Müller, Schuler, & Yates, 2008), sexuality (Dewinter et al., 2017), and the meaning of inclusion (Humphrey & Lewis, 2008).

Gaining insight into individuals with ASD's experiences within PE can help create an understanding of direct challenges, preferences, motivations, and aversions. Research from the experiences of students with ASD in PE (Healy et al., 2013) has revealed specific concerns expressed by the participants themselves (e.g. fear of injury, sensory issues, and exclusion). Students with ASD are experts on their personal experiences, and it is the job of the researcher to understand those experiences and facilitate physical educators' awareness and understanding of teaching this population in PE. However, a lack of research exists examining the embodied experiences of students with ASD in their PE settings. Therefore, the purpose of this study was to explore the meaning that students with ASD ascribed to their experiences in self-contained PE classes.

Summary

Chapter II was a review of literature significant to this study. The literature selected for this chapter included explaining the importance of physical activity for youth with ASD. A brief description of ASD was outlined along with the characteristics identified within the spectrum. Additionally, the benefits of physical activity and motor skill development specific to this population was explained. It was comprised of peer-reviewed articles that focused on the physical education and physical activity of children with disabilities and why it is important to listen to their voices specific to PE settings. Finally, the findings of literature interviewing students with ASD regarding their PE experiences (Healy et al., 2013) were discussed.

CHAPTER III: METHODOLOGY

The purpose of Chapter III, Methodology, was to provide an outline of the procedures and instruments that were used in the data collection and analysis process. The following sub-sections describe the research design, the research question, procedures, research setting, participants, data collection, data analysis, and the summary.

Research Design

This study used a qualitative research design. Qualitative research places emphasis on “understanding through looking closely at people’s words, actions and records” (Maykut & Moorehouse, 1994, p.29). Maykut and Moorehouse (1994) explained that to understand the world under investigation, people’s words and actions are used by qualitative researchers. This research requires an empathic perception to reproduce the “feeling, motives, and thoughts behind the actions of others” (Maykut & Moorehouse, 1994, p. 30). They clarify by saying,

Words are the way that most people come to understand their situations. We create our world with words. We explain ourselves with words. We defend and hide ourselves with words. The task of the qualitative researcher is to find patterns within those words (and actions) and to present those patterns for others to inspect while at the same time staying as close to the construction of the world as the participants originally experienced it.

(Maykut & Moorehouse, 1994, p. 30)

Carrington and Graham (2001) argued that “more qualitative research with ASD was necessary to discover more about the lived experience on individuals with ASD from their own perspective” (p. 47). Within the qualitative research paradigm, a phenomenological approach was used in this study. This approach is designed to explore the embodied experiences of individuals during major life events (Smith, Flowers, & Larkin, 2012). According to Leedy and

Ormrod (2019), looking at multiple perspectives on the same situation allows the researcher to “make some assertions regarding what something is like from an insider’s perspective.”

Expressing emotions and feelings openly in relation to a lived experience can elicit more meaningful information from the individual because they are speaking from a deeper point of emotional investment. Additionally, Zahavi and Parnas (2003) argued that the phenomenological perspective could provide significant benefits to the literature surrounding ASD.

Participant Recruitment Procedures

Parental permission (See appendix A) was obtained from a parent or guardian as all participants were under the age of 18-years-old. Assent forms (See appendix B) describing the purpose of the study were read aloud to the participants in a private room. The purpose of the study was described in detail along with the eligibility and exclusionary criteria for the participants. The risks, benefits, and confidentiality of the participants related to the study was also clarified before obtaining consent. All participants assented to participate.

Once informed consent and assent were obtained, an additional form (See appendix C) was completed by the teachers to gather demographic data and a brief developmental and diagnostic history. Demographic information collected included the child’s height, age, weight, ethnicity, and gender. Additional information obtained included when the participant received their medical diagnosis, a list of any body language gestures the teachers could provide to help determine the participants’ feelings or moods, and any triggers the researcher should try to avoid. Gaining insight into the participants’ respective body language gestures related to certain feelings was an invaluable piece of information when transcribing the video-recordings.

Eligibility criteria to participate in this study included receiving educational services because of an ASD diagnosis, willingness to be photographed and video-recorded, regular

participation in physical education classes, and being available for a face-to-face interview.

Given the participants unique, respective characteristics, the interviews were semi-structured and tailored to the individual's needs. The participants and their guardians were able to remove themselves from the study at any time.

Research Setting

This study was conducted within the PE classes in a separate public day program. The physical education classes were held in a self-contained setting with a certified PE teacher with 20+ years of experience. The participants were photographed during their participation within PE class. This class was held in either a multi-purpose room or on the school's outdoor grounds for every class meeting.

The interviews were conducted in a comfortable and familiar setting for the participants. They were able to choose between the school's multi-purpose room, the school psychologists' office, or in their home. They were given the choice as to where the interview took place to ensure their comfortability, limit new distractions, and enhance genuine responses. Specifically, the multi-purpose room was where the participants engaged with the researcher the most so that environment was most relatable to that person. We included the school psychologist's office because that is the location of their ongoing assessments and evaluations, therefore they may have felt more comfortable being questioned in the same environment.

Participants

The participants included in this study were four students with ASD attending a middle school program specially designed to target the unique educational, sensory, and functional needs of children with ASD. All participants were assigned pseudonyms to protect identity. The first participant selected for the study was Mike. He was a 12-year-old, African-American male

who was diagnosed with ASD in March of 2016. Mike was enrolled in this program since August of 2016, and his placement within this program was attributed to behaviors including elopement, tantrums, aggression, and destruction. The second participant selected for this study was Toby. He was an 11-year-old, African-American male who was diagnosed with ASD in June of 2012. Toby was enrolled in this program since October of 2014, and his placement within this program was attributed to behaviors including throwing items, elopement, and tantrums. The third participant selected for the study was Andy. He was an 11-year-old, Caucasian male who was diagnosed with ASD in January of 2017. Andy was enrolled in this program since October of 2017, and his placement within this program was attributed to interfering behaviors including aggression. The last participant selected for the study was Jim. He was a 12-year-old, African-American male who was diagnosed with ASD in March of 2015. Jim was enrolled in this program since March of 2017, and his placement within this program was attributed to behaviors including inappropriate, attention-seeking actions, elopement, aggression, and destruction.

Each participant utilized individual reinforcements to encourage positive behavior and cooperation. The reinforcer that Mike chose to use was being able to look at an interesting picture on the wall. He was allowed to do so after completing the interview. Toby's daily reinforcement strategy used a token economy system (i.e. his point system data sheet). He earned all of his points for our time together for having good behaviors and staying on task. Andy chose some time to play in the multi-purpose room as his reinforcer. Upon completing the interview, Andy wanted to practice boxing with the PE teacher using boxing gloves and the punching bag. Jim's daily reinforcer was a token reward system. He earned a picture for our time together to go towards his reward at the end of the day.

Data Collection

Data for this study included semi-structured interviews and observational notes. Data were collected through a modified scrapbook interview method (Harvey, Wilkinson, Presse, Joober, & Grizenko, 2012). This method was designed to broaden the scope of inductive research methods used to explore experiences of children and to allow them to access deeper levels of implicit knowledge related to those experiences. Harvey and colleagues (2012) explained that the technique enables a child to speak comfortably about his or her experiences. This method was developed for children with attention-deficit hyperactivity disorder (ADHD) who face similar attention challenges to those with ASD. Because a characteristic of ASD is difficulty expressing feelings and emotions, this study utilized the scrapbook interview method to facilitate those reactions.

Each participant was observed during their respective 25-minute PE classes over the course of five weeks. They were photographed by the researcher while engaging in PE. Field notes were also recorded during the observation to capture particular positive and negative experiences with equipment and activities, as well as any common phrases the PE teacher used while describing an activity. The purpose of noting common words used by the PE teacher was to identify instances of echolalia. Echolalia is the repetition, or echoing, of verbal words or utterances made by another person (Grenier, 2014). This characteristic may have influenced the participants responses concerning certain activities or equipment when describing their experiences. The researcher also spent 15 minutes of one-on-one time with each participant in the gym encouraging them to take photos to supplement the photos taken by the researcher.

The students, assisted by the researcher, reviewed the photographs in their electronic scrapbook (e.g. laptop or tablet) that documented their PE experiences. During the review of the photographs, the researcher conducted 40-55 minute, semi-structured, video-recorded interviews

with each participant to discuss their experiences. Given the nature of ASD, the interviewer did not impose a time limitation and interviews were conducted in a manner most comfortable for each participant. For example, the students chose the type of chair they wanted to sit in and the direction they wanted to face in relation to the window. The interviews were video-recorded to capture body gestures that may have gone unnoticed during the interview process. Body language gestures displayed by the participants provided more meaning to their verbal responses.

The children were asked open-ended questions about their PE classes which allowed them to articulate their experiences freely. Because individuals with ASD may have sensory input sensitivities, the interview questions were structured using explicit vocabulary to limit auditory stimuli (Breslin & Liu, 2015). For example, interview questions included (a) What is your favorite thing to do in PE, (b) What is your least favorite thing to do in PE (c) Do you enjoy playing with your peers in PE, and (d) Why? Then the participants were asked to speak about each picture included in their scrapbook (e.g. what is this a picture of? What is happening in this picture? How do you feel when you see yourself doing this activity?).

Throughout the interview process the students were asked to elaborate on certain comments to specify how that particular event made them feel. These follow-up questions were used to explore contextual meaning, dependent on individual replies to questions (Merriam, 1989). Instead of relying entirely on memory, which can prove to be difficult to some individuals with ASD (Maras & Bowler, 2010; Spitzer, White, Mandy, & Burgess, 2016), the scrapbook photos provided prompts to facilitate the participants' recall of the situation and possibly any feelings related to those events.

Data Analysis

The video-taped interviews were transcribed verbatim by the researcher upon conclusion of the data collection process. The body language gestures were documented in notes taken during the interviews and subsequent notes were taken during the transcription process. The objective of the transcription process was to obtain a tangible document of the interview which included all words spoken by the participants and interviewer. Any length of pauses and non-verbal utterances were not recorded, as the content and meaning of the participants' experiences were the focus of this analysis (O'Connell & Kowal, 1995).

A constant comparison method (Boeije, 2010) was used to interpret the data; this allowed for patterns of meaning to be revealed across participant responses. The basic strategy of this analytical process was to constantly compare pieces of data, as the name implies. By continually evaluating each interview, the researcher was able to reexamine information that appeared to resonate throughout several different responses. The themes were constructed by the researcher during data analysis and included recurring concepts described by the participants in their respective interviews.

Methodological triangulation, researcher reflexivity, and peer debriefing were utilized to enhance trustworthiness. Methodological triangulation is the use of multiple methods to study a single issue (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005). The multiple methods utilized in this study included the arts-informed inquiry (photos) and cognitive science (interview) aspects of scrapbook interviewing, researcher observation and field notes, and body language through video-taped interviews. Researcher reflexivity is the researchers attempt to understand and self-disclose their assumptions, beliefs, values, and biases (Brantlinger et al., 2005). Researcher reflexivity was achieved through reflective field notes taken during PE experiences and the interview process as well as retrospective observations upon subsequent

examination of the video-recordings. Peer debriefing is a “process of exposing oneself to a disinterested peer in a manner paralleling an analytical session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind” (Lincoln & Guba, 1985, p. 308). For this study, an impartial peer, familiar with the ASD population and this line of inquiry, examined the researcher’s transcripts and final results. Afterwards, feedback was provided to enhance credibility and support validity.

Summary

This chapter explained the methodology utilized for this study. A qualitative research design was used as the foundation for developing the research question and methods used for data collection and analysis. More specifically, a phenomenological approach molded the research question to focus on the participants’ embodied experiences. The initial procedures for this study consisted of informed consent forms being given to the parents of the potential participants. Once informed consent and assent was obtained, a supplementary form was given to the parents, guardians, or caregivers requesting the child’s demographic information as well as developmental and diagnostic history. The research study was conducted within the physical education classes. Data were collected through the scrapbook interview method. This method combines photographic scrapbooking and semi-structured interviews to collect data for analysis. The data analysis process took transcribed interviews and constantly compared each interview to find any patterns revealed across all participants’ responses. Methodological triangulation, researcher reflexivity, and peer debriefing were utilized to enhance trustworthiness.

CHAPTER IV: MANUSCRIPT

Exploring the Experiences of Children with Autism Spectrum Disorder in Self-contained Physical Education: A Modified Scrapbooking Study

Abstract

The purpose of this study was to explore the meaning that students with autism spectrum disorder (ASD) ascribed to their experiences in self-contained physical education (PE) classes. Four participants with a primary diagnosis of ASD who attended a self-contained PE class in a separate public day school were purposively selected for this study. Data were collected through semi-structured interviews, observational field notes, and reflective notes. Methodological triangulation, researcher reflexivity, and peer debriefing were utilized to support trustworthiness. After interview transcription, thematic development was conducted using a three-step analytic process informed by the purpose and research approach adopted in this study. Overall, the participants' experiences in PE were positive and meaningful, and three interrelated themes emerged from the data. The first theme, "They care about my feelings": Teachers' attitudes in PE, highlighted participants' descriptions of why their physical educators played a critical role in shaping their experiences. The second theme, "My friends make it more meaningful": Importance of positive peer interactions, revealed the significance the participants ascribed to participating in PE with their peers. Finally, the third theme "Oh, but the noise": Structural and sensory considerations, describe accommodations within PE the participants attributed to a more enjoyable and successful PE experience. Additionally, sensory sensitivities described hyper- and hypo-sensitive sensory stimulations the participants experienced in PE. The themes highlight several contributing factors influencing participants' positive PE experiences which should be considered by PE teachers to enhance the quality of education for students with ASD.

Exploring the Experiences of Children with ASD in Self-contained Physical Education: A Modified Scrapbooking Study.

The benefits associated with children engaging in a physically active lifestyle are well documented (Center for Disease Control and Prevention [CDC], 2014). However, school-aged children with autism spectrum disorder (ASD) tend to participate in less physical activity (Memari et al., 2013) and more sedentary behaviors (Must et al., 2014) than peers without disabilities. Because children with ASD tend to be inactive, they are more likely to be overweight or obese than age-matched peers without disabilities (Curtin, Anderson, Must, & Bandini, 2010; Egan, Dreyer, Odar, Beckwith, & Garrison, 2013; Zuckerman, Hill, Guion, Voltolina, & Fombonne, 2014). For example, Curtin and colleagues (2010) found that 30.4% of children with ASD tended to be overweight or obese compared to children without ASD (23.6%) among a cross-sectional nationally representative sample of children aged 3-17 in the United States. Inactivity among youth with ASD may be attributed to social and behavioral deficits often associated with the developmental disorder (Pan & Frey, 2006). For example, because most youth engage in physical activity with peers, difficulties understanding social cues, making eye contact, playing imaginative and social games, and sharing/turn-taking can pose problems for those with ASD when engaging with others (Pan & Frey, 2006).

Fortunately, intervention research has demonstrated that physical activity engagement can be increased for participants with ASD, and those improvements can help decrease stereotypic tendencies, aggression, off-task behavior, and elopement (Lang et al., 2010; Oriel, George, Peckus, & Semon, 2011; Petrus et al., 2008). Thus, in addition to health-related benefits, children with ASD may also display improvements in on-task behaviors and stereotypic behaviors as a result of physical activity engagement. The most likely environment for youth

with disabilities, including those with ASD, to safely and effectively learn about and participate in physical activity is during well-designed, school-based physical education (PE) classes (Haegele, Zhu, Lee, & Lieberman, 2016). The current literature regarding students with ASD in PE tend to focus on the perspectives of stakeholders, such as parents (Columna, Cook, Foley, & Baily, 2014; Lee, Haegele, & Chang, 2016), teachers (Obrunikova & Dillon, 2011), and peers (Ward & Ayvazo, 2006). Among these studies, a number of concerns have emerged regarding integrated PE for youth with ASD. For example, parents of children with ASD have reported dissatisfaction with their children receiving PE in integrated settings because of a lack of parent-teacher communication and attention to their child's individualized needs (Lee et al., 2017). Additionally, parents' concern about the preparedness of PE teachers to appropriately educate those with ASD with their peers has emerged (Columna et al., 2014; Lee et al., 2016). PE teachers themselves have reported a number of challenges that arise while working with students with ASD, such as inattentive and hyperactive behaviors, difficulty understanding and performing tasks, and social impairment, that are believed to impede the ability to effectively educate children with ASD (Obrunikova & Dillon, 2011).

To date, most literature pertaining to PE for youth with ASD was conducted from the perspectives of stakeholders. However, it has been stated that there is a "need for insider accounts" by individuals with ASD to increase understanding of needs and/or accommodations and drive positive change in schools (Humphrey & Lewis, 2008, p. 42). By listening to the voices of youth with ASD, researchers can gain a better understanding of how they experience PE and help identify strategies to improve instruction (Coates, 2011). Thus far, only two studies have explored PE experiences from the perspectives of students with ASD (Blagrove, 2017; Healy et al., 2013). Healy and colleagues (2013) examined the experiences of 12 children

between the ages of nine and 13-years-old in integrated PE settings in Ireland and found that negative perceptions towards PE were abundant. These negative perceptions were primarily attributed to challenging peer interactions (i.e. bullying), sensory issues (e.g., heat sensitivity), and exclusion. More recently, Blagrove's (2017) examined the perceptions of 10 middle school children with ASD in a self-contained PE setting within integrated public schools in the United States, and participants reported encouraging experiences which included positive perceptions of the physical educators and active participation in class activities. However, concerns still emerged from the participants' narratives, such as challenging peer interactions (e.g., bullying, teasing) and sensory issues (e.g., over-heating during activities). To date, the existing literature has examined PE experiences in integrated and self-contained settings in integrated public schools, however many children with ASD engage in other PE settings, such as PE in separate public day schools specifically designed for children with ASD. Understanding experiences in this context can provide further depth to our current knowledge about how youth with ASD experience PE in various settings. Thus, the purpose of this study was to explore the meaning that students with ASD ascribed to their experiences in self-contained PE classes within a separate public day school.

Persistent deficits in social communication, an aspect of the ASD diagnosis, may make the verbal communication necessary for typical qualitative interviewing difficult. Thus, an alternative method of scrapbook interviewing was used in this study. This method was designed to broaden the scope of inductive research methods used to explore experiences of children and to allow them to access deeper levels of implicit knowledge related to those experiences (Harvey, Wilkinson, Presse, Jooper, & Grizenko, 2012). Harvey and colleagues (2012) explained that the technique can enable a child to speak comfortably about his or her experiences. This

method was developed for children with attention-deficit hyperactivity disorder (ADHD) who face similar attention challenges to those with ASD.

Methods

Research Approach

This study utilized a phenomenological approach. This approach is designed to explore the embodied experiences of individuals during major life events (Smith, Flowers, & Larkin, 2012). The major life event for this study was the participants experiences in their self-contained PE classes. Expressing emotions and feelings openly in relation to lived experiences can elicit meaningful information from the individual because they are speaking from a deeper point of emotional investment. Additionally, Zahavi and Parnas (2003) argued that the phenomenological perspective could provide significant benefits to the literature surrounding ASD. Utilizing a phenomenological approach in this study helped unlock salient features of the participants' experiences, such as effective instructional strategies, that contributed to the meaningfulness of PE. Thus, a phenomenological approach was deemed appropriate for this study.

Participants

A purposive sample of youth with ASD, who were recommended by school personnel based on pre-established eligibility criteria, acted as participants for this study. Recruitment recommendations were based on the eligibility criteria: (a) receiving educational services because of an ASD diagnosis, (b) willingness to be photographed and video-recorded, (c) regular participation in physical education classes, and (d) being available for a face-to-face interview. Parental permission, and subsequent participant assent, was obtained from each referred participant. Once consent and assent were obtained, the participants' teachers were asked to complete a supplemental form which included demographic data (i.e. height, age, weight,

ethnicity, and gender) and a brief developmental, educational, and diagnostic history. In addition, information pertaining to the participants' medical diagnoses, a list of body language gestures the teachers could provide to help determine the participants' feelings or moods and triggers the researcher should try to avoid during interactions, were collected. Gaining insight into the participants' respective body language gestures related to certain feelings was considered invaluable information when transcribing the video-recordings.

Four students who received self-contained educational services because of an ASD diagnosis and who attend the same separate public day school for children with ASD acted as participants in this study. The first participant selected for the study was Mike, a 12-year-old African-American male who was diagnosed with ASD in March of 2016. According to school personnel, Mike displayed feelings of happiness by smiling and verbal expression. Mike has been enrolled in the day school since August of 2016, and was initially enrolled in the program because of elopement, tantrums, aggression, and destruction. The second participant selected for the study was Toby, an 11-year-old African-American male who was diagnosed with ASD in June of 2012. According to school personnel, Toby displayed feelings of happiness by laughing, smiling, and verbal expression. Toby has been enrolled in the day school since October of 2014 and was initially enrolled in the program because of throwing items, elopement, and tantrums. The third participant selected for the study was Andy, an 11-year-old Caucasian male who was diagnosed with ASD in January of 2017. According to school personnel, Andy displayed feelings of happiness by laughing, smiling, and verbal expression. Andy has been enrolled in the day school since October of 2017 and was initially enrolled in the program because of interfering behaviors including aggression. The last participant selected for the study was Jim, a 12-year-old African-American male who was diagnosed with ASD in March of 2015. According to school

personnel, Jim displayed feelings of happiness by laughing, smiling, hand flapping, and bouncing. Jim has been enrolled in the day school since March of 2017 and was initially enrolled in the program because of inappropriate, attention-seeking actions, elopement, aggression, and destruction. Pseudonyms were assigned to each participant to protect identities.

Research Setting

The study was conducted at a separate public day school specially designed to target the unique educational, sensory, and functional needs of children with ASD in a mid-Atlantic state. Within the PE settings, the student to teacher ratio was 2:1 with some students requiring a personal 1:1 assistant if deemed necessary. The curriculum that guided the PE lessons included skill development and the Autism Fitness program (Chessen, 2009). The skills observed during the data collection process (i.e. a five-week period) included basketball dribbling, basketball passing, strength training, and cardio and muscular endurance training. Additionally, exercises adopted from the Autism Fitness curriculum were utilized throughout the course. Sample exercises included squats, overhead sandbell presses, overhead sandbell/medicine ball/body bar walks, double rope swings, push throws, hurdle step overs, forward jumps, and bear walks. With the unique ability levels of the participants and the limited equipment and space available to the PE teacher, modifications were made to activities to accommodate every students' needs. For example, in addition to overhead presses and sandbell walks, the students also performed sandbell slams. These involved students lifting the sandbell over their head, or as high as their range of motion would allow, and forcefully throw the sandbell on a marked target on the floor in front of them. One PE teacher worked in this school. She was a certified adapted PE teacher and had been teaching PE in this particular separate public day school program for over 20 years.

She was awarded the 2007 teacher of the year in adapted PE for a mid-Atlantic state and became a certified Autism Fitness instructor in 2017.

Data Collection

Data for this study were collected during the winter months of 2017. Data included semi-structured interviews, observational field notes and reflective notes. The researchers' university institutional review board reviewed and approved all study protocols.

Semi-structured interviews. Semi-structured interviews, which were video-recorded and lasted approximately 40-55 minutes, acted as the primary source of data for this study. Interview data were collected through a modified scrapbook interview method (Harvey et al., 2012). Prior to interviews, each participant was observed during their respective 25-minute PE classes over the course of five weeks. Photographs were taken by the first author to capture images of the participants engaging in typical PE activities. The first author also spent 15 minutes of one-on-one time with each participant in the gymnasium allowing the participant to take supplemental photos for the modified scrapbook interviews. Interviews were conducted by the first author in one-to-one settings with each participant while they reviewed photographs in their electronic scrapbook (i.e. laptop) that documented their PE experiences. Given the nature of ASD and time-on task difficulties, the interviews did not have a pre-determined time limitation and were conducted in a manner most comfortable for the participant. For example, the students chose the type of chair they wanted to sit in and the direction they wanted to face in relation to the window. The interviews were video-recorded to capture body language gestures that may have gone unnoticed during the interview process. Body language gestures displayed by the participants provided additional meaning to their verbal responses.

During the interviews, the participants were asked open-ended, preliminary and interview questions about their PE classes which allowed them to articulate their experiences freely. Individuals with ASD may have sensory sensitivities; therefore, interview questions were structured using explicit vocabulary to limit auditory stimuli (Breslin & Liu, 2015). For example, preliminary questions included: (a) What is your favorite thing to do in PE, (b) what is your least favorite thing to do in PE, and (c) do you enjoy playing with your peers in PE? Following preliminary questions, the participants were asked to speak about each picture during the interview which included in their electronic scrapbook to explore the meaningfulness they ascribed to various aspects of PE. Throughout the interview process the students were asked to elaborate on certain comments to specify how that particular event made them feel. These follow-up questions were used to explore contextual meaning, dependent on individual replies to questions (Merriam, 1989). Instead of relying entirely on memory, which can prove to be difficult to some individuals with ASD (Spitzer, White, Mandy, & Burgess, 2016; Maras & Bowler, 2010), the electronic scrapbook photos provided prompts to facilitate the participants' recall of the situation and possibly any feelings related to those events. To ensure engagement during the interview process, each participant utilized personalized reinforcements (e.g., token economy systems) to encourage positive behavior and cooperation.

Observational field notes. During the pre-interview observation period, observational field notes were recorded by the first author. Observational field notes were used to capture particular positive and negative experiences with equipment and activities, as well as any common phrases the PE teacher used while describing an activity. Field notes were used to provide additional context for the interviewing process, as well as a secondary data source.

Reflective notes. Reflective field notes were recorded during the interview and transcription process by the first author. Reflective field notes included the interviewer's reflections on what the participant said, possible emergent themes, and notable facial gestures and body language. These notes provided a deeper context to the participants' responses and their feelings and emotions expressed while viewing the photographs.

Data Treatment and Analysis

The video-taped interviews were transcribed verbatim by the first author upon conclusion of the data collection process. The objective of the transcription process was to obtain a tangible document of the interview which included all words spoken by the participants and interviewer and the participants' body language. Any length of pauses and non-verbal utterances were not recorded, as the content and meaning of the participants' experiences were the focus of this analysis (O'Connell & Kowal, 1995). After transcription, thematic development was conducted using a three-step analytic process. First, the lead researcher became intimate with the data by reading and re-reading the transcriptions, observational field notes, and reflective notes for each participant several times. While reading and re-reading, the lead researcher marked passages she judged of interest and importance with brackets (Boeije, 2010). Second, the lead researcher condensed documents (transcripts, reflective notes, observational field notes) related to each participant to more easily identifiable themes. The final step in the analysis was to search for patterns across participants' responses through constant comparison. Recurring themes were identified as those that were present for all participants. After initial analysis, the primary and secondary authors convened to discuss themes, and those that were agreed upon were displayed as findings.

Methodological triangulation, researcher reflexivity, and peer debriefing were utilized to enhance trustworthiness. Methodological triangulation is the use of multiple methods to study a single issue (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005). The multiple methods utilized in this study included the arts-informed inquiry (photos) and cognitive science (interview) aspects of scrapbook interviewing, researcher observational field notes, reflective notes, and body language through video-taped interviews. Researcher reflexivity is the researcher's attempt to understand and self-disclose their assumptions, beliefs, values, and biases (Brantlinger et al., 2005). Researcher reflexivity was achieved through reflective field notes taken during the interview process as well as retrospective observations upon subsequent examination of the video-recordings. Peer debriefing is a "process of exposing oneself to a disinterested peer in a manner paralleling an analytical session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind" (Lincoln & Guba, 1985, p. 308). For this study, an impartial peer, familiar with the ASD population and this line of inquiry, examined the researcher's transcripts and final results. Afterwards, feedback was provided to enhance credibility and ensure validity.

Results and Discussion

The data analysis revealed three interrelated themes from the participants' narratives: (a) "They care about my feelings": Teachers attitudes in PE, (b) "My friends make it more meaningful": Importance of positive peer interactions, and (c) "Oh, but the noise": Structural and sensory considerations. Each of these themes demonstrated the participants' enjoyment of PE stating that PE is "fun" and they all were "excited" when it is time to go to PE. These themes are described, exemplified, and interpreted within the context of the current literature.

"They Care About my Feelings": Teachers' Attitudes in PE

The existing literature suggests that PE teachers' attitudes towards students with disabilities play an essential role in students' enjoyment of PE (Block & Obrusnikova, 2007; Bredahl, 2013; Haegele & Sutherland, 2016). According to Bredahl (2013), when students with disabilities have positive views of their PE teachers, they are more likely to enjoy their PE experiences. In the current study, all participants expressed verbal and physical excitement when seeing and discussing their PE teacher (observational and reflective notes). For example, while reviewing the photos, Jim began flapping his hands, smiling, and bouncing in his chair when he saw a picture of the physical educator engaging in an activity with him (reflective notes).

Although research regularly describes participants with disabilities' negative perceptions towards their PE teachers, which tend to be informed by instances of discrimination, exclusion, and bullying (Bredahl, 2013; Coates, 2011; Fitzgerald, 2005; Haegele & Sutherland, 2016), this study revealed opposing experiences. Participants attributed their excitement for PE to the teacher's personality, accommodations, and empathy. For example, Mike said, "Look! There's [the PE teacher]!" when reviewing the photos during the interview and later stated that the "[PE teacher] makes PE fun!" Jim explained that his physical educator was fun because she liked to "dance." All participants expressed happiness when talking about how excited the physical educator was in PE and that made them "excited for PE." For example, Toby stated:

This is why I don't like to be at home. When my mom hurts my feelings, she doesn't even care but my teachers care about my feelings. They want me to be happy. (Interview: Toby)

While previous literature has exposed instances of belittlement by PE teachers in integrated settings (Bredahl, 2013; Coates, 2011; Haegele & Sutherland, 2016), it was not the case in the current study. The participants from the current study, who were in a self-contained setting,

expressed appreciation towards their physical educator and how she treated them with respect. Like Toby, Andy liked the physical educator because she “believes in me.” Andy also described feeling “confident” when “she shakes my hand.” He said it made him “feel like a normal person. Like I can do anything.” The positive experiences Andy had in PE and the confidence gained went beyond the classroom and helped him feel confident in life. He described feeling “weird” seeing himself lifting weights because he had “never done it before” but that it was fun because he “never gets to do these things ever and it makes me strong.” The physical educator encouraged Andy to try lifting the weights after he expressed interest in them and to provide Andy with more of a physical challenge in PE (reflective notes).

“My Friends Make It More Meaningful”: Importance of Positive Peer Interactions

According to Seymour, Reid, and Bloom (2009), friendships have an influential role in how children with disabilities experience PE. As such, it is not surprising that Blagrove (2017) and Healy and colleagues (2013) found that participants’ with ASD tended to express the desire for more positive peer interactions in PE. In the current study, having peers to engage in PE with was a key contributing factor to participants’ enjoyable experiences. For example, Andy explained that PE was important to him “because I get to play with my friends.” During the interviews, Andy was observed smiling whenever talking about his peers in PE (reflective notes). Similarly, Mike explained that he liked to run around the blacktop because “my friends are there.” He continued by stating it made him “happy, because they’re great.” Mike also described that the only thing that made him upset in PE was when his peer wouldn’t play with him. He indicated that it made him upset “because she is my friend and I want to play with her.” Like Andy, Mike displayed excitement and positive body language when viewing his peers in PE in the photos (reflective notes).

All participants described a preference for playing with their peers in PE instead of alone because it makes them “happy.” In alignment with Blagrove (2017) and Healy and colleagues (2013), participants reported that peer interactions contributed to positive experiences in PE. During the interviews, Jim expressed having a favorite peer to run with and laughed out loud when he came across a picture of himself and this particular peer running on the blacktop. He started clapping and smiling and exclaimed the peer’s name while pointing at him in the picture. Still smiling, Jim said, “it was fun.” (reflective notes). Like Andy and Jim, Toby also had a favorite peer that he liked to play with in PE. He described him as being “a good friend and he makes me laugh.” Toby mentioned wishing he could have a “playdate at home” with his peer to “play basketball.” He said it would make him feel “better because I’d have someone to play with and not just be lonely on my phone all day even though I am used to that.” Consistent with previous research, it is clear that the participants’ positive peer interactions contributed to a more enjoyable experience for students with ASD (Blagrove, 2017; Healy et al., 2013; Seymour et al., 2009). The participants’ positive peer interactions and close relationships with peers had a significant impact on their experiences in PE. Given the existing recorded experiences of students with ASD in PE (Blagrove 2017; Healy et al., 2013) it was particularly notable that none of the participants recalled experiencing any negative peer interactions, bullying, or teasing.

“Oh, but the noise”: Structural and Sensory Considerations

Fitzgerald (2005) reported that students with disabilities have more positive perceptions of PE experiences when their needs are accommodated for. For example, structured accommodations such as using visual targets and trackers, utilizing consistent routines, and limiting distractions have been explained as necessary in order to effectively complete certain PE activities (Breslin & Liu, 2015; Lee & Haegele, 2016). The findings in the current study support

existing scholarship and communicated suggestions regarding strategies for teaching youth with ASD in PE (Breslin, 2015; Lee & Haegele, 2016). For example, Toby described the purpose of having spots on the blacktop:

Interviewer: What do we do at the blacktop?

Toby: Run to the spots.

Interviewer: Why are there spots on the blacktop?

Toby: So, you know where you're going.

Interviewer: What would happen if the spots weren't there?

Toby: Then we wouldn't know where we were going. We'd be all over the place.

(Interview: Toby)

Clearly, Toby identified that having visual representations helped him stay on track during activities. These findings are consistent with generally accepted implementation suggestions for teaching students with ASD in PE (Alexander & Schwager, 2012; Breslin, 2015; Lee & Haegele, 2016). Similarly, Andy indicated that he “would mess up terribly” if there wasn't a visual target on the floor marking the target for sand bell slams. He explained that it helped “angle him” and if the target wasn't there then he “wouldn't know what the target was. I could hit somebody.” Additionally, Mike expressed excitement when he saw a picture of himself holding the Lap Tracker (i.e., a piece of laminated paper with five Velcro pieces on one side and a strip of Velcro on the back). After each lap, the student took a Velcro piece from one side and placed it on the other. Mike particularly enjoyed the Lap Tracker because “it helps him count laps” so he “knows when he is finished.” Jim also talked about the lap tracker saying he knows it's “five then finished.”

In addition to activity structure, most participants expressed appreciation for consistency in the transition process out of PE. Jim expressed enjoyment when the physical educator “checks behaviors” at the end of PE so he knows if he “earned or not” for meeting the criteria of “quiet mouth, nice hands, quiet feet, listen, and do all your work” which is provided with a visual of the desired behaviors. Consistent transitions from one place or activity to the next is supported by current literature providing strategies to minimize challenging behaviors (Alexander & Schwager, 2012; Lee & Haegele, 2016). Accordingly, Toby reported checking behaviors after PE on his “point sheet.” He explained receiving “points for doing a good job and then I earn a letter to McDonalds and when I get all the letters I get to go there.” He liked being able to see the he was doing a good job and felt “sad” when he didn’t earn his points.

Individuals with ASD can often times experience sensory system challenges such as sensory overload, sensory aversion, or over-focused sensory inputs (APA, 2013). Sensory difficulties can make experiences in PE challenging for students with ASD (Alexander & Schwager, 2012; Breslin, 2015). Alexander and Schwager (2012) suggest that some individuals with ASD might experience hypo- (e.g. vocal outbursts or wanting pressure) or hyper-sensitivity (e.g. a dislike for physical touching or bright lights) to stimuli. Three participants described their personal hyper-sensitivity to auditory and vestibular stimuli during PE. For example, Andy preferred quieter equipment over equipment that was too loud:

Oh, but the noise, though! I’m just picturing the noise of them crashing down. It would be way too loud. It sounds so bad in my head.

(Interview: Andy)

Similarly, Toby described a preference for playing basketball by himself saying “I like to do it by myself because I concentrate better.” He continued that he has trouble concentrating “because

they're too loud" but he would much rather play with a peer "if they were quiet." Additionally, Jim's hyper-sensitivity to vestibular stimulation was observed during PE activities. For example, he would become overly excited after excessive movement, especially high-speed activities (e.g. running in circles), and even became physically excited (i.e. smiling, laughing, bouncing in the chair) when he saw a picture of himself running (reflective notes). He also stated that when PE was "too much fun, I feel like taking a break."

Some individuals who experience hyper-sensitivity to certain stimuli can also experience hypo-sensitivity to others (Heflin & Alaimo, 2007; Miller, 2014). While the participants displayed a hyper-sensitivity to auditory and vestibular stimuli, Toby and Andy also expressed hypo-sensitivity to proprioceptive stimuli. When reviewing the photos of himself engaging in PE, Andy explained that it "feels good" to have his muscles "working hard" while doing the activity, and Toby said "I feel better when I'm doing them because I get to slam them [sandbells] down really hard." In addition to the sand bell slams, Andy also reported a favorite activity being weight lifting, stating that it made him "feel strong and really good." Similarly, Toby stated that he loved box jumps "because you get to jump on the things really high." According to Heflin and Alaimo (2007), the proprioceptive feedback that Andy and Toby experienced can be related to an internal sense of effort (i.e. the conscious sense of awareness that proprioception is occurring).

Limitations

Overall, the participants reported positive experiences in PE and attributed those experiences to their teacher, peers, and environment. However, this study was not without limitations. First, communication was a challenge for some participants. Difficulties were

displayed when trying to elaborate on feelings and emotions regarding certain experiences, therefore some responses were not applicable to the purpose of this study. Also, some participants displayed echolalia where they repeated words or utterances spoken by the interviewer (Grenier, 2014). This characteristic may have influenced the participants' responses during the interview due to common words or phrases used by the PE teacher concerning certain activities or equipment during class. Second, the participants in this study attended PE twice a week for 25 minutes per class which may have limited the amount of data collected. More specifically, the content taught remained narrow and could have affected specific activity related responses. Additionally, participant selection may be considered a limitation. The participants selected for the study were from a self-contained PE setting within a separate public day school who were capable of verbal communication. Furthermore, excluded from this study were students that exclusively communicated with an assistive device because it did not adhere to the data collection method. Therefore, these findings may not be transferrable to all children with ASD in other self-contained or integrated settings. Lastly, because the separate public day school program is specifically designed for students with ASD, the participants experiences may not be generalizable to students with ASD in an integrated PE setting.

Summary & Conclusion

Little previous attention has been given to the experiences of students with ASD in PE from their perspective (Blagrove, 2107; Healy et al., 2013). This study used phenomenology as the research approach and implemented a modified scrapbook interview method during data collection (Harvey et al., 2012). The students were photographed in their respective PE classes and those photos were later used as visual prompts for semi-structured interviews. The photos aided in the memory recall of the participants when being questioned about past experiences.

The purpose of this study was to explore the meaning that students with ASD ascribed to their experiences in self-contained PE classes. To the knowledge of the researchers, this is the first study to examine PE experiences of students with ASD within a separate public day school. Furthermore, this study is the first to reveal exclusively positive PE experiences from the perspective of students with ASD.

Three interrelated themes emerged from the data depicted participants' experiences. These themes, "They care about my feelings": Teachers attitudes in PE, "My friends make it more meaningful": Importance of positive peer interactions, and "Oh, but the noise": Structural and sensory considerations, provide unique insight into PE experiences within a separate public day school for students with ASD and what can be attributed to those experiences. Overall, participants reported being excited for PE and experienced encouraging interactions with the physical educator and their peers. All participants expressed a fondness for their PE teacher and her demeanor towards their individual needs, feelings, and the accommodations she used to provide successful participation. Fortunately, this is contrary to the exclusionary experiences that tend to be reported by students with ASD in integrated PE settings (Healy et al., 2013). Additionally, the participants described positive friendships with peers in PE to be a key contributing factor for PE being enjoyable and engaging, while existing literature typically reports incidents of teasing and bullying for students with ASD in PE (Blagrove, 2017; Healy et al., 2013). Finally, participants reported appreciation for the classroom structure and sensory considerations provided during their PE experiences. The themes highlight several contributing factors for the participants' positive PE experiences which should be considered by PE teachers in their integrated or self-contained settings to enhance the quality of education for students with ASD.

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CHAPTER V: SUMMARY

The purpose of this study was to explore the meaning that students with ASD ascribed to their experiences in self-contained PE classes. This study used a phenomenological approach as the conceptual framework, and the data collection method implemented within this approach was a modified scrapbook interview method (Harvey et al., 2012). The students were photographed in their respective PE classes and those photos were later used as visual prompts for the semi-structured interview. The picture also aided in the memory recall of the participants when being questioned about past experiences. The participants in this study were more engaged and focused when using the photographs along with interview questions. Their excitement became exaggerated when seeing and describing the photos of themselves, their friends, and the teacher in PE, and they were more eager to discuss PE when observing themselves actively participating in class.

Previous literature exploring PE from the perspectives of students with ASD is limited to two studies (Blagrove 2017; Healy et al., 2013). Blagrove's (2017) study was conducted using participants in a self-contained PE setting while Healy and colleagues (2013) was conducted using participants from an integrated PE setting. The participants in this study engaged in a self-contained PE setting within a separate public day program exclusively for students with a primary diagnosis of ASD. They expressed excitement and fondness towards their PE experiences through verbal language and body language gestures. The three emerging themes in this study were (a) "They care about my feelings": Teachers attitudes in PE, (b) "My friends make it more meaningful": Importance of positive peer interactions, and (c) "Oh, but the noise": Structural and sensory considerations. These three themes contributed to the all participants' enjoyment of PE stating that PE is "fun" and they all get "excited" when it is time to go to PE.

The first theme, “They care about my feelings”: Teachers attitudes in PE, is in alignment with existing literature that states teacher’s attitudes towards their students with disabilities in PE play an essential role in the students’ enjoyment of PE. Block and Obrusnikova (2007), stated that positive attitudes of PE teachers may be the most critical factor in ensuring meaningful experiences of students with disabilities. This supports findings from Bredahl (2013), which suggested that students with disabilities’ experiences in PE are significantly influenced by their teacher and how understanding and accommodating they are.

The second theme, “my friends make it more meaningful”: Importance of positive peer interactions, revealed the significance the participants ascribed to playing with their friends in PE. Seymour, Reid, and Bloom (2009) found that friendships within PE have an “influential role” in how children with disabilities experience PE. Similarly, participants in the current study, having their friends to play with in PE appeared to be a key contributing factor to an enjoyable experience for all participants. In alignment with Blagrove (2017) and Healy and colleagues (2013), constructive peer interactions can attribute to positive experiences in PE for students with ASD.

The third and final theme, “Oh, but the noise”: Structural and sensory considerations, described the factors the participants attributed to a more enjoyable and successful PE experience. Fitzgerald (2005) found that students with disabilities have more positive perceptions of their PE teachers who accommodate the needs of all students. Accommodations can include the structure of the environment (i.e. using visual targets and trackers, keeping consistent with routines, and limiting distractions). Also, consistent transitions from one place or activity to the next is supported by current literature to potentially help to minimize challenging behaviors (Alexander & Schwager, 2012; Lee & Haegele, 2016). Furthermore, sensory difficulties can

make experiences in PE challenging for students with ASD (Alexander & Schwager, 2012; Breslin, 2015; Blagrove, 2017; Healy et al., 2013; Lee & Haegele, 2016). Sensory system challenges that individuals with ASD face in PE can include visual, auditory, tactile, vestibular, olfactory, and proprioceptive. Alexander and Schwager (2012) explain that some individuals with ASD might be hypo- or hyper-sensitive to stimuli. Hypo-sensitivity to stimuli might manifest itself in an individual who seeks out a certain stimulus that they perceive to be lacking in their environment (e.g. vocal outbursts or wanting pressure). Correspondingly, if an individual with ASD is hyper-sensitive to certain stimuli then that stimulus can sometimes be overwhelming for them (e.g. a dislike for physical touching or bright lights). Some individuals who experience hyper-sensitivity to certain stimuli can also experience hypo-sensitivity to others (Heflin & Alaimo, 2007; Miller; 2014).

Conclusion

Little previous attention has been given to the experiences of students with ASD in PE from their perspective (Blagrove, 2017; Healy et al., 2013). This study used phenomenology as the research approach and implemented a modified scrapbook interview method during data collection (Harvey et al., 2012). The students were photographed in their respective PE classes and those photos were later used as visual prompts for semi-structured interviews. The photos aided in the memory recall of the participants when being questioned about past experiences. The purpose of this study was to explore the meaning that students with ASD ascribed to their experiences in self-contained PE classes. To the knowledge of the researchers, this is the first study to examine PE experiences of students with ASD within a separate public day school. Furthermore, this study is the first to reveal exclusively positive PE experiences from the perspective of students with ASD.

Three interrelated themes emerged from the data depicted participants' experiences. These themes, "They care about my feelings": Teachers attitudes in PE, "My friends make it more meaningful": Importance of positive peer interactions, "I wouldn't know what the target was": Structural considerations, and "Oh, but the noise": Sensory sensitivities, provide unique insight into PE experiences within a separate public day school for students with ASD and what can be attributed to those experiences. Overall, participants reported being excited for PE and experienced encouraging interactions with the physical educator and their peers. All participants expressed a fondness for their PE teacher and her demeanor towards their individual needs, feelings, and the accommodations she used to provide successful participation. Fortunately, this is contrary to the exclusionary experiences that tend to be reported by students with ASD in integrated PE settings (Healy et al., 2013). Additionally, the participants described positive friendships with peers in PE to be a key contributing factor for PE being enjoyable and engaging, while existing literature typically reports incidents of teasing and bullying for students with ASD in PE (Blagrove, 2017; Healy et al., 2013). Finally, participants reported appreciation for the classroom structure and sensory considerations provided during their PE experiences. The themes highlight several contributing factors for the participants' positive PE experiences which should be considered by PE teachers in their integrated or self-contained settings to enhance the quality of education for students with ASD.

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Appendix A
INFORMED CONSENT DOCUMENT

OLD DOMINION UNIVERSITY

PROJECT TITLE: Scrapbook interviewing: Exploring children with ASD's experiences in physical education.

INTRODUCTION

The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES.

This research is being conducted by faculty at Old Dominion University.

RESEARCHERS

Responsible Project Investigator

Justin Haegele, PhD, Assistant Professor, Department of Human Movement Sciences, Old Dominion University

Co-Investigators

Amanda Yessick, Graduate Student, Department of Human Movement Sciences, Old Dominion University

DESCRIPTION OF RESEARCH STUDY

Your child has been invited to join a research study to look at their experiences in physical education. Please take whatever time you need to discuss the study with your family and friends, or anyone else you wish to. The decision to let your child join, or not to join, is up to you.

In this research study, we are exploring the embodied experiences of students with ASD in their physical education setting and the meaning they ascribe to those experiences.

Your child will be photographed participating in their physical education class over the course of four weeks and take supplemental photos during 15 minutes of a one on one session in the gym.

The researcher will then ask the participant to review the photos while simultaneously asking semi-structured question about any feelings or emotions related to the photos. The interview should last 60-90 minutes; however, the interview process will depend on the participant's comfort level, time on-task, and willingness to cooperate.

The investigators may stop the study or take your child out of the study at any time if they judge it is in your child's best interest. They may also remove your child from the study for various other reasons. They can do this without your consent.

Your child can stop participating at any time. If your child stops he/she will not lose any benefits.

EXCLUSIONARY CRITERIA

Eligibility criteria to participate in this study will include: (a) receiving educational services because of an ASD diagnosis, (b) willingness to be photographed and video-recorded, (c) regular participation in physical education classes, and (d) being available for a face-to-face interview.

RISKS AND BENEFITS

RISKS:

There are no expected or predicted potential risks associated with the participation in this study.

And, as with any research, there is some possibility that the participant may be subject to risks that have not yet been identified.

BENEFITS:

There are no direct benefits associated with this study. The information obtained in this study will expand our knowledge base leading to beneficial changes in the future.

NEW INFORMATION

If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

CONFIDENTIALITY

Your child's name will not be used when data from this study are published, reported, or presented. Every effort will be made to keep clinical records, research records, and other personal information confidential. Data collected will be kept on a computer that requires a password for entry that only the researcher(s) know(s). The researcher(s) will delete/destroy all contact information after data are collected, and use pseudonyms when presenting findings. The results of this study may be used in reports, presentations, and publications; but the researcher will not identify the participant. Of course, records may be subpoenaed by court order or inspected by government bodies with oversight authority.

WITHDRAWAL PRIVILEGE

Your participation in this study is completely voluntary. It is all right to refuse participation. Even if you agree now, you may withdraw from the study at any time without consequence from the researchers or Old Dominion University.

COMPENSATION FOR ILLNESS AND INJURY

Agreeing to your child's participation does not waive any of your legal rights. However, in the event of harm arising from this study, neither Old Dominion University nor the researchers are able to give you any money, insurance coverage, free medical care, or any other compensation. In the event that your child suffers harm as a result of participation in this research project, you may contact Dr. Justin Haegele, Assistant Professor, Old Dominion University at jhaegele@odu.edu or Amanda Yessick at ayess001@odu.edu.

VOLUNTARY CONSENT

By signing this form, you are saying (1) that you have read this form or have had it read to you, and (2) that you are satisfied you understand this form, the research study, and its risks and benefits. The researchers will be happy to answer any questions you have about the research. If you have any questions, please feel free to contact Dr. Justin Haegele, at (757) 683-5338 or jhaegele@odu.edu

If at any time you feel pressured to allow your child to participate, or if you have any questions about your rights or this form, please call Dr. Tancy Vandecar-Burdin, Chair of the Institutional Review Board Chair (757-683-3802) or the Old Dominion University Office of Research (757-683-3460).

And importantly, by signing below, you are telling the researcher YES, that you agree to participate in this study. The researcher should give you a copy of this form for your records.

Subject's Printed Name	Date
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INVESTIGATOR'S STATEMENT

I certify that I have explained to this subject the nature and purpose of this research, including benefits, risks, costs, and any experimental procedures. I have described the rights and protections afforded to human subjects and have done nothing to pressure, coerce, or falsely entice this subject into participating. I am aware of my obligations under state and federal laws, and promise compliance. I have answered the subject's questions and have encouraged him/her

to ask additional questions at any time during the course of this study. I have witnessed the above signature(s) on this consent form.

Investigator's Printed Name & Signature	Date
Witness' Printed Name & Signature	Date

Appendix B

Child Participant Assent Form

A. WHAT IS THIS STUDY ABOUT?

We are asking children with ASDs to talk about their physical education experiences and the meaningfulness of those experiences. We have already informed your parent or legal guardian that we are asking permission for you to participate in this study.

B. WHAT WILL HAPPEN TO YOU?

If you agree to participate, you will be photographed during your PE class as well as take your own photos during one on one time in the gym. After the photos have been collected on an electronic device, you will be asked to review the photos with Mrs. Amanda and talk about any feelings or emotions related to them.

1. You can decide to leave the study at any time.
2. You may ask Mrs. Amanda any questions at any time before, during, or after the photos and interviews have been completed.
3. If you feel frustrated or anxious at any time during this process, you can tell Mrs. Amanda or any other teacher. You will be allowed to take breaks as needed.

C. WHAT ARE MY CHOICES?

You can be in this study if you want to, but you don't have to be in it if you don't want to. You don't have to do the study even though your parent or guardian said it is okay.

Nobody will get mad at you if you don't want to do this. If you decide to be in this study, and change your mind later, that is okay, too. You just tell Mrs. Amanda or your teacher that you changed your mind and you will not be forced to continue participating.

D. ASSENT

If you would like to participate, you agree to allow Mrs. Amanda to take your picture and ask you questions. You do not have to participate if you do not want to, and you can stop participating at any point. If you agree, please sign both copies of this form. Give me one copy and keep one for yourself. You can contact Mrs. Amanda at (334)590-0527 if you have any questions.

Child Signature or Initial _____ Date _____

Signature of Person Obtaining Assent

_____ Date _____

Appendix C
Supplementary Form

Child's Name: _____

Age: _____

Weight: _____ (lbs.)

Height: _____ (in.)

Gender: Male ___

Female ___

Other ___

Ethnicity (X): African American ___

White Non-Hispanic ___

Hispanic or Latino ___

Asian or Asian American ___

Other (please specify): _____

Diagnostic History:

When was the participant diagnosed with ASD?

When did the participant enroll in the separate public day school program?

Assessment and evaluation scores:

Please list any body language gestures that the participant may display indicating happiness, sadness, excitement, frustration, etc.

Please list any triggers or antecedents that the researcher should try and avoid.

Appendix D
Interview Guide

1. What is your name?
2. How old are you?
3. What are some of your favorite things?
 - a. Why?
4. What are some things you don't like?
 - a. Why?
5. Who is your PE teacher?
6. Do you like her?
 - a. Why?
7. What are somethings she does that you don't like?
 - a. Why?
8. What is your favorite thing to do in PE?
 - a. Why?
9. What are some of your least favorite things to do in PE?
 - a. Why?
10. Do you like playing with your friends in PE?
 - a. Why?
11. What do you like to do more than anything else with your friends in PE?
 - a. Why?
12. What is your least favorite thing to do in PE with your friends?
 - a. Why?

13. Do you like it when (teacher) and (assistant) come to PE?

a. Why?

14. Do you think PE is important?

a. Why?

15. How do you feel when it is time to go to PE?

16. Do you do any activities at home that you learned in PE?

17. Who do you play with at home?

18. What do you do together?

PHOTOS!!!

19. What is this a picture of?

20. What is happening in this picture?

a. Why?

b. How did you feel when you were doing this?

i. Why?

**AMANDA BLAIR YESSICK, BS
CURRICULUM VITAE**

ADDRESS

2925 Big Bend Drive
Chesapeake, VA 23321
334-590-0527
ayess001@odu.edu

EDUCATION

- 2018 **MS**, Old Dominion University
Pending (2018)
Physical Education
Concentration: Adapted Physical Education
- 2016 **BS**, Old Dominion University
Cum Laude
Physical Education
- 2013 **AS**, Tidewater Community College
Social Science

EXPERIENCE

2017-2018 *Graduate Research Assistant*. Old Dominion University. Norfolk, VA.

RELATED EXPERIENCE

2012 *Coach*, AMF Chesapeake Lanes Beginners Bowling League, Chesapeake, VA.

HONORS AND AWARDS

National

- 2018 *Adapted Physical Education/Activity Graduate Student Award: Master's*,
Presented by the Society of Health and Physical Educators (SHAPE America).
- 2017 *Undergraduate Student Research Award*, Presented by the Society of Health and
Physical Educators (SHAPE America).
- 2016 *Old Dominion University Major of the Year Award*, Presented by the Society of
Health and Physical Educators (SHAPE America).

University

- 2016 *Hattie Strong Scholarship*, Presented by the Dean of the Darden College of
Education, Old Dominion University.

2016 *Robert B. Cunningham Scholarship*, Presented by the Darden College of Education, Old Dominion University.

TEACHING

Teaching Specialization:

Adapted Physical Education/Activity
ASD

PUBLICATIONS

Refereed Journal Publications

1. Haegele, J.A., Yessick, A.B., & Kirk, T.N., (2017). Physical activity experiences of youth with visual impairments: An Alaskan perspective. *British Journal of Visual Impairment*, 35(2), 103-112.

Published Research Abstracts

1. Yessick, A.B., & Haegele, J.A. (in press). "Missed Opportunities": Adults with visual impairments' reflections on PE experiences. *Research Quarterly for Exercise and Sport*, 88(1), A12-A13.

REFERED PRESENTATIONS AT PROFESSIONAL MEETINGS:

National

Yessick, A. B. (July 2017). Scrapbook interviewing: exploring children with autism spectrum disorder's experiences in PE. Emerging scholar presentation at the 2017 National NCPEID conference. Arlington, VA.

Yessick, A.B., & Haegele, J.A. (March 2017). "Missed Opportunities": Adults with visual impairments' reflections on PE experiences. Research presentation at the 2017 National SHAPE convention. Boston, MA.

State

VAHPERD, State Conference, Virginia Beach, VA, Fall 2014

Knott, S., Yessick, A., & Hostettler, E. (2014). Tactical Games Approach. Presentation at 2014 VAHPERD State Conference. Virginia Beach, VA

University

Yessick, A.B., & Haegele, J.A. (March 2017). "Missed Opportunities": Adults with visual

impairments' reflections on PE experiences. Research presentation at the 2017 Graduate Research Achievement Day, Norfolk, VA.

Yessick, A.B., Haegele, J. A., Zhu, X., & Bobzien, J. L. (March 2018) Exploring students with autism spectrum disorder's experiences in physical education: A modified scrapbooking study. Research presentation at the 2018 Graduate Research Achievement Day, Norfolk, VA.

PROFESSIONAL SERVICE

Community Activities

- 2017 Family Fun Day, New Horizon's Center for Autism, Newport News, VA
- 2016 Camp Abilities Alaska, Anchorage, AK
- 2016 Little Feet Meet, Norfolk, VA
- 2016 SHAPE Southern District Conference, Williamsburg, VA
- 2016 Families of Autistic Children of Tidewater Soccer, Virginia Beach, VA
- 2015 Families of Autistic Children of Tidewater Volleyball, Virginia Beach, VA
- 2015 Big Feet Meet, Norfolk, VA
- 2015 Families of Autistic Children of Tidewater Gunawannabowlagain, Virginia Beach, VA
- 2014 Math Expo, Virginia Sports Hall of Fame Museum, Portsmouth, VA

College/University Activities

- 2014 Program Distributer, Old Dominion University, Norfolk, VA
- 2014 ODU 5K, Old Dominion University, Norfolk, VA

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

- 2017-Present Adapted Physical Education Special Interest Group (SHAPE)
- 2017-Present National Consortium for Physical Education for Individuals with Disabilities (NCPEID)
- 2014-Present Virginia Association for Health, Physical Education, Recreation, and Dance (VAHPERD)
- 2014-Present Society for Health and Physical Educators (SHAPE)

SPECIALIZED TRAINING OR CERTIFICATIONS

Initial Public-School Teacher Certification, Area: Physical Education, Virginia State Department of Education, Pending

Certified Handle with Care Provider, June 2017- June 2018

Certified First Aid Administrator, American Red Cross, May 2016 – May 2018

Certified CPR Administrator, American Red Cross, May 2016 - May 2018

Certified Virginia State mandated child abuse reporter

PROFESSIONAL REFERENCES

Professional references available upon request.