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Graduate Studies

PERCEPTIONS OF UNIVERSALLY DESIGNED ADVENTURE EDUCATION
IN HIGH SCHOOL PHYSICAL EDUCATION

A Manuscript Style Thesis Submitted in Partial Fulfillment of the Requirements for the
Degree of Master of Science in Exercise and Sport Science

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PERCEPTIONS OF UNIVERSALLY DESIGNED ADVENTURE EDUCATION
IN HIGH SCHOOL PHYSICAL EDUCATION

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We recommend acceptance of this thesis in partial fulfillment of the candidate's requirement for the degree of Master of Science in Exercise and Sport Science Physical Education Teaching-Adapted Physical Education Teaching and Adventure Education Concentrations.

The candidate has completed the oral defense of the thesis.



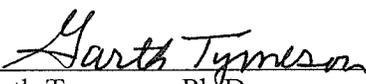
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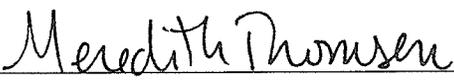
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ABSTRACT

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The purpose of this study was to investigate the effects of a universally designed adventure education (UDAE) program on students of varying ability levels. Five data collection techniques were employed to gain a rich understanding of the long term benefits of students with disabilities (SWD) and their nondisabled peers participating in a high school UDAE program. Data collection included semi-structured formal interviews, informal follow up interviews, observations, document analysis, and narrative descriptions. Participants included alumni of a UDAE program, parents of SWD in the program, and faculty members of a school district who initiated or supported the program. Themes developed included Generalization of Teachable Moments; Sense of Community; and Changing Life Perspectives. Findings depicted long-term engagement involving physical activity, special education, adapted physical education, and adventure education/outdoor pursuits amongst multiple populations. In conclusion, participation in UDAE programming during high school physical education can enhance positive feelings between individuals of varying populations that transition into life after graduation.

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INTRODUCTION

Adventure education (AE) is defined as an experiential learning process in which people construct knowledge through direct experience, skill practice, and strengthening values (Shih & Hsu, 2016). It includes seven stages to enhance student collaboration and communication: Acquaintance activities/names games; ice breakers; communication activities; problem solving activities; trust activities; low elements; and high elements (Bisson, 1999). AE provides a framework which focuses on enhancing teamwork, trust, cooperation, and self-confidence. A unique aspect of AE is its noncompetitive nature, unlike team sports where the goal is to defeat another team. AE has the potential to serve as a curricular model to facilitate an inclusive learning environment for students of varying ability levels. It also has the potential to be implemented in a variety of settings. Therefore, AE is an ideal method of instruction to incorporate the use of peer assisted learning strategies (PALS) in inclusive physical education (PE). According to Lieberman and Houston-Wilson (2009), the use of PALS can help facilitate inclusion and allow for individualized instruction.

Inclusive Physical Education

There are many benefits to inclusive PE for students of varying ability levels. Research has shown substantial social benefits regarding the inclusion of students with disabilities (SWD) into general PE (Vogler, Koranda, & Romance, 2000; Baker, Wang, & Walberg, 1995). However, there are several factors that need to be taken into consideration for inclusive PE to be a positive learning experience (Park, Koh, Block, 2014). According to Park et al., (2014), frequent interactions between students with and

without disabilities help create a positive experience within an inclusive PE setting.

However, these frequent interactions need to be positive for successful inclusion in PE.

Goodwin and Watkinson (2000) conducted a study focusing on the meaning of inclusive PE from the perspectives and experiences of SWD. The authors found that SWD developed a sense of belonging from supportive interactions with nondisabled peers. A sense of belonging was developed when nondisabled peers provided encouragement and physical support to SWD. Participants of the study described that they felt like members of the class when their peers were willing to spend time with them. On the other hand, Goodwin and Watkinson (2000) found that contributing factors to unsuccessful inclusive PE were social isolation and lack of engagement in class activities. Therefore, creating a sense of belonging in inclusive PE where all participants feel they are an asset to the class and get along with one another can create a successful learning environment.

The importance of deliberately planning for positive interactions within inclusive PE is reinforced by Spencer-Cavaliere and Watkinson (2010). Spencer-Cavaliere and Watkinson (2010) identified three major themes from a research study. Themes included gaining entry to play, feeling like a legitimate participant, and having friends. The authors found when SWD were included by nondisabled peers, they developed a sense of belonging which leads to an emotionally safe learning environment. Participants felt like they were socially accepted by their peers when they were given entry to play. Moreover, participants felt that when they were given roles that were of value to the class and they felt like they were contributing members. In addition, participants described having friends was meaningful in gaining the feeling of inclusion. Therefore, because friends

were more likely to invite SWD entry to play and provided encouragement and praise an emotionally safe learning environment was provided which is vital to the feelings of all members of an inclusive PE environment.

Inclusive PE has the potential to be beneficial for students with and without disabilities. Block and Zeman (1996) conducted a study examining the effects of inclusive PE on the attitudes of students without disabilities. They found that students without disabilities did not have any unfavorable attitudes towards their peers with disabilities. Furthermore, Block and Zeman found that students without disabilities who participated in inclusive PE were more accepting of lesson adaptations compared to students who weren't members of an inclusive PE environment. The authors also found that proper support services can facilitate successful inclusion. A strategy for successful implementation of needed support services can be achieved through PALS.

Klavina and Block (2008) suggested that peer-mediated instruction increases the frequency of interactions between students with and without disabilities and increases physical activity levels for SWD. The use of PALS can be very beneficial to facilitate a successful inclusive PE setting. This idea is supported by the findings of a study conducted by Klavina (2008). Klavina found that assistance and praise provided to SWD from peer tutors enhanced positive feelings and decreased feelings of dependence upon adult support personnel. In addition, Park et al., (2014) suggested large class sizes can inhibit the needed support for SWD within inclusive PE. Thus, the use of PALS can help SWD successfully meet the learning outcomes in inclusive PE. The use of PALS has the potential to be beneficial for SWD and the teacher because it allows for needed direct instruction that can't always be provided in a large class. This idea was supported by

Downing and Rebollo (1999) in a study regarding inclusive PE from the perspectives of parents of SWD. Downing and Rebollo analyzed the views of 100 parents for successful inclusion in PE. Based on the results, the authors identified that large class sizes were the most substantial barrier for successful inclusion in PE. Therefore, implementing PALS in an inclusive PE setting can be beneficial for SWD because of the direct one-on-one instruction being provided to them, which can't always be achieved by the teacher (Lieberman & Houston-Wilson, 2009).

According to Cervantes, Lieberman, Magnessio, and Wood (2013), when utilizing peer tutoring in a one-on-one setting in general PE, it assists SWD by receiving additional support and attention. Cervantes and colleagues identified that PALS is beneficial for SWD because it provides practice opportunities to perform different motor skills followed by receiving immediate feedback. In addition, the authors found that PALS produces substantial social benefits because students develop a bond with each other. Cervantes et al., (2013) also identified a positive outcome of PALS is that the student without a disability who takes a leadership role as a trained peer tutor can develop a sense of pride and accomplishment through participation.

Adventure Education and Outdoor Pursuits

AE and Outdoor Pursuits (OPs) are educational tools that place participants in unique and novel environments to enhance their level of trustworthiness and responsibility. AE and OPs are unique in that they teach and enable participants to explore and value outdoor skills, change life perspectives, develop self-confidence, and grow to become leaders (Sibthorp, Thurman, Paisley, Gookin, & Schumann, 2011). Sutherland and Legge (2016) highlight the uniqueness of adventure-based learning

(ABL). ABL incorporates cooperative, problem-solving, and decision-making activities. The objective of the activities is to help participants develop their own unique abilities with guidance from the teacher or group leaders. Sutherland and Legge define ABL as a student-centered approach, which emphasizes the educative experience of students. Furthermore, the authors state that ABL can be applied in a variety of cultural contexts and to a wide range of participants. Sutherland and Legge (2016) proposed that the key components to ABL include experiential learning, sequence and flow of activities, facilitation being student-centered, processing through briefing and debriefing, emotional and physical safety, and cultural responsiveness.

AE and OPs have been found to enhance participants' intra- and interpersonal skills (Rhodes & Martin, 2014). Intra- and interpersonal skills are enhanced due to the frequent interactions that take place between participants. Frequent interactions allow AE and OPs participants to develop close relationships over time. Quay, Dickinson, and Nettleton (2003) identified that exploring and learning about relationships within an AE and OPs setting can enhance interdependence in participants more than in the generic classroom. Quay and colleagues explored the effectiveness of outdoor education from the perspectives of ninth grade students. Participants in the study felt that outdoor education addressed experiential learning to a more substantial degree than in the classroom setting.

Forgan and Jones (2002) described AE activities as those that develop an atmosphere of acceptance in an experiential manner. In an experiential manner participants take risks, share, discuss, and problem solve together. Forgan and Jones (2002) noted that adventure activities are motivating for children due to their noncompetitive nature. This idea is reinforced by the work of Gibbons, Ebbeck,

Concepcion, and Li (2010). The authors conducted a study involving 1,802 middle school-aged PE students participating in experiential learning activities. Gibbons and colleagues studied the effectiveness of implementing activities in PE where the focus was to enhance teamwork, communication, and trust between group members. An example of an activity included a group of students balancing together on a carpet to maneuvering through an obstacle course. A total of 18 experiential learning tasks were incorporated into the study, which gradually increased in terms of physical, social, emotional, and intellectual challenge. All activities were similar in that successful completion of each task required students to cooperate, communicate, and trust each other. The effectiveness of the activities were examined over an 8-month period. Assessment of student self-perceptions was done using the Self-Perception Profile for Children (SPPC). The authors found that implementing these activities enhanced student's self-perception and perceived social regard for their peers and adult figures. Under self-perception, students substantially improved scholastic competence, social acceptance, and behavioral conduct. Moreover, the authors found that implementation of AE and OPs activities enhanced student perceived social regards for their parents, classmates, teachers, and friends.

It is apparent that AE and OPs have the potential to support the mental and emotional growth of students. AE is a curricular model that provides all participants with multiple opportunities to frequently interact with each other. Therefore, the purpose of this study was to investigate the influence of a universal adventure program on students of varying ability levels.

METHOD

Participants

A purposive sample of participants was recruited and selected to participate in this study based on several criteria: (a) a participant of a universally designed adventure education (UDAE) program during their high school career; (b) a parent of a student with a disability who was currently or had participated in a UDAE program; (c) a faculty member who supported or implemented a UDAE program; and (d) being willing to complete an interview for 30-45 minutes. The university institutional review board approved the study protocols (See Appendix A). All participants provided informed consent before data collection.

Twelve participants successfully completed interviews and were included in data analysis. Of the participants, 3 were parents of people with disabilities who had or are currently participating in a UDAE program at a high school in west central Wisconsin, 5 were alumni from the same school who were peer mentors in a UDAE program, and 4 were current faculty members from the school who have facilitated and supported the UDAE program.

Operational Definitions

The following terms were used in this study:

Adventure Education (AE): AE is an experiential learning process in which people construct knowledge through direct experience, skill practice, and strengthening values (Shih & Hsu, 2016).

Outdoor Pursuits (OPs): OPs were defined as learning activities taking place in the natural world that incorporate traveling from one point to the next by nonmechanized means of travel (Ford & Blanchard, 1993).

Universally Designed Adventure Education (UDAE): For the purpose of this study, UDAE was defined as an educational environment where SWD engage in various AE and OPs activities with their nondisabled peers in a cooperative learning setting.

Data Collection

Five qualitative techniques were employed to gather data. Formal interviews of parents, alumni, and faculty members were conducted. The interviews focused on the effects of participating in a UDAE program (long term educational gains, personal values, and social benefits). All interviews were 30-45 minutes. Formal interviews were audio-recorded and transcribed verbatim. In addition, follow-up informal interviews were completed with all participants to clarify and gain further insight. Notes were taken during informal interviews with pen and paper followed by transcription onto an electronic resource, which were completed as soon as possible after each informal interview. The researcher took notes for each question asked of the participant followed by reading the notes back to ensure an accurate depiction of the responses from participants.

Observations of a current UDAE program were carried out in six classes. Field notes were documented during observations with pen and paper and then documented electronically as soon as possible. In addition, document analysis was completed on reflection journals written by previous peer mentors along with other teaching materials supplied by the physical educator who facilitated the UDAE program. Finally, the alumni

who were previous peer mentors in the UDAE program completed narrative descriptions of an “ideal UDAE program” that they would implement based on their views, experiences, and philosophies.

Data Analysis

Initially, data pertaining to the parents, past students, and faculty members regarding the benefits of UDAE programming were identified. Each of the subsets were coded and categorized using the techniques of analytic induction and constant comparison (Goetz & LeCompte, 1984). Categories were then condensed into meaningful themes. Furthermore, to ensure the quality of each theme and subtheme, a coding manual was developed with quotes and other illustrations depicted from all data collection sources listed under each (See Appendix B). After development of a coding manual a group of professionals with expertise in qualitative research reviewed it and provided feedback to the researcher. Modifications were made as necessary and the coding manual was sent back to the reviewers for clarification and feedback. The main goals of the analysis were to explore the long term social and educational benefits to UDAE programming and to describe key components that led to these benefits.

Trustworthiness and Credibility

Standards of quality and verification are key issues in qualitative research (Creswell, 1998). The trustworthiness of this study was verified in various ways. First, the researcher implemented triangulation of data collection sources to gain a deep understanding of the content. Prior to the start of data collection, the researcher/interviewer sent interview questions designed for each group of participants to professors in adapted physical education with in depth backgrounds in qualitative

research for peer review. Revisions to interview questions were made. In addition, the researcher searched for discrepant and negative cases throughout the analysis of data collection. During the process of semi-structured formal interviews, as well as after the analysis was completed, the researcher completed member checks through informal interviews where participants were asked to provide clarification or confirmation of their responses to interview questions. Lastly, two university adapted physical education professors with backgrounds in qualitative research reviewed the data analysis coding manual developed by the researcher. Their comments were incorporated into the final reporting of the findings.

RESULTS

Based on the interpretation and analysis of five different data collection instruments, three themes emerged: (a) Changing of Life Perspectives; (b) Sense of Community; and (c) Generalization Teachable Moments. Each theme also included interrelated subthemes that related specifically to the content of each theme. The author throughout the article used first person terminology. However, to protect the identity of the participants, wording was transcribed and included into the results without any alteration.

Changing Life Perspectives

Through the interpretation given by various participants on multiple data collection sources, it was apparent that the way individuals perceived their peers had changed due to being involved in a noncompetitive PE setting. In regards to nondisabled peer mentors who participated in a UDAE program, it allowed them the opportunity to view their peers with disabilities with a person-first lens. As such, multiple participants in this study described this concept to some degree. The primary instructor pointed out that “I think it really helps people see past those differences and view the person rather than the disability” and a parent highlighted that “They just know him and don’t think anything of it [having a disability]” in reference to how nondisabled peers treated their child.

Altered Perceptions

Within this study, multiple data sources described that participation in UDAE afforded opportunities for students with and without disabilities to learn from each other through differentiating how they view each other. Formal interviews identified this

concept well. Jillian a mother of a SWD reflected “I think the two way street for learning there is, um....a life lesson that should, everybody should have”. The Primary Instructor explained that, “I think it [the program] really helps people see past those differences and view the person rather than the disability”, which helps all participants learn from one another. This was also evident in a formal interview conducted with Lizzie a former participant who described that “I took a boy with Down syndrome to prom with me and the community was happy” when reflecting on the impact participating in UDAE had on the way she perceived her peers. In addition, Jillian explained during an informal interview that participating in UDAE programs shows individuals without disabilities that SWD are able to learn and this program makes students without disabilities more comfortable around SWD because of the nature of AE and OPs. Furthermore, this type of program was illustrated as beneficial for students as well as faculty members who have assisted with this program.

A secondary instructor who co-taught the UDAE course enjoyed assisting in this program because “it’s opened my eyes to see that there [are] way more abilities than disabilities in a lot of these kids”. Other data collection sources identified that participating in UDAE programming allows students to feel included to the point where they obtain the emotional safety to be themselves without fear of ridicule. In Anna’s narrative description, she believed that her participation in UDAE “made activities possible for everyone of all abilities” and “they looked at a person and saw their abilities and what they could do and adapted activities as needed”. This was also evident in Reese’s narrative description as she explained “[i]n this class you will not see cliques”. Fittingly, Don described during a formal interview how his son with a disability

participating in this class was beneficial for not only his son, but for the nondisabled peers as well. When describing the most important benefits this type of program has for his child with a disability and for all children, Don illustrated:

some of the “popular” [kids] in school you know athletes that are going through this [UDAE] or other kids that are doing really well that take this class you know, know him [child with a disability] and think of him as their friend and so he, um, I think it’s huge for other kids to get exposure to disability to special needs that they know it’s not something to be scared of because “that’s just how [his son] is”....he has to go over here and flap his arms a little bit now right now or he has to he’s not going to answer you right away, but you just have to wait for an answer. They just know him they don’t think anything of it [having a disability]

(Don/Formal Interview)

In many cases, the PE teachers involved with the development of the UDAE program were identified as reasons for the success of this program and feelings of inclusion. A common trait described by many participants when discussing the instructors was their passion and commitment towards ensuring the success of all students enrolled in their program. As such, the administrator described the feelings of the instructors towards their program as “you know it’s definitely their work, but it’s also more importantly I think a life passion that they really take ownership [of their program]”. Likewise, numerous reflection journals written by former participants in UDAE depicted both instructors involved as substantial supports towards their feelings of accomplishment upon completion of the program. Multiple alumni who completed narrative descriptions described their perspectives regarding how the instructors helped

provide a positive learning environment for all parties involved. For example, alumni stated, “I thought that our teachers organized the class in a way that allowed us to have enough time and opportunities to participate in everything that is significant to the outdoors” (Reynolds), and Reese illustrated in her narrative description that a UDAE program facilitates students positively interacting with each other. She explained:

When you walk in the gym of an ideal universal adventure program you may see physical and intellectual differences however, if you observe for a moment longer you will see teamwork, communication, trust, and encouragement. Each of these is the product of the environment set by the teacher and students who truly want to be there. (Reese/Narrative Description)

Autonomy

Multiple data resources showed that individuals participating in the UDAE program developed feelings of autonomy where self-confidence was enhanced and they felt the ability to take on more of a leadership role. This was apparent in the class setting as well as everyday life. Meaning, feelings of autonomy were generalized into various environments such as work settings and interacting with other people. Through analysis of reflection journals written by previous participants in UDAE, it was apparent that students felt like they didn’t have to depend as heavily on other people. This was due to the instructor of the program making appropriate modifications to lesson activities when needed and SWD receiving support from their nondisabled peers only when asked. Some examples of appropriate modifications developed by the primary instructor include an “automatic belay system” during rock climbing units and a “crossbow” during archery units, and students without disabilities assisting their peers with physical disabilities

reach the top point of a cave by carrying them to the top in a medsled during caving units. Moreover, Kristen described during an informal interview that when she was in the program there was a student with limited mobility in one arm and his peers only supported him by providing him encouragement to try when he was ready, which led to him eventually attempting to rock climb independently.

Furthermore, participants who described the program felt that it provides students with opportunities to develop feelings of leadership. For example, two parents of SWD described that their child's involvement in UDAE "gave him a ton of confidence to work with his peers" and "the ropes course, getting to do that and um, I mean that's a huge confidence booster for him". This was evident in reflection journals and narrative descriptions as students illustrated that supporting sixth grade students during "6th grade adventure day" provided them autonomous feelings that me students "feel like I did not have to depend as heavily on others for belaying this year and I enjoyed that independence" (Reflection journal) and this opportunity "gave me a chance to step into more of a leadership role"(Reynolds/narrative description). The Administrator described that "the confidence it puts in or instills within students with disabilities I think is really key..." when discussing how the UDAE program prepares students for real life settings. The Primary Instructor reinforced this idea by explaining "everybody in the class, it puts them in unique situations and teaches them about responsible decision-making". This was evident during observations of the UDAE program. During observations it was clear that the primary researcher was able to identify that SWD were afforded multiple opportunities to achieve autonomy due to their nondisabled peers assisting in various lesson activities such as caving, winter shelter building, and belaying and only offering

assistance when needed. SWD within this study felt as though they were valued members of the group because they held specific roles that assisted in successful implementation of lesson objectives. For example, Cynthia who is a paraprofessional at the school district where this program takes place described “it’s interesting to see them, regular ed. students give special needs students responsibilities, hold them accountable”. Based off this illustration by Cynthia , Jillian a parent of a SWD felt that these valued roles are evident because “their participants and not just putting them on the sideline and watching their friends do things”.

Moreover, Jillian described during an informal interview that she believed participating in this program helped her son become more confident because of the nature of AE and OPs. She illustrated that the specific activities within this class were able to show SWD that their nondisabled peers have barriers they have to overcome too such as being afraid of heights. Jillian felt that the unique activities all students participated in together helped them learn from each other because they were usually new to the activity taking place and cooperation was the foundation of success for all activities. Jillian explained that she believes this is what made her son more confident to try to teach other people things that he is knowledgeable about in his everyday life now, Likewise, it was apparent that these valued roles were held by SWD based on data discovered in reflection journals, observations, and informal interviews. For example, reflection journals identified feelings of independence developed through UDAE because of activities like rock climbing. Fittingly, a responses found within a reflection journals include “I feel like I did not have to depend as heavily on others for belaying this year and I enjoyed that independence”. In addition, Cynthia reflected during an informal interview of a former

student she had with Asperger's syndrome who participated in this program and eventually went on to be the manager of the varsity football team and pursued a college degree in engineering. Cindy felt that this program is what provided this student the tools to pursue these activities and aspirations. Likewise, this was shown during an observation of a winter shelter building lesson activity taking place as the instructor gave students the opportunity to make their own groups. In addition, Anna described in her narrative description that participating in a UDAE "not only does it teach physical well-being, but because it also teaches character, responsibility, and trust, just to name a few very important values" when describing the vitality of this type of program. These characteristics listed by Anna are essential in order to develop autonomous behavior.

Sense of Community

Friendship

It was apparent that experiential learning activities helped enhance perceived social regard within the UDAE program. Participants expressed the quality of themselves or their children forming friendships with their peers through the nature of engaging in AE and outdoor education activities in a noncompetitive class setting. For some participants, feelings of friendship slowly developed over time. For example, Anna illustrated during a formal interview that participating in a UDAE program during her high school career "helped me kind of um, be comfortable with building friendships in college". Likewise, Anna illustrated in her narrative description "I would not change any of the things that I learned from this class or friendships I've taken away" when describing an ideal UDAE program and how she would alter it to meet her beliefs. Reese W discussed during a follow up interview that she is still friends with many people from

that program who participated in that class with her and that they still connect on Facebook. This was due to participants having the opportunity to bond with one another and developing feelings of trust which enabled participants to illustrate how “I have made friends in this class that I know I would not have made without it” and “I have met some people that I would probably have never talked to, if it wasn’t for being in this class” (Reflection Journals).

Jillian explained during a formal interview that her child with a disability was able to connect with his peers in school because of the UDAE program. She explained “it gave him a better connection in school to other kids that he would see that he maybe wasn’t so used to seeing” and “it just gave him some friendships and stuff that he typically didn’t have” when reflecting on her son participating in this program with his nondisabled peers during his high school career. A common concept found within reflection journals identified that UDAE program provided opportunities to meet new people that they probably would not have met in any other school settings. Other participants identified that these friendships developed through participation in UDAE transitioned into their lives outside of the school environment. The Primary Instructor illustrated how this class is beneficial for everyone because “now they have formed that friendship that bond, um there’s, there’s just interaction as far as texting, phone calls, hanging out outside of school” when describing the changes of interaction behaviors between peers with and without disabilities since implementation of this program. Furthermore, Don described during a formal interview how his son with a disability has been afforded the opportunity to interact with his nondisabled peers outside of school. He explained:

he's wanting to do social things with his friends, um, it's not real interactive he still doesn't have those skills as well as other kids, but the kids that are picking him up that know that and they know how to interact with him enough to make him feel like part of the group (Don/Formal Interview).

Caring

Data from this study showed that participants of the UDAE program developed a sense of caring. Multiple data sources such as reflection journals, formal interviews, narrative descriptions, and observations showed that the sense of caring was developed via peers helping one another. This took place within snowshoeing, caving, winter shelter building, bouldering, and hiking. For example, Lizzie explained that because of being involved in UDAE "it just made me realize that not only to think of myself, but always others and their feelings towards um, different goals that they have and the fears that come along with that".

During observations there were numerous instances when students with and without disabilities demonstrated feelings of caring towards their peers. In one instance a student was observed warning her peers with and without disabilities of hazardous areas to ensure their safety. In another instance a student was observed cutting down a tree branch that fell and hit a classmate and the student expressed great concern for her safety. The Administrator also described a sense of caring demonstrated by students when reflecting on his previous experiences in participating with the UDAE program during different group outings. The Administrator explained:

Yeah I definitely seen a level of compassion and wanting to involve in or include students with disabilities in experiences they wouldn't typically get to do. You

really see a joy in our typically developing students when they are able to help.

(Administrator/Formal Interview)

Reflection journals reinforced this statement made by the administrator as a former student described how she appreciated the willingness of peers to help each other whenever needed. Further support to this claim was illustrated by participants during formal and informal interviews. For example, Cynthia discussed in a formal interview how this program motivated nondisabled peers to care for their peers with disabilities. Cynthia described “Um, I’ve seen regular ed kids stand up to their peers in defense of these kids [students with disabilities]”. Further, the Primary Instructor explained students demonstrating feelings of caring from nondisabled peers through interaction outside of the UDAE program. He explained “as you walk down the hall you’ll see the students who were in the class (UDAE) interacting, which you didn’t see before” and “They’re (nondisabled peers) going to watch their adapted sports league games, which they wouldn’t have done before...” thus, it is evident that students who actively engaged in UDAE demonstrate feelings of caring towards their peers in multiple avenues other than the class setting. The ability to be trustworthy is one of the essential components of AE and OPs programs.

Based on the descriptions from reflection journals, it was evident that students felt trusted by their peers. Other responses from reflection journals described that “Universal P.E. has taught me teamwork, that it’s ok to ask for help, and to trust more of my peers” and “I wasn’t hesitant in making sure that I was able to trust everyone around, and most importantly that everyone trusted me”. Fittingly, these concepts of trusting other people and wanted to be trusted by others were apparent in other data collection sources. Kristen

described in her narrative statement that being involved in UDAE with her peers overtime assisted in the development of trusting other people. She explained, “by the time it came to our senior year we had become really close and able to trust on each other” when describing her experience in UDAE during her high school career. Part of what is required to make one trustworthy is being held accountable and some participants have identified how the UDAE program did this. Cynthia explained “it’s interesting to see them, regular ed. students give special needs students responsibilities, hold them accountable”. Fittingly, this was evident during observations of the current UDAE program. The primary researcher observed nondisabled peers offering opportunities to their peers with disabilities during winter shelter building by allowing them to cut off branches and asking them if they would like to help in any other way. Moreover, during observations of a bouldering and belay training, nondisabled peers asked their peers with disabilities what types of roles they wanted as opposed to assigning them roles they deemed appropriate.

Generalization of Teachable Moments

Teamwork

Results from formal interviews, informal interviews, narrative descriptions, and observations indicated that participation in UDAE provoked feelings of being able work in unison to achieve group-oriented objectives including rock climbing, bouldering, snowshoeing, and caving, which carried over into life following graduation. Reynolds explained in his narrative description that participating in UDAE during his high school career has benefited him in his life now because “[o]verall this class [UDAЕ] has impacted me by showing me that some people just need a helping hand and some

guidance and I really enjoyed being able to do that”. Further, Reynolds discussed during a formal interview that participating in UDAE prepared him to work with individuals with disabilities as well as others in general due to the life lessons he was able to take away from that type of class. Reynolds illustrated:

I’m an apprentice lineman, um; I have a lot of you know younger kids coming up to me “how’d you, where’d you go? how’d you start?” Uh you know I lead them in the right direction, I give them the right information and in the field of work that I’m in I have to be a big mentor to younger uh, younger guys that are working under me. I also wouldn’t have been able to be a mentor if I didn’t join the universal PE program because that program really shaped me and prepared me to be to be able to mentor uh, kids or you know guys that I work with that are younger than me, um, [it’s] something I enjoy doing whether it’s someone with a disability or someone without a disability, it doesn’t bother me one bit. I see the two people, I guess I shouldn’t say two people, but I see the people with the disability and the people without a disability as the same person, it doesn’t bother me one single bit. (Reynolds/Formal Interview)

It was clear that students in the class were not impacted by typical hierarchical roles that you would typically see in a team sports unit. For example, Reese described that UDAE as significant because “students demonstrate responsibility by altering who they are partners or work with in a group”.

Reflection journals showed that participants felt that being involved in the UDAE program gave them tools that assisted in the development of being able to put the needs of others first and recognized that this skill can be applied to other settings outside of

school. For example, one student stated in their reflection journal that when belaying for someone who is climbing on a rock wall teaches being selfless. Further, another student stated in a reflection journal that “I’ve really become more adventurous and outgoing because of this class, and this summer I am going to try and apply this class to my real life”, thus, multiple students were able to learn how to appropriately interact with one another and develop feelings of positivity that ensures the emotional and physical safety of their peers. Moreover, the secondary instructor explained that the communication needed to be successful in a UDAE is applicable to multiple settings in life. He explained:

If you’re part of an organization and you’ve got a department of 30 people, you got to get to know those 30 people and work well with them and get along with them; well that’s what we’re doing here [UDAE] (Secondary Instructor/Formal Interview)

Likewise, Kristen described that being part of a UDAE program prepared her for her current profession now because after being involved in this type of program for multiple years, she explained:

It [UDAE] kind of was able to prepare for working in group settings even though I’m not working with someone that has a disability, it still I’m able to kind [of] like work with them [colleagues] better and understand you know kinda their needs and everything (Kristen/Formal Interview)

This illustration from Kristen was reinforced from the feelings of Anna. Anna discussed in her narrative description that “[t]hey [nondisabled peers] learned life lessons such as the fact that we are all similar in some ways. Just because there is something different

about some people, doesn't mean that they need to be treated differently" Fittingly, this depiction made by Kristen is further supported through other data sources. Anna supports this claim in her narrative description:

Along with inclusion for people of varying abilities, the physical education adventure class that I was part of at my high school gave regular ed students the opportunity to integrate with a population they might otherwise not have interacted with. They learned life lessons such as the fact that we are all similar in some ways. Just because there is something different about some people, doesn't mean that they need to be treated differently. (Anna/Narrative Description)

Lifelong Pursuits

Participants in this study described their personal experiences in AE and OPs with their peers transferred into their everyday life. Participants discussed how the content taught in UDAE program transitioned into their lives today such as their careers "the trust and the communication um, that I learned in that class and transferred it over to my um, career as a um, activities assistant at a state center for individuals with disabilities" (Anna). The nature of the activities and the diversity between participants fostered an interest in pursuing special education, physical education, and AE and OPs as a career. When reflecting on previous experiences during UDAE, Lizzie explained "I feel like it definitely sparked my interest in what I want to do with my career" and "that class made me just want to pursue the career that I'm going to be a special education teacher!". In this illustration, Lizzie was able to take her experience working in noncompetitive lesson activities with her peers of varying ability and discovered a passion for supporting

individuals with disabilities and is currently finishing a degree in special education. She explained:

I um, feel like I can make goals easier for um, kids setting their goals and not only setting them, but achieving them in the long run and just seeing progress is always something that can take a long time but um, it's always worked out in the end, so yeah! (Lizzie/Formal Interview)

In addition, Lizzie illustrated during an informal follow up interview that she was motivated to pursue special education as a career because of the joy she felt from her peers with disabilities demonstrating simple acts of kindness such as shaking her hand or smiling at her when she entered the class. Moreover, Lizzie also explained during an informal interview that she has applied the content she learned within UDAE to her students in the classroom setting. For example, Lizzie discussed that during a classroom activity where SWD developed goals they wish to achieve over the summer. Lizzie motivated a student to conquer a fear of heights by trying to hike up a local bluff a little further each day over the summer. Anna felt that being a member of this class encouraged her to continue working with children with disabilities. Anna explained that UDAE taught her some life lessons that assisted her in becoming “more vocal and independent” and because of this program, she was able to transfer the “communication piece” into her career now. For example, Anna explained during an informal interview that because of participating in the UDAE program, she can differentiate how to effectively communicate with children and colleagues in her work setting now. In addition, Reese discussed during her formal interview that the content she was provided in UDAE gave her the leadership skills required to “have the ability to lead out a group of freshmen girls that will be on a,

uh, 9-week, uh, backpacking trip this summer up in the mountains of Canada”. Further, Reese explained during an informal interview that participation in UDAE in high school is what paved the way for her to pursue a physical education degree with a minor in adapted physical education to continue supporting SWD become confident and competent movers.

Reese described in her narrative description how activities taught in an adventure program are compatible to the national standards for physical education. She identified “the universal adventure program used rock climbing, archery, caving, ice fishing, and the high ropes course to teach to the national standards”. Rock climbing is just one of many AE and OPs educational pieces that can tie into several of the national physical education standards. For example, climbing the wall meets standard 1 because the student is demonstrating a variety of movement patterns to successfully climb the wall. Further, climbing the rock wall requires strategic planning to successfully make it to the top, which correlates with standard 2. In addition, the act of belaying for a rock climber requires communication, trust, and responsible behavior, thus, this role relates directly to standard 4.

Further, other participants described how their experiences in UDAE developed interests for leisure and volunteerism. Reynolds felt that being involved in the UDAE program sparked an interest volunteering within the community. Reynolds explained “I participate in uh, programs outside of uh, work and things like that to mentor kids in the outdoors”. During an informal interview, Reynolds explained that participating in UDAE is what lead him to become a member of his local Lions Club within his community so he

could continue to mentor other people and teach people what he knows to help them become successful.

Other data sources such as formal interviews, reflection journals, and observations reinforced the statements derived from responses of participants. Other participants, such as Susan have identified the benefits of UDAE to motivate themselves or their children to stay physically active. When discussing the benefits of her son participating in this program, Susan explained “When you [her son] started doing those activities you realized how important it was to stay strong so you could enjoy, enjoy physical activities, I noticed that”. It was evident that this class exposed students to activities like hiking, rock climbing, ice fishing, and bouldering that can be more feasible to explore through adulthood. For instance, multiple reflection journals discussed students learning how to set up ice shanties and make fishing knots when ice fishing and learn different ways to be successful when rock climbing.

Further, observations pointed out that the primary instructor connected content taught in the program towards leisure and competitive activities that can be implemented outside of school following graduation. For example, the instructor tied the importance of safety when caving and explained how it’s their responsibility to stay safe when engaging in this type of activity outside of school. Moreover, during a different observation, the instructor brought in a former student to introduce bouldering and provided resources where students can engage in bouldering competitions locally and in different areas of the Midwest during their leisure time. Moreover, Lizzie explained in an informal interview that participating in the various activities that were embedded in the curriculum were

even more motivating when given the chance to practice in authentic settings such as rock climbing out in the wilderness instead of on a rock wall within a gymnasium.

DISCUSSION

The purpose of this study was to investigate the influence that a UDAE has on students of varying ability levels. The three themes that evolved: (a) Changing of Life Perspectives; (b) Sense of Community; and (c) Generalization of Teachable Moments, illustrated how participation in a reversely integrated AE and OPs setting allowed students of all abilities to develop skills that have made positive impacts throughout their lives. All data collection sources unanimously provided explanations and examples that corroborated to the long term benefits of participating in a UDAE program for students with and without disabilities. The results of the current study extended the understanding of AE and OPs and the impact it makes for students of various ability levels long term. Congruent with the findings of Spencer-Cavaliere and Watkinson (2010) having friends, feeling like a legitimate participant, and gaining an entry to lesson activities played an important role in the positive experiences of children with disabilities. Numerous participants described during formal and informal interviews how participation in this class met the needs of all participants and facilitated friendships that are still relevant following graduation.

Previous research has identified that SWD have participated in parallel activities when engaged in lesson activities with their nondisabled peers (Haegle & Zhu, 2017). The current study explored a different avenue where all students achieved lesson objectives through process-oriented lesson activities that maximized participation, which was reflectively discussed through formal and informal interviews followed by confirmation from observations of a current program taking place. It appears that participation in this type of program was maximized because students engaged in lesson

activities that focused on the needs of the group, not the needs of winning or losing. Further, participation in lesson activities within the context of AE and OPs encourages students to communicate appropriately during problem-solving activities and activities within this specific curricular model can enhance students' interpersonal skills (Shih & Hsu, 2016; Rhodes & Martin, 2014). Multiple data sources depicted that members of a UDAE program focused more on helping others achieve their goals and become successful instead of placing an emphasis on individual goal achievement. In addition, past research has identified that SWD not actively participating in activities can perpetuate negative feelings about PE (Bredahl, 2013; Haegele & Sutherland, 2015; Goodwin & Watkinson, 2000). However, based on the responses of participants interview questions along with results depicted from other data collection instruments such as narrative descriptions and analysis of reflection journals, only positive feelings were communicated when reflecting upon the experience of participation in a UDAE program. For example, multiple participants described how engaging in UDAE afforded opportunities to be involved in the same activities with their peers. Congruent with the findings of Zmudy, Curtner-Smith, and Steffen (2009a) participants engaged in a variety of different participation styles while engaged in process-oriented lesson activities. For instance, the researcher witnessed during observations of a bouldering and belay training lesson that several students exhibiting the "go getter" participation style and involved themselves in every activity possible while others exhibited "ground supporter" characteristics, and provided positive reinforcement to their peers who engaged in various activities outside their comfort zones. However, there were not any instances where the researcher observed students demonstrating the "rough houser" participation style, which

incorporates acts of physical violence in a playful manner. Therefore, all parties involved were afforded the opportunity to participate in the various lesson activities where the felt comfortable.

In relation to the findings of Spencer-Cavaliere and Watkinson (2010) SWD developed meaningful friendships with their nondisabled peers, which moved beyond the school day. Participants in the study expressed during formal interviews how they still keep in touch with members of the UDAE program they went through during their high school careers. Further, observations of a current UDAE echoed this as students of various populations interacted with one another in a positive manner. Therefore, results from the current study support the notion that students engaging in lesson activities that focus on cooperation and trust can enhance feelings of friendship between participants. Further, parents described how their children are more social outside of school because of this program. Jillian discussed how her child with a disability enhanced his ability to overcome barriers through participating in this type of curricular model, which reiterates the findings of Davidson (2001).

Altered perceptions and autonomy were apparent in the theme *changing life perspectives*. Echoed in this theme were aspects of students changing the way they viewed others through participating in experiential learning activities, which has been illustrated to develop an altered positive perceived regard for their peers (Gibbons et al., 2010). For example, participants discussed how this class afforded opportunities for people to recognize that everyone has strengths and weaknesses and look more towards the ability of people as opposed to the disability. Further, the current study indicated that participation in this class enhanced feelings of motivation to pursue careers involving

physical activity and SWD. In congruence with Seymour, Reid, and Bloom (2009) participants in this study expressed that participating in this class made people view their peers as a person first before instantly looking at peripheral traits such as having a disability. It appears that these enhanced feelings of competency for SWD participating in this type of program.

In addition, past research has perpetuated that bullying episodes in physical education ignite from perceived differences between students (O'Connor & Graber, 2014). Participants in the current study expressed how participation in this type of class allowed students the opportunity to see past perceived differences. For example, Don described during a formal interview how nondisabled peers are able to acknowledge certain traits regarding his son with a disability and not think anything of it. Likewise, Jillian described during an informal interview how her son with a disability felt more comfortable around his nondisabled peers after seeing them demonstrate feelings of fear when participating in specific AE and OPs activities. Therefore, altered perceptions between students of varying ability level could be due to participation in this curricular model placing substantial focus on social growth (Forgan & Jones, 2002). Moreover, participations in novel AE and OPs experiences amongst individuals of various social groups introduces feelings of equality (Garst, Scheider, & Baker, 2001). This was apparent in the current study as participants described how this program was very different from traditional PE settings and afforded opportunities for people to learn more about their peers.

Autonomy was also apparent in the changing life perspectives theme. Autonomy was achieved through participation in this program setting because of all participants

being afforded the opportunity to engage in various task structures unique to AE and OPs, which includes exploratory and atmospheric task structures (Zmudy, Curtner-Smith, & Steffen, 2009b). Multiple data sources depicted that SWD were offered valuable roles and held to high standards while participating in this type of PE setting. This idea of holding a valuable role is reminiscent of the concept of social role valorization. Social role valorization is the idea that the welfare of an individual depends to a significant degree of the social roles they hold (Wolfensberger, 2000). If these roles are valued by others, then the people who hold them will be treated well. Participation in these task structures afforded the opportunity to allow all students to escape their comfort zones, which as supported by multiple data collection sources, afforded opportunities to gain confidence. Multiple data collection sources depicted how participation in UDAE led to participants overcoming barriers such as getting outside their comfort zone. Therefore, results of the current study correlates with the findings of Davidson (2001) who identified that participating in outdoor education builds confidence and mental strength through overcoming personal barriers.

Developing friendships and demonstrating feelings of caring were identified and described under the overarching theme sense of community. Friendships were developed between SWD and their nondisabled peers through concomitant participation in UDAE lesson activities such as bouldering, ice fishing, winter shelter building, and rock climbing. Previous research has identified that participation in AE and OPs during PE can develop a difference in terms of inclusivity of social groups in comparison to other PE and school settings (Sutherland & Legge, 2016; Fernandez-Rio & Suarez, 2016; Smith, Steel, & Gidlow, 2010; Zink & Burrows, 2008). This was apparent in the present study as

participants described that in this type of class you will not see “cliques” and students were afforded the opportunity to develop friendships with people of various hierarchical status and participate in activities outside of school such as going to the movies or prom. Alumni described during formal and informal interviews that they are still friends with people they met through this program today. These findings are in agreement with previous research that identified participation in AE and OPs forms friendships and closer relationships between peers (Sutherland & Legge, 2016; Smith et al., 2010). Interestingly, participation in this type of program developed friendships between SWD and nondisabled peers who held substantial hierarchical roles within the school environment, which was supported through multiple data sources. Demonstrating feelings of caring was also substantially supported under this theme. Quay et al., (2003) described how participation in lesson activities in the outdoors enhances feelings of caring between all people involved. This was evident in the current study as all data sources identified feelings of caring between all members of a UDAE. Participants of the study identified the importance of putting the needs of other people before the needs of themselves and develop feelings of trust between one another.

Teamwork and lifelong pursuits were vividly expressed under the theme generalization of teachable moments. Similar to the findings of Goodwin and Watkinson (2000) positive experiences were developed through SWD being afforded the opportunity to participate in lesson activities meaningfully and competently with their nondisabled peers. It is apparent that this is due to participants demonstrating the characteristics of teamwork within the UDAE program where the emphasis was placed on the process of group dynamics to successfully meet the lesson objectives. Moreover, parents described

how participation in this specific curricular model was advantageous for all students involved because the activities were new for everyone, which assisted in people being able to recognize their personal barriers as well as the barriers of others, which developed feelings of support between all parties involved. This sense of support can enhance personal growth due to the elimination of potential risk factors (Berman & Davis-Berman, 2005).

In addition, several persons in this study illustrated how participating in this type of program afforded opportunities to transfer what they learned into other areas of life. This could be due to AE and OPs concepts being applicable to other areas of life, thus, underlying concepts within this model are very generalizable (Cooley, Burns, & Cumming, 2014). This was apparent in the current study as participants discussed that what they learned in this program was applied to other settings in their lives now such as work and leisure activities. Participants who were alumni of a UDAE in this study described how the content taught in the UDAE gave them the skills and knowledge to work with different populations. Further, parents of SWD described how participation in this program afforded them opportunities to work with other people and try new things. Lifelong pursuits was evident in this study as multiple data sources identified that involvement in UDAE developed the motivation to pursue careers and leisure activities related to the content and environment of this type of program. It was evident that participation in UDAE can develop long term feelings of motivation to enhance the learning of other people.

Acculturation has been identified as an influential factor in engaging in AE and OPs related occupation (Zmudy et al., 2009c). This was evident within the current

practices of participants who previously engaged in this type of program during their high school career. However, unlike the findings of Zmudy et al., (2009c) the acculturation of AE and OPs concepts by participants was supported through school-based experiences. Further, past research has identified that learning mechanisms taught in AE and OPs transferred to multiple contexts (Sibthorp et al., 2011). Fittingly, this was thoroughly described within this study. As mentioned earlier, multiple participants described that involvement with this type of program developed the ability to transfer what they learned into their lives. For example, Lizzie explained during an informal interview that even though she is pursuing a career in special education, she applied concepts she learned from the UDAE to her students she is working with now. In addition, Anna and Reese described during formal and informal interviews that the experiences they gained from participating in a UDAE program motivated them into pursuing careers and leisure based activities specifically related towards physical activity, AE and OPs, and SWD.

Implications

Several implications for adapted and general PE teachers can be derived from this study. The results indicate that implementing an AE and OPs class for SWD and their nondisabled peers can foster long term social and educational benefits for all involved. AE and OPs are curricular models that focus on the process of completing lesson objectives and promote frequent interactions (Forgan & Jones, 2002; Sibthorp et al., 2011; Shi & Hsu, 2016). When asking how participating in this program during high school influenced their career now, several participants described how UDAE enhanced their ability to appropriately communicate and work cooperatively with other people in various settings. Further, several participants who are now pursuing careers in adapted PE

and special education classroom teaching stated how this program assisted them to support SWD in various educational settings.

The current study also shows that participating in this class enhances feelings of community among SWD and their nondisabled peers. Parents and faculty members explained that this class afforded SWD opportunities such as attending the prom or going to the movies. Several parents indicated how their children would rarely interact with other people before participating in the UDAE program. Parents felt that this program is what gave their children the confidence to attend different social events and embark in different leadership opportunities. Faculty members also described how this program gave students without disabilities a chance to look at the person rather than the disability when working with SWD and made them more comfortable to interact with them. This was further identified during observations of the current program taking place. During observations, the primary researcher witnessed SWD and their nondisabled peers interacting with each other in a positive manner.

Participants described the effectiveness of implementing this type of program were due to lesson activities being different from a traditional PE setting, the authenticity of lesson activities, and having passionate teachers support the program. Participants felt that this class was motivating for students because it was different from what they typically did in PE classes. For example, several parents explained that their children never went rock climbing or caving prior to enrolling in the UDAE program and these unique activities motivated them to continue being physically active outside of school. Further, alumni and parents described how participating in authentic lessons as a culminating event was motivating for all students. Alumni described how rock climbing

on natural rock at the conclusion of a rock climbing unit was fun and exhilarating for all students. Lastly, participants described that the effectiveness of this program was drawn from passionate teachers who put substantial effort in ensuring the success of all students.

Limitations

The framework of the class may not be generalizable to an inclusive physical education environment where SWD are placed in a general education class. It is recognized that the PE environment in this study involved nondisabled peers going through a screening process to participate in the class. Therefore, this class demonstrates a reverse inclusion setting to support SWD. With that being identified, the nature of this PE setting may constrain the conclusions. In addition, of the five participants that were alumni UDAE, four of them were female and two out of the three parents were female as well. Thus, the researcher was restricted in making gender comparisons, which is a fruitful area of investigation. Moreover, the current study investigated a UDAE program that took place at only one school with one lead teacher facilitating the program. Lastly, individuals with disabilities weren't interviewed to illustrate their feelings of the program which can hinder the ability to evaluate the program based on their perspectives.

CONCLUSION

This study provided three main conclusions based on the information attained from multiple data sources. First, it was evident that participating in this type of program altered the way SWD perceived their nondisabled peers and vice versa based on responses of alumni and parents of SWD. Secondly, participating in this setting teaches various life lessons, which transfer to life after graduation. Lastly, this program fosters feelings of community between individuals with various backgrounds and characteristics.

Altered perceptions between SWD and their nondisabled peers was thoroughly illustrated throughout the current study. Parents described how this program was beneficial for their children as well as their nondisabled peers because it gave both groups an opportunity to discover similarities between each other and become more accepting of their differences. In addition, faculty members described how their involvement in this program altered the way they perceived SWD and their nondisabled peers in regards to how they demonstrate abilities of teamwork, caring, and independence.

It was evident that participants generalized what they learned in this program to their adult lives. For instance, participants in a UDAE program during their high school career discussed how this environment motivated them to continue working with SWD in educational settings such as special education classroom teaching and adapted physical education. Moreover, participants who participated in this class during high school who didn't pursue careers involving SWD illustrated how they took principles from what they learned and applied it to their careers such as working cooperatively with others and differentiating the way they communicate to meet group objectives. Further, parents

described how participation motivated their children with disabilities to stay physically active and develop the ability to demonstrate autonomous decision-making.

The current study revealed how participation in this UDAE class developed feelings of community among all students through the development of friendships and feelings of caring towards each other. Various data sources described how students developed friendships with people of different hierarchical roles because of participating in a class that focuses on the success of the group. Multiple participants described through formal and informal interviews how SWD felt more connected with their nondisabled peers due to exhibiting traits of caring. Parents of SWD explained how their children felt more part of the school community because of nondisabled peers inviting them to social events outside of class. Faculty members supported this claim when discussing how nondisabled peers invited SWD to social gatherings such as the prom or the local movie theatre. Therefore, the current study supports the claim of participating in a UDAE program can develop feelings of friendship within the class setting, which will transition to other environments.

The current study addresses multiple positive characteristics regarding the implementation of a UDAE course as part of a high school physical education curriculum. Based on interview responses of multiple participants, students engaging in this type of program continue to stay active and view others as people before instantly looking at other traits such as having a disability. Further, as described through multiple data sources, successful implementation of this type of program requires physical educators who demonstrate passion and drive for success of all students. Lastly, results from this study illustrate that involvement in this type of program can substantially assist

individuals to work with other people in a cooperative manner and better prepare them to pursue careers involving individuals with disabilities.

Suggestions for Future Research

Future research regarding the benefits of a UDAE may include gaining a more hermeneutic phenomenological inquiry of this type of program from gathering information from current students engaged in this setting. Several research methods to gain this type of insight may include photo-elicitation interviews with current students with and without disabilities. This can be a fruitful area of investigation as photo-elicitation interviews have been shown to quickly develop rapport between the participant and the researcher and it allows the participant to express their ethos while exploring the photograph (Collier & Collier, 1986).

Another research method to pursue a deeper understanding of this type of program from the perspectives of current students could be through a combination of focus group and individual interviews regarding the characteristics of participating in a UDAE program. We recognize that the reversely integrated nature of the program studied may not be generalizable to other inclusive PE settings. Therefore, another fruitful area of future investigation may be to target the meaning behind a UDAE within an inclusive PE class, which requires no screening process for nondisabled peers to participate. This can potentially develop indications to identify and appreciate the strengths and barriers from both settings.

Other areas of future research may include investigating the benefits of participating in a similar program at the middle school level and the impact gender has on

nondisabled peers mentors. Lastly, another area of future research may include studying the effects of implementing a training session for nondisabled peers mentors.

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APPENDIX A
INSTITUTIONAL REVIEW BOARD RESEARCH APPROVAL LETTER

To: Nicolas Faulds

From: Bart Van Voorhis, Coordinator
Institutional Review Board (IRB) for the
Protection of Human Subjects
bvanvoorhis@uwlax.edu
608.785.6892

Date December 26, 2017

Re: **RESEARCH PROTOCOL SUBMITTED TO IRB**

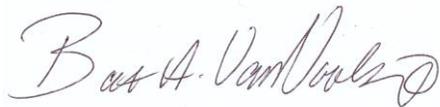
The IRB Committee has reviewed your proposed research project entitled: ***"Perceptions of Universally Designed Adventure Education"***.

The Committee has determined that your research protocol will not place human subjects at risk. **The attached protocol has been approved and is exempt from further review per 45CFR46, 46.101(b)(2).**

However, it is strongly suggested that Informed Consent always be used. Remember to provide participants a copy of the consent form and to keep a copy for your records. Consent documentation and IRB records should be retained for at least 3 years after completion of the project.

Since you are not seeking federal funding for this research, the review process is complete and you may proceed with your project.

Good luck with your project.

A handwritten signature in black ink that reads "Bart A. Van Voorhis" with a stylized flourish at the end.

cc: IRB File

APPENDIX B
THEMATIC CODING MANUAL

Generalizing Teachable Moments (1)

➤ Teamwork

- I think this class has been good for me because it has helped me work with other students and helped me learn some skills at being a leader too. It has shown me some things that I can keep doing even when I am finished with school (Reflection Journal #6)
- Surely one must be selfless in order to help their team achieve group success. The act of belaying for a climber demonstrates this perfectly. (Reflection Journal #2)
- Overall this class has impacted me by showing me that some people just need a helping hand and some guidance and I really enjoyed being able to do that. (Reynolds Narrative description)
- I think they are more likely to be open minded and inclusive in their thinking for our society overall and not believe that certain people belong in certain classes or certain jobs so I think it really opens their mind and how it should be included in our society. (Administrator Interview Response to Question #4)
- Nondisabled peer assists student with disability with putting on winter gear (Observation #3)
- Even though I wasn't one of the people that carried her, I still did my part to help by carrying supplies (Reflection Journal #6)
- Students with and without disabilities assist instructor with handling equipment (Observation #3)
- Students ask each other if they need help throughout the lesson activity (Observation #2)
- In this class you will not see cliques; student's demonstrate responsibility by altering who they are partners or work with in a group. The tones, expectations, and goals are set by the teacher and carried throughout the year. (Reese W Narrative Description)
- so it gave him more confidence to go into other situations and be able to jump in. (Jillian Parent Interview Response to Question #1)
- I think that when we teach our um, our kids how to be more open and accepting that has a bigger impact through the rest of their lives. (Jillian Parent Interview Response to Question #4)
- he has um, learned how to, uh help other people. (Jillian Parent Interview Response to Question #5)
- "but it kind of was able to prepare me for working in group settings even though I'm not working with someone that has a disability, it still I'm able to kind like work with them better and understand you know kinda their needs and everything." (Kristen interview response to question #2)
- If you're part of an organization and you've got a department of thirty people, you got to get to know those thirty people and work well with

them and get along with them; well that's what we're doing here
(Secondary Instructor Interview Response to Question #7)

- If nothing else, I hope I was a positive influence on the class by cheering them on (Reflection Journal #3)
- Nondisabled peers walk with students with disabilities and engage in small talk (Observation #3)
- Peers without disabilities ask their peers with disabilities if they need any help (Observation #3)
- Students ask each other for help when cutting down tree branches (Observation #2)
- if I take one of our students with disabilities and we walk down the hall if somebody that's in our class or has been in our class previously and has formed that relationship with him they'll talk to him they'll say hi..they'll they'll interact just like peers, just like they should interact with any other peer whether they have a disability or not. (Primary Instructor Interview Response to Question #3)
- for some of our students with special needs, not all of them, um, it's the first time they've had like really close relationships with multiple other people that don't have special needs and some of them, um, cross gender will start to have feelings towards the student towards the peer mentors cause they're really nice to them and they're making positive relationships because they are friends and they're making those positive connections and they've never had that or they've, I shouldn't say they've never had that, they've had limited interactions like that and our students with, with special needs sometimes have a hard time with, how do I interact with that person when I have feelings for them?.....but we use it as a teachable moment....(Primary Instructor Interview Response to #6)
- I'll message her on Facebook and see how things are going and get updates and stuff from her so it's really nice to see that you can easily make someone's day by just a small act. (Kristen Stewart Interview Response to Question #3)
- We always did a ton of team building we had to work effectively together before we could even think about going rock climbing (Reese W Interview Response to Question #4)
- Nondisabled peer compliments student with disability for helping clean up equipment (Observation #6)

➤ **Lifelong Pursuits**

- I participate in uh, programs outside of uh, work and things like that to mentor kids in the outdoors. I uh, uh, try to participate in the community mentoring kids as much as possible so it really, that program really, I wouldn't say it prepared me but it shaped me into, into a mentor because it

helped me with those kids. (Ryan Reynolds Response to Interview Question #3)

- ...that girl came into this class, she was going to graduate and she wasn't going to do anything (the girl in foster care) and why wouldn't she be? Why wouldn't she be just pissed off at life. Her life sucked you know? And she went to TC, she went onto school, she went onto get a job and love life and do things and I honestly believe it was because of that class, honestly and it sounds like a big old pipe dream, but it's not... (Cynthia Interview Response to Question #6)
- Uh, we have had a number of students that want to work with special needs students as part of their future career and they look at this as a great opportunity to see what it's like. (Secondary Instructor Interview response to Question #4)
- They learn about it too they learn about you know techniques and about different equipment and things like that so um, you know I think that has an opportunity for people to be involved longer term I think, (Don Interview Response to Question #7)
- When you started doing those activities you realized how important it was to stay strong so you could enjoy, enjoy physical activities, I noticed that. (Susan B Interview Response to Question #5)
- I enjoyed learning how to setup an ice shanty and how to make the correct fishing knots (Reflection Journal #6)
- So I feel like it definitely sparked my interest in what I want to do with my career. (Lizzie Interview Response to Question #1)
- Um, probably just...everything I learned in that class from um, Eggrich has made me and Bagnesky has made me work with the kids I work with now in my job um, so much easier. (Lizzie Interview Response to Question #5)
- I um, feel like I can make goals easier for um, kids setting their goals and not only setting them, but achieving them in the long run and just seeing progress is always something that can take a long time but um, it's always worked out in the end so, yeah! (Lizzie Interview Response to Question #5)
- So I feel like everything just made me, from that class made me just want to pursue the career that I'm going to be a special education teacher! (Lizzie Interview Response to Question #6)
- The activities taught in an adventure program are simply the tools to teach to the national standards. (Reese W Narrative description)

- the trust and the communication um, that I learned in that class and transferred it over to my um, career as a um, activities assistant at a state center for individuals with disabilities. (Anna Interview Response to Question #6)
- I would say this this program is the main reason why I'm here and the main why I'm putting in the effort for the adapted minor (Reese W Interview Response to Question #3)
- as I was a senior in high school I got my level one certification as a result of that class and participating with a high ropes course. (Reese W Interview Response to Question #5)
- I mean the program is what really decided where I wanted to go based on knowing that this is a possible possibility of a program that I could run and that there is a model that I could follow after (Reese W Interview Response to Question #6)
- So in after graduation, I didn't really know what I was going to do so I kind of put my mindset to figuring out where I wanted to go so I figured out where I wanted to go and I kind of you know fell short in a few places and the and my mind always went back to that universal PE program with the, uh, with the kids with disabilities showing how hard they pushed every single day and how hard they have to keep fighting to uh, uh, do the things that they want to do. So it was kind of a huge motivator, uh, from working with those kids, uh, in that program. (Reynolds Interview Response to Question #2)
- Former student says to the class that participating in UDAE is what motivated her to continue climbing after graduation (Observation #6)

Sense of Community (2)

➤ Friendship

- I have made friends in this class that I know I would not have made without it (Reflection Journal #4)
- I have met some people that I would probably have never talked to, if it wasn't for being in this class (Reflection Journal #1)
- Um, inviting them to dances going you know after this class we've had kids ask kids to prom you know we've had special needs girls have that prom experience and it's with a regular ed. (Cynthia Interview response to Question #2)
- It's not just peers with and without disabilities then it's peers with cultural groups that they wouldn't have taken the time to get to know and friendships that blossom from that as well because that they count on each other so much. (Cynthia Interview Response to Question #3)
- I know my oldest son and a lot of his friends that were in that class ask still all these years later "how is so and so, have you seen him?" "How are they doing?" So it's just it's not just it doesn't end here I guess is what I'm saying. (Cynthia Interview Response to Question #7)
- ...since he's been doing this he he'll go into the high school for an after school program. (Don Interview response to Question #2)
- Good opportunity to meet new students.(Susan B Interview Response to Question #5)
- Watching everyone bond and become closer than I thought we ever would was terrific (Reflection Journal #8)
- I'm still friends with them on Facebook (Reese W Member Check)
- Not only how hard everyone worked but how everyone got to know each other and came to be such a great group and an awesome group of kids and friends (Reflection Journal #5)
- So now they have formed that friendship that bond, um there's, there's just interaction as far as texting, phone calls, hanging out outside of school. (Primary Instructor Interview Response to Question #3)
- it gave him a better connection in school to other kids that he would see in the hallway that he maybe wasn't so used to seeing (Jillian Parent Interview Response to Question #1)
- it just gave him some friendships and stuff that he typically didn't have (Jillian Parent Interview Response to Question #1)
- they would be so excited when the wrestling boys would come and show up. And they would talk about their ASL games (Lizzie Interview Response to Question #7)
- he's wanting to do social things with his friends, um, it's not real interactive he still doesn't have those skills as well as other kids, but the kids that are picking him up that know that and they know how to interact with him enough to make him feel like part of the group. (Don Interview Response to Question #5)

- it helped me kind of um, be comfortable with building friendships in college (Anna Interview Response to Question #2)
- the friendships are super valuable to me today (Anna Interview Response to Question #5)
- when somebody posts pictures of the program on from when I was, when I was participating in it. Um, we just interact with each other and commemorate about those memories. (Anna Interview Response to Question #5)
- I would not change any of the things that I learned from this class or friendships I've taken away (Anna Narrative Description)

➤ **Caring**

- I liked that people were willing to help me when I needed a hand (Reflection Journal #1)
- You have to make sure that you're looking out for them because sometimes they might not understand something is unsafe if they do something. (Kristen Stewart Interview Response to Question #4)
- Um, I've seen regular ed. Kids stand up to their peers in defense of these kids. (Cynthia Interview Response to Question #3)
- The highlight of our archery unit was when Andrea proved the Myth Buster wrong by shooting her crossbow bolt right into the end of another one (Reflection Journal #6)
- Yeah I definitely seen a level of compassion and wanting to involve in or include students with disabilities in experiences they wouldn't typically get to do. You really see a joy in our typically developing students when they are able to help. (Administrator Interview Response to Question #3)
- it's just the level of togetherness and sense of community is absolutely essential and something we want for our culture here. (Administrator Interview Response to Question #7)
- as you walk down the hall you'll see the students who were in the class interacting, which you didn't see before. (Primary Instructor Interview response to Question #3)
- They're going to watch their adapted sports league games, which they wouldn't have done before or cause they didn't really know about it. (Primary Instructor Interview response to Question #3)
- he's wanting to do social things with his friends, um, it's not real interactive he still doesn't have those skills as well as other kids, but the kids that are picking him up that know that and they know how to interact with him enough to make him feel like part of the group. (Don Interview Response to Question #5)
- So I I will say out of the adapted kids that I've met have always gotten out of their box by encouragement you know almost easier to handle than. (Susan B Interview response to Question #6)
- It was all so great because I had people be with me that let me be myself around them (Reflection Journal #8)
- Students warn their peers of potential safety hazards-careful when walking on the ice, the instructor is cutting down trees so avoid this area (Observation #3)

- Students express concern for each other- Student was greatly concerned when a peer got hit by a tree branch (Observation #2)
- I'll message her on Facebook and see how things are going and get updates and stuff from her so it's really nice to see that you can easily make someone's day by just a small act. (Kristen Stewart Interview Response to Question #3)
- he was awake in the morning before he needed to be and ready because he was so excited to get there every day and so it gave him um, just really a sense of belonging and uh, a fun and safe place to be (Jillian Parent Interview Response to Question #4)
- They, they if one student needs help from several of them or the whole group the whole group is there to succeed together. (Jillian Parent Interview Response to Question #8)
- it just made me realize that not only to think of myself, but always others and their feelings towards um, different goals that they have and the fears that come along with that. (Lizzie Interview Response to Question #2)
- You have to be respectful of the other kids needs in the class, it's not just yours. (Lizzie Interview Response to Question #4)
- with your um, pride in them and things of that nature, they would feel more comfortable experiencing things like with a friend or someone that they trust (Anna Interview Response to Question #4)
- bullying like there is no place for that in that class or any class, but especially one where students are putting themselves outside of their comfort zone I think it was a very important aspect (Reese W Interview Response to Question #4)
- Nondisabled peer helps student with disability get a harness on (Observation #6)

Changing Life Perspectives (3)

➤ Altered Perceptions

- I think it really helps people see past those differences and view the person rather than the disability. I think that's huge. You know you can see that that's Joe that's not a student with Down syndrome or that's that's Bob that's not just a person with autism, that's just who that person is. (Primary Instructor Interview Response to Question #4)
- some of the "popular" in school you know athletes that are going through this or other kids that are doing really well that take this class you know know him and think of him as their friend and so he, um, I think it's huge for other kids to get exposure to disability to special needs that they know it's not something to be scared of because it's just Cole. (Don Interview Response to Question #4)
- "that's just how Cole is"...he has to go over here and flap his arms a little bit now right now or he has to he's not going to answer you right away, but you just have to wait for an answer. They just know him they don't think anything of it. (Don Interview Response to Question #4)
- I guess I kind of discovered you can really help kids or adults with disabilities without even like realizing it like I had a lot of fun being in that class it was definitely my favorite class of high school and it's just like the small things that really matter to them I think you know just saying hi to someone in the hallway.(Kristen Stewart Interview Response to Question #3)
- that's why I think the class is successful is that we talk about everybody has strengths, everybody has weaknesses and as a group we need to do things to play on everybody's strength to make up for the weaknesses of, of everybody in the group (Primary Instructor Interview Response to Question #1)
- feeling much, much more comfortable working with his peers and um, not being on the sideline. (Jillian Parent Interview Response to Question #1)
- their participants and not just putting them on the sideline and watching their friends do things(Jillian Parent Interview Response to Question #4)
- So I think the two way street for learning there is um, is uh, a life lesson that should, everybody should have (Jillian Parent Interview Response to Question #4)
- through my son's childhood and high school years, we have had classmates come to us and say um, how much they thought of Ethan for, um, teaching them kind of life lessons that they wouldn't have had the opportunity to learn(Jillian Parent Interview Response to Question #4)
- Um, because of the environment of it um, pairing the activities along with nondisabled peers and you know the disabled kids, um when you have all

those things working together is what makes this just an exceptional program. (Jillian Parent Interview to Question #7)

- with the um, coordination of abilities and cognitive levels and where it's set up for everybody to be successful(Jillian Parent Interview to Question #8)
- I took a boy with Down syndrome to prom with me and the community was happy (Lizzie Interview Response to Question #6)
- Not a single person was standing alone during the building of winter shelters, all students were interacting with each other and conversing (Observation #2)
- Students with disabilities are provided positive reinforcement by their nondisabled peers (Observation #3)
- Students with and without disabilities present as a group to their class (observation #1)
- I have never been a part of a group that is this focused on team success and aware of everyone's physical and emotional needs (Reflection Journal #7)
- Once we all got into the large room we decided as a group what we wanted to go see (Reflection Journal #6)
- Snowshoesing was a particularly interesting unit because the instructors, other students and I had to brainstorm on what was the best way for me to snowshoe (Reflection Journal #4)
- In this class you will not see cliques; student's demonstrate responsibility by altering who they are partners or work with in a group. (Reese Witherspoon Narrative Description)
- It was all so great because I had people be with me that let me be myself around them (Reflection Journal #8)
- It was easier for me to trust when I knew they had complete faith in me to be there for them if they fell (Reflection Journal #8)
- It amazed me how everyone came together to help everyone out, just not that one kid who was super star or star athlete (Reflection Journal #5)
- It is always nice to work with new people. I enjoyed my fellow classmates (Reflection Journal #3)
- I felt I was challenged in all four units but with the help of my classmates and my own problem solving, I felt successful (Reflection Journal #1)
- Students ask their group members for assistance or clarification (Observation #5)
- There were a lot of us that had been in the class for most of our high school career, so by the time it came to our senior year we had become really close and able to trust on each other (Kristen Stewart Narrative Description)
- They had fun, but they took their responsibilities very seriously to make sure that everybody was safe. (Jillian Parent Interview Response to Question #4)

- the other staff and the other students made me comfortable enough to get out of my comfort zone (Anna Interview Response to Question #3)
- having trusting other people doing what they're saying they're gonna do to protect you or protect your back so that um, no-one feels bad about themselves or whatever in that experience is very nice as well. (Anna Interview Response to Question #5)
- They made activities possible for everyone of all abilities (Anna Narrative Description)
- They looked at a person and saw their abilities and what they could do and adapted activities as needed (Anna Narrative Description)
- They learned life lessons such as the fact that we are all similar in some ways (Anna Narrative Description)
- Uh, so before I got involved with the program you know I kinda I didn't see the disability, the people with disabilities as the same as us, you know I always you know I always thought they couldn't do things. The things that we could do without disabilities so it was a really big eye opener to me after the first year (Reynolds interview Response to Question #1)
- it's opened my eyes to see that there way more abilities than disabilities in a lot of these kids (Secondary Instructor Interview response to Question #1)
- Former students shows class two different ways to climb (muscle and bone) to identify this sport (bouldering) does not take substantial strength to be successful (Observation #6)
- Multiple belay school stations are set up to maximize participation (Observation #6)
- Students were given the option to boulder or participate in belay school (observation #6)

➤ **Autonomy**

- I feel like I did not have to depend as heavily on others for belaying this year and I enjoyed that independence (Reflection Journal #4)
- the ropes course. Getting to do that and um, I mean that's a huge confidence booster for him. A child with special needs because everybody is cheering for him and are willing to help him out (Susan B Interview Response to Question #1)
- it made him probably braver getting to the top of the ropes course you know he had that was yeah because you had to be able to hang on and support yourself while you're in the sling (Susan B Interview Response to Question #3)
- I think it puts, especially our peer mentors, but even our, our everybody in the class it puts them in unique situations and teaches them about responsible decision-making. (Primary Instructor Interview Response to Question #7)

- the confidence it puts in or instills within students with disabilities I think is really key and I think our teachers work really hard at that! (Administrator Interview Response to Question #7)
- it's interesting to see them, regular ed. Students give special needs students responsibilities, hold them accountable and I guess that would all come under leadership. (Cynthia Interview Response to Question #4)
- Peers without disabilities offer their peers with disabilities opportunities to help with winter shelter building (Observation #3)
- it gave him a ton of confidence to work with his peers (Jillian Parent Interview Response to Question #1)
- their participants and not just putting them on the sideline and watching their friends do things(Jillian Parent Interview Response to Question #4)
- through my son's childhood and high school years, we have had classmates come to us and say um, how much they thought of Ethan for, um, teaching them kind of life lessons that they wouldn't have had the opportunity to learn(Jillian Parent Interview Response to Question #4)
- The differences made in his life have been um, um, all positive (Jillian Parent Interview Response to Question #4)
- it really made um, the kids like my son, um, want to work really hard and feel like they could um, do the same things because there was just so much of a positive environment. (Jillian Parent Interview Response to Question #4)
- What it gives us as parents um, to see our child be successful to see our child be accepted um, to see other students learn from our child um, and to see him with value and um, as a contributing person and in society and in any endeavor (Jillian Parent Interview to Question #8)
- that's why I think the class is successful is that we talk about everybody has strengths, everybody has weaknesses and as a group we need to do things to play on everybody's strength to make up for the weaknesses of, of everybody in the group (Primary Instructor Interview Response to Question #1)
- being willing to share my opinion with others in a work setting (Anna Response to Interview Question #2)
- the strengths which, I found within myself that I did not know was possible is another that I continue to carry with me. (Anna Interview Response to Question #5).
- You know they, they pushed me to be a better person (Reynolds Interview Response to Question #2)

APPENDIX C
INTERVIEW QUESTIONS FOR PARENTS OF
STUDENTS WITH DISABILITIES

Universal Adventure Education Interview Questions (Parents of Students with Disabilities Who Were in the Program)

1. How has the universal adventure education program improved your child's communication and social skills?
2. How has your child's self-confidence changed since being involved in the universal adventure education program?
3. How has the universal adventure education program improved the physical and motor skills of your child?
4. What do you think are the most important benefits to the universal adventure education program for your child and all children?
5. In what ways have you seen your child exhibit different social traits outside of school?
6. In your estimation, what factors create a successful inclusive physical education class environment?
7. Which of these factors do you feel are present in the universal adventure education program?
8. What suggestions do you have for teachers who want to start a universal adventure education program?

APPENDIX D
INTERVIEW QUESTIONS FOR FACULTY MEMBERS

Universal Adventure Education Interview Questions (Faculty and other program staff)

1. How have your perceptions of students with or without disabilities changed as a result of the universally designed adventure education program?
2. What changes have you noticed in the atmosphere of your school among students since the start of the universal adventure education program?
3. What changes have you seen in the interaction behaviors between peers with and without disabilities in your school since the start of the program?
4. What do you think are the most valuable benefits of being a peer mentor in the universal adventure program?
5. What valuable benefits have you noticed in the students at your school?
6. What do you feel are the negative aspects of the universal adventure program?
7. In what ways do you feel that the universal adventure program helps prepare all students for real life situations?
8. What are the most critical factors for success of implementing a universally designed adventure education program?
9. What suggestions do you have for teachers who want to start a universal adventure education program?

APPENDIX E
INTERVIEW QUESTIONS FOR FORMER PARTICIPANTS

Universal Adventure Education Interview Questions (Former Nondisabled Peer Tutors)

1. What were your feelings towards your peers with disabilities before becoming involved with the universal adventure education program? What were they after your first year?
2. How did being a peer mentor in the universal adventure education program help prepare you for life situations after graduation? (appreciation for the outdoors, ability to take on leadership roles, altered perspectives)
3. What did you discover about yourself through being a peer mentor?
4. What are some characteristics that you think make for a quality or effective high school peer mentor in a universal adventure education program?
5. Of the things you learned while you were a peer mentor, what are several that are most valuable to you today?
6. How has being a peer mentor influenced your decision about the career you wish to eventually pursue?
7. What suggestions do you have for teachers who want to start a universal adventure education program?

APPENDIX F
NARRATIVE DESCRIPTION WRITTEN DIRECTIONS
FOR THE PARTICIPANTS

File Name: Narrative Description Template for Former Nondisabled Peer Tutors

In 300-400 words, please describe what you think an ideal universal adventure education program should look like or include. In your response, explain what aspects you would change or keep the same in the universal adventure education program you participated in during high school. What changes would you make and why?

APPENDIX G
PARTICIPANT CONSENT FORM

Perceptions of Universal Adventure Education Programs

Informed Consent Form

My name is Nicholas Faulds. I am a graduate student at the University of Wisconsin-La Crosse. I am inviting you to participate in a research study about the impact of a universal adventure education (UAE) program in physical education for students with and without disabilities. This form will tell you about the study to help you decide whether or not you want to participate.

Why is this study being done?

The purpose of this study is to investigate the perceptions that a UAE program has on parents of students with disabilities, adults who formerly served as nondisabled peer teachers, and high school staff member's familiar with the program. You are being asked to take part in the study because you have been involved in the UAE program at Holmen High School.

What do I need to do?

If you decide to be in the study, I will ask you questions about the UAE program at Holmen High School. I will ask you to do this through interview sessions which will be audio recorded. The audio recorded interviews will take place for about 30 minutes and will be conducted either in small group or phone settings. In addition, follow up interviews may be conducted to clarify your responses. Lastly, for any participants who have previously served as peer mentors in the UAE program, you will be asked to provide a one-page typed narrative statement on what you feel an ideal UAE program would look like.

What are the benefits to me for taking part in the study?

Taking part in this study may not have direct benefits to you, but it will help professionals in the fields of adventure and adapted physical education learn the benefits of a UAE program. This study has the potential to benefit physical educators by providing directions to implement a UAE program in their school district, which will enhance student learning and the cultural atmosphere between students with and without disabilities.

Are there any risks to me if I decide to be involved in this study?

There are no foreseeable risks in this study.

How will my information be protected?

Your responses will be confidential as the research team will be the only people with access to any personal information you provide. Also, pseudonyms will be used when reporting data. The results of this study may be used in reports, presentations, or publications but your name will be kept confidential at all times. All data will be stored in a password protected computer and will be retained up to two years after the project is completed.

Do I have to be in the study?

No, you don't. The choice is yours. Your participation in this study is completely voluntary. You can change your mind anytime if you decide you don't want to be in the study anymore.

What if I have questions?

If you have questions about the study, you can ask me now or anytime during the study. You can also call me at (585)447-1908 or e-mail me at faulds.nichola@uwlax.edu or the chair of this study Dr. Matt Maurer at (608)785-6535 or mmaurer@uwlax.edu If you have any questions about your rights as a participant in this research or if you feel you have been placed at risk, you can contact the UW-La Crosse IRB Office at irb@uwlax.edu. (608)785-8124.

Signing below means that you have read this form and that you are willing to be in this study.

Print Your Name: _____

Your Signature: _____
Date

Name of the Investigator: _____

Signature of the Investigator: _____

APPENDIX H
REVIEW OF RELATED RESEARCH LITERATURE

REVIEW OF RELATED RESEARCH LITERATURE

Introduction

Adventure education (AE) has been defined as an experiential learning process in which people construct knowledge through direct experience, skill practice, and strengthening values (Shih & Hsu, 2016). It includes seven stages to enhance student collaboration and communication: Acquaintance activities/names games; ice breakers/initiatives; communication activities; problem solving activities; trust activities; low elements; and high elements (Bisson, 1999). AE is an educational framework that focuses on enhancing teamwork, trust, cooperation, and self-confidence. A unique aspect of AE is its noncompetitive nature, unlike team sports where the goal is to defeat another team. Furthermore, AE can be implemented as a curricular model that can be offered in a variety of settings; therefore, AE is an ideal area of instruction to incorporate the use of peer assisted learning strategy (PALS) in inclusive physical education (PE). According to Lieberman and Houston-Wilson (2009), the use of PALS can help facilitate inclusion and allow for individualized instruction. The use of a peer assisted learning in AE can greatly benefit students with and without disabilities in areas of socialization and leadership (Quay, Dickinson, & Nettleton, 2003; Zmudy, Curtner-Smith, & Steffen, 2009a; Zmudy, Curtner-Smith, & Steffen, 2009b; Zmudy, Curtner-Smith, & Steffen, 2009c; Forgan & Jones, 2002; Sibthorp, Furman, Paisley, Gookin, & Schuman, 2011).

Inclusion in Physical Education

Inclusion of students with disabilities (SWD) into general physical education (PE) has many benefits in regards to the affective, psychomotor, and cognitive domains of learning. Research has shown substantial social benefits for the inclusion of SWD into

general PE (Vogler, Koranda, & Romance, 2000; Baker, Wang, & Walberg, 1995).

Vogler et al., (2000) found that nondisabled kindergarten students who were in an inclusive PE class with a student with severe cerebral palsy were able to accept (socially) their disabled peer. Thus, the implementation of inclusive PE can be quite advantageous for both students with and without disabilities.

Spencer-Cavaliere and Watkinson (2010) conducted a study on inclusion in physical activity settings from the perspective of SWD. The authors found three themes that illustrated feelings of inclusion, which included gaining entry to play, feeling like a legitimate participant, and having friends. The authors discussed how gaining entry to play was necessary for social acceptance. When students were included by their nondisabled peers, they developed a sense of belonging which leads to an emotionally safe learning environment.

Hutzler, Fliess, Chacham, and Auweele (2002), studied 10 children with physical disabilities. The authors found factors that substantially support inclusion were classmates and friends. Results also showed that when non-disabled peers encouraged peers with disabilities to participate in lesson activities, students with disabilities felt an increase in satisfaction and more united with their peers.

When implementing inclusive PE there are critical practices that need to be taken into consideration to achieve success within general PE (Park, Koh, & Block, 2014). One needs to promote positive interactions between students with and without disabilities (Lieberman, James, & Ludwa, 2004). If done properly all students' quality of life can be enhanced. Practices that help support the inclusion of SWD with nondisabled peers include positive attitude/support, modification, peer tutoring, and additional in service

training (Park et al, 2014). A meaningful subfactor under positive attitudes was frequent interactions between students with and without disabilities.

Contact theory suggests that as people come into contact with people who are different from themselves, stereotypes and prejudice will decrease as they come to understand more about the other person over time. Inclusive PE parallels contact theory. Lieberman et al. (2004) points out that inclusive PE provides a climate in which cooperation is emphasized over competition. This climate is created through teacher modeling. When nondisabled peers participate in lesson activities with SWD, this can provide a SWD a sense of motivational effectiveness (Vogler et al., 2000). Vogler and colleagues described motivational effectiveness as a result of nondisabled peers providing a nurturing environment for their peer with a disability. When analyzing data, the authors discovered that when students took the time to get to know the SWD, the student was not viewed as different.

Block and Zeman (1996) researched the effects of students without disabilities who were involved in inclusive PE and discovered that nondisabled students did not have any unfavorable attitudes towards their peers with disabilities. Meaning that SWD that are included in an educational setting with their non-disabled peers have no impact on the emotional stability of the entire class. Moreover, the authors noted that students without disabilities that participated in inclusive PE were more accepting of rule changes to class activities in comparison to the control group of students who had no peers with disabilities. From the perspectives of students without disabilities regarding the presence of a peer with a disability, Vogler et al., (2000) found the major theme amongst the class was social acceptance. SWD were contributing members of the class.

However, when SWD are mainstreamed in general PE where nondisabled peers are unsupportive, there can be negative effects. In a study conducted by Goodwin and Watkinson (2000) six themes emerged regarding perceptions of inclusive PE. They divided the six themes into two central ideas. The two central ideas were good days and bad days. On good days, the authors found there to be a sense of belonging that emerged from supportive interactions between classmates. Bad days on the other hand were characterized by social isolation between participants. Participants felt rejected and neglected. The authors found that a contributing factor to a bad day in inclusive PE was lack of engagement in class activities by their peers. When analyzing data, the authors found that bad days in PE were caused by nondisabled peers prejudgment of their skill level during class activities. For example, a student in the study described a soccer unit where peers wouldn't include him in the activity by not passing to him and assuming he wasn't able to play soccer due to him having a disability.

Spencer-Cavalier and Watkinson (2010) found that when SWD were not given important roles it may affect level to which they feel included. Spencer-Cavalier and Watkinson discovered in their study that when SWD weren't given important roles or were underestimated in the roles they were capable of holding played a substantial role in their own views of feeling included. If their peers didn't perceive them to be able to actively engage in the lesson, students with disabilities doubted themselves. Therefore, feeling like a legitimate participant depended on others for children with disabilities role as a participant to be valued or challenged. When the participants in the study were recognized for their efforts and strengths then the feeling of inclusion was enhanced.

Successful inclusion in general PE can be a challenge because even if you modify the lesson activity to meet the needs of SWD, this can create a nonproductive lesson for your students without disabilities. Typically, the inclusive PE program is compromised either for students with or without disabilities (Block & Zeman, 1996). However, having nondisabled peers support SWD can be beneficial to both students with and without disabilities. Block and Zeman studied the effects of nondisabled children engaged in inclusive PE. The participants in the study consisted of an experimental group which had three students with severe cognitive delays and a control group with no students who had disabilities. The authors found that when comparing the two groups results in skill acquisition were similar. The authors thought this was due to nondisabled peers being rotated to assist SWD in order for everyone to have the same amount of skill practice during the unit of instruction.

Peer Assisted Learning

The use of students without disabilities to serve as peer tutors or mentors in general PE can substantially support the SWD educational needs in order to be successful in the performance of motor skills (Houston-Wilson, Dunn, van der Mars, & McCubbin, 1997; DePaepe, 1985). Providing support services, which is mandated in the U.S. in Part B of the Individuals with Disabilities Education Act (IDEA) 1990, has the potential to make the difference between successful and unsuccessful inclusion (Block & Zeman, 1996). One must provide the necessary supports based on the needs of the child for an adequate educational experience (Cervantes, Lieberman, Magnessio, & Wood, 2013). With appropriate training, a peer tutor may be exactly what the student with a disability needs in order to be successful in general PE.

In a study by Houston-Wilson et al., (1997) involving SWD receiving support from trained and untrained peer tutors, the authors found that the use of trained peer tutors substantially benefitted the motor performance of the subjects. The authors discovered that untrained peer tutors hindered skill acquisition in performing different motor skills, which included the horizontal jump, catching, and the overhand throw. These findings support the idea that proper training students without disabilities to teach their peers is essential to motor skill acquisition.

According to Lieberman and Houston-Wilson, (2009) characteristics of a quality peer tutor include enthusiasm, patience, and a display of interest in tutoring. Use of peer supports is very helpful in PE because with students who are properly trained and motivated to support their peers with disabilities, allow the teacher to circulate through the class to properly instruct and supervise students while the SWD receive the support they needed in order to be successful. This is helpful in an inclusive learning environment, especially when the teacher has a large class size. To provide appropriate support for SWD in inclusive PE, they may need substantial support. A factor which can inhibit the needed support is large class sizes (Park, et al., 2014). Park and colleagues discussed the difficulty of individualizing instruction in overcrowded classes due to the teacher not having the ability to circulate and attend to every student. Therefore, in oversized classes the PE teacher may not be able to provide as much one-on-one instruction to the SWD that he or she may need in order to be successful. Some SWD may only need minimal support such as verbal prompting or visual cues, but others may need more direct one-on-one instruction, which can be provided through quality peer tutoring or mentoring programs.

According to Cervantes et al., (2013) when utilizing peer tutoring in a one-on-one setting in general PE, it assists the SWD by receiving additional support and attention. Moreover, a program where nondisabled peers support SWD benefits both parties due to the SWD receiving the support needed and the nondisabled peer having the leadership opportunity. Cervantes and colleagues discuss that disability awareness and role-playing can be beneficial strategies prior to training of peer tutors. Therefore, this will potentially motivate students to provide their peers with the support needed. This also gives students the opportunity to enhance their leadership skills because with proper training and exposure to disability awareness, students will obtain the knowledge to advocate for their peers with disabilities.

Klavina and Block (2008) conducted a study focusing on interaction behaviors caused by peer tutors. The authors noted that when classmates who were not peer tutors helped their peers with disabilities, the peer tutors let them help while providing instructions on how to assist. As described by Lieberman et al., (2004) inclusive PE can support the class because it provides students with leadership opportunities. Lieberman and colleagues discuss that inclusive PE promotes the personal development of all students. Thus, incorporating PALS in inclusive PE can aid students achieve personal growth.

Klavina and Block, (2008) conducted a study involving three students with severe multiple disabilities. The authors researched the effect of peer tutoring on interactive behaviors in inclusive PE. They discovered that interaction levels between the target students and their peers without disabilities increased when peer-mediated conditions

were initiated. The authors also found that peer assisted learning can improve physical activity levels among SWD.

Lieberman, Dunn, van der Mars, and McCubbin (2000) conducted a study involving eight elementary aged students who were deaf and eight hearing students trained in peer tutoring. The authors found strong evidence to support that physical activity levels increased due to peer tutoring. Lieberman and colleagues measured the moderate to vigorous physical activity levels of deaf students during a baseline sampling prior to the implementation of trained peer tutors. After collecting data regarding physical activity levels without a trained peer tutor, the authors implemented an intervention period in which deaf students were supported by trained peer tutors. After analyzing both sessions, the authors discovered a substantial increase in the physical activity levels of the participants after implementation of trained peer tutors.

Peer tutoring can be beneficial for the teacher with a low budget in providing the student with the additional support needed. Some school districts do not have the funding or resources to provide SWD with assistance from a paraprofessional. Cervantes et al., (2013) pointed out the fact that peer tutoring can be a win-win approach because it provides a service that is essentially free. Therefore, as opposed to the school district hiring a paraprofessional, the PE teacher can train voluntary peers to provide the SWD the support required to succeed. Thus, implementation of a peer assisted learning model can benefit all parties involved in inclusive PE.

Peer tutoring programs can help enhance a sense of belonging in the general PE environment. Klavina and Block, (2008) found that when support was being provided to students with disabilities by their nondisabled peers, there was an increase in engagement

in lesson activities. In the study, Klavina and colleagues identified that close proximity from assistant personnel increased levels of dependence from adults and limited interactions with nondisabled peers. Therefore, implementation of PALS can assist in enhancing the amount of social interactions between students of various ability levels. The authors also discovered that peer tutors tended to maintain higher frequency of interactions with their peers with disabilities, thus peer tutoring developed more positive interactions in general PE. The authors noted that participation in class activities developed a sense of belonging for all target students, which was achieved through implementation of peer assisted learning.

Using peer-mediated instruction also supports the findings of Klavina (2008) in a case study involving three elementary aged students with severe multiple disabilities. The findings included higher engagement during lesson activities and more frequent feedback being provided to target students due to the implementation of peer-mediated instruction. Klavina (2008) discovered the higher frequency in feedback from peers caused improved academic outcomes. Klavina (2008) found that peer-mediated instruction tended to be meaningful and successful in PE. The author found that peer tutors providing assistance and praise to their peers with disabilities enhanced positive feelings and decreased dependence of support from adults. These findings further support the results of Klavina and Block, (2008) who identified the benefits of implementing peer tutors in PE for SWD.

Adventure Education/Outdoor Pursuits

AE and outdoor pursuits (OPs) are educational tools and processes that place participants in novel environments in order to enhance participants level of

trustworthiness and responsibility. Due to AE and OPs being included within the physical education content standards/benchmarks in 1991, the number of schools implementing AE and OPS have grown substantially (Zmudy et al., 2009a). AE and OPs are unique in that they teach and enable participants to explore and value outdoor skills, change life perspectives, develop self-confidence, and become leaders (Sibthorp et al., 2011).

AE and OPs employ thematic designs by using physical learning materials to guide students in discovering problems followed by identifying solutions (Shih & Hsu, 2016). Shih and Hsu, (2016) stated that in the problem-solving process, participants are encouraged to conduct interpersonal communication as means to develop confidence through team effort and collective responses to frustrating situations. AE and OPs assist student learning via experience. In a study conducted by Gibbons, Ebbeck, Concepcion, and Li (2010) the authors discovered that embedding experiential education into PE can enhance middle school students perceived social regard and self-perceptions. Specifically, Gibbons and colleagues conducted a study involving 1,802 middle school aged students and discovered that experiential education creates a more cohesive school environment.

Sutherland and Legge (2016) highlight the uniqueness of adventure-based learning (ABL). ABL incorporates cooperative, problem-solving, and decision-making activities. The objective of the activities is to help participants develop their own unique abilities with guidance from the teacher or group leaders. Sutherland and Legge. (2016) stated the following:

In contrast to the sport based physical education curriculum, the participants felt that the usual social hierarchies and masculinities were

nonexistent and when they did develop, they shifted based on specific skills needed for each of the units in adventure physical education.

(p. 305).

AE and OPs have been found to enhance participants intra- and interpersonal skills (Rhodes & Martin, 2014). Intra- and interpersonal skills are enhanced due to the frequent interactions that take place between participants. Frequent interactions allow AE and OPs participants to develop close relationships over time. Quay et al. (2010) point out that exploring and learning about relationships within a AE and OPs setting can help participants become more interdependent with others than in the traditional classroom.

Gehris, Kress, and Swalm (2010) proposed that AE activities have the potential to enhance specific components of physical self-concept. Gehris and colleagues reported that the student participants viewed AE activities to be substantially more fun and motivating in comparison to traditional fitness activities. Moreover, a student participant in the study felt that AE activities developed a sense of trust between classmates. The student in the study stated that the trust established between a climbing team was equal to that of a football team.

Larson (2007) explored the effects that an adventure camp had upon the self-concept of adolescents with behavioral problems. Following the adventure camp the participants showed significant positive change in the areas of popularity, happiness, and satisfaction. Larson assessed the self-concept of children with behavioral problems using the Piers-Harris Children's Self-Concept Scale and found that being involved in an adventure camp developed significant differences for the experimental group in

comparison to the control group. Therefore, involvement in adventure-based activities can substantially benefit in the self-concept of adolescents based on the authors findings.

Forgan and Jones, (2002) described AE activities as those that develop an atmosphere of acceptance in an experiential manner. In an experiential manner participants take risks, share, discuss, and problem solve together. During debriefings, students involved in AE activities discuss issues to meet the group's goal, not their individual goal. Forgan and colleague noted that adventure activities are motivating for children due to the noncompetitive activity setting. In addition, the authors noted that when implementing adventure activities, the teacher leads by offering advice rather than instruction. This promotes students making independent decisions, which empowers students to discuss issues towards the activity when needed.

Experiential learning has the potential to be adventitious to a learning environment involving students of varying ability. Sutherland and Legge (2016) point out that participants are actively engaged in knowledge creation. The knowledge that is created is constructed in a collaborative manner between the teacher (facilitator) and the students who work in a self-directed manner.

Gibbons et al. (2010) point out that AE/OPs activities provide a means of team building through physical challenges (TBPC). This can be beneficial for PE students because TBPC can be implemented within existing curriculums. Because TBPCs can be modified and woven into existing curriculums, current measures for proficiency can be met with little or no costs in time or equipment.

Past research focusing on student participation styles in general PE (Griffin, 1985; Pope & O'Sullivan, 2003) has highlighted the fact that students participate in general PE

in a hierarchal fashion. This means that the highly skilled students tend to dominate the gymnasium or field of play a negative manner. Zmudy et al., (2009a) did a similar study within the field of AE and OPs. Zmudy et al., (2009a) discovered a multitude of participation styles. Specifically, Zmudy and colleagues found nine participation styles including go getters, explorers, limelight seekers, fear conquerors, chickens, light hikers, ground supporters, rough housers, and mini-rough housers. The most significant finding though was that within the AE and OPs setting the participation styles did not work in the same hierarchal fashion. Specifically, within the field of AE and OPs the highly skilled students did not dominate the field of play in a negative manner. Instead, students who were quieter and not as highly skilled as some of their peers engaged in the AE and OPs where they challenged themselves and supported their peers. Zmudy and colleagues noted that students who typically weren't the most engaged in AE and OPs activities were able to conquer their fears and gain a sense of satisfaction from participation in activities, but wouldn't be able to accomplish this without support of their peers. Therefore, AE and OPs employs a sense of unity that gives students who would normally fall under a different hierarchical fashion in other PE settings a feeling of belonging from support of their peers.

Past research has also found that AE and OPs can benefit the physical educator as well (Zmudy et al., 2009c). Zmudy et al. (2009c) conducted a study focusing on ecology and task structures within AE. The authors found two task structures that pertained specifically to AE. The systems unique to AE were the exploratory and atmospheric systems. The authors described the exploratory system as a task system in which students morphed an activity into an adventure. In regards to the atmospheric system, the authors

described how it specifically related to the affective domain of learning and was used by adventure educators in the study to create an inviting climate where everyone felt like they were a part of the group. These two systems served to reinforce the instructional, managerial, and student social systems (Allen, 1986; Doyle, 1979, 1983, 1986; Doyle & Carter, 1984) within their AE and OPs program. In regards to the exploratory system, this reinforced the social system due to it enhancing group cohesiveness. Zmudy et al., (2009c) described how the exploratory system caused students to explore the lesson environment with enthusiasm, which created a positive learning atmosphere for students. In regards to the atmospheric system, Zmudy and colleagues described how the overarching goal was to support and sustain the three main task systems. This system supported the development of mutual respect, which assisted the AEs in the managerial task system. Moreover, it assisted in the instructional task system because students were able to complete tasks together in a positive learning environment. Furthermore, the atmospheric system reinforced the social system because students were able to recognize the importance of their peers.

Zmudy et al., (2009b) conducted a study focusing on involving two inexperienced adventure educators. Zmudy and colleagues discussed key factors that influenced the participants in engaging a career in AE. The key factors that led to this included acculturation, exposure to the outdoors, and exploring the outdoors with peers. Following graduation, these factors not only led to pursuing a career in AE, but also promoted advocacy for this curricular model. In the study, a participant discussed during an interview that she introduced AE and OPs to a peer during college, which greatly motivated the peer and introduced a new curricular model for future use. Thus, exposure

to the outdoors can greatly enhance the interests and participation of AE and OPs activities for a lifetime. This idea can also be reinforced by the work of Sibthorp et al., (2011) who discovered that participating in AE and OPs activities during high school can carry over into taking on leadership roles and appreciating the outdoors following graduation.

Friendship development and peers building closer relationships are important outcomes of AE and OPs experiences (Smith, Steel, & Gidlow, 2010). These relationships can help build a more caring community (Quay et al., 2003). Furthermore, Quay et al., (2003) found that students who were friends with each other and involved in OPs demonstrated caring behaviors towards each other, but students who weren't at friendship status were demonstrating similar levels of caring towards each other. Therefore, AE and OPs employ an environment where students all care for and feel cared by their peers to a level not always seen in other school climates. Moreover, participants reported that OPs was a more caring context in comparison to their other classes. In addition, AE and OPs offer opportunities which create transfer learning that can aid students following graduation.

In a study by Sibthorp et al., (2011) involving 508 people who were alumni of the National Outdoor Leadership School, the authors found that the participants mentioned several themes that carried over into their lives because of AE. Three themes described by participants in particular included the ability to function under difficult circumstances, ability to serve in leadership roles, and changing life perspectives because they were either relevant or transferable. Therefore, AE and OPs has shown the ability to prepare participants for situations they will eventually face in real life. This idea is reinforced by

Gibbons et al., (2010). Gibbons and colleagues studied 1,802 middle school-aged PE students, and found that implementation of AE and OPs activities were effective and could be transferred to real-world settings. Gibbons and colleagues studied the effectiveness of implementing activities in PE where the focus was to enhance teamwork, communication, and trust between group members. The authors analyzed the effectiveness of these activities over an 8-month period and assessed student self-perceptions using the Self-Perception Profile for Children (SPPC). The authors found that implementation of these activities increased student levels in self-perception and perceived social regard. Under self-perception, students substantially improved in the areas of scholastic competence, social acceptance, and behavioral conduct. Moreover, the authors found that implementation of AE and OPs activities enhanced student perceived social regards for their parents, classmates, teachers, and friends. Thus, experiential learning activities that are part of AE and OPs can assist in the transfer of learning in social regards of individuals around them in multiple environments.

Social Interactions

According to Samalot-Rivera (2014), social skill instruction can replace negative behaviors with more desirable ones. Social skill instruction can teach students in more constructive and socially rewarding ways to behave properly. Samalot-Rivera (2014) discussed that physical educators have the ability to build and develop students in the affective and cognitive domains by using role playing as a social skill intervention. Through role playing, students can better understand ways to behave during difficult situations. This concept was supported by Lund and Kirk (2010) who discussed that role

playing and debriefing afterwards can assist students to apply what they learned to transfer and apply it to behave appropriately during physical activity settings.

Attitudinal change requires appropriate contact, which is defined by Lieberman et al. (2004) as, “contact that is frequent, long-term, meaningful, appropriately planned and structured, cooperative, positive, and interactive will elicit the greatest attitudinal change” (p.39). Therefore, when students are participating with peer who have disabilities there should be frequent and positive interactions amongst them. By doing this, perspectives of SWD will be more positive, which will facilitate an emotionally safe learning environment.

However, attitudinal change can be difficult to impact in some curricular areas due to there not being as much emphasis on group collaboration. Blinde and McCallister, (1998) suggest that emphasizing individual outcomes and putting less emphasis into teaching individual team sports can aid in PE experiences for SWD. In addition, Blinde and colleague suggest that PE teachers closely monitor the class social dynamics in order for students to foster sensitivity and caring towards their peers with disabilities. Klavina and Block, (2008) found that social isolation and segregation were immersed by close proximity of adult personnel which increased dependence on adults and limited interactions with their classmates. In another study conducted by Klavina (2008) involving using peer-mediated instruction, the results suggested that dependence on adults decreased when SWD were given support in class from their peers. Therefore, in order to promote attitudinal change within PE, there should be less emphasis on just adults supporting students with disabilities and more emphasis on support and interactions from nondisabled peers.

Barriers in Adventure Education

It has been shown that implementing AE principles into PE has the potential to enhance student knowledge in several areas. Lund and Tannehill (2015) described these areas as the ability to trust and solve problems individually and with groups. However, there are barriers that physical educators face when attempting to incorporate AE principles into their curriculum. Identified barriers include instructional strategies by teachers to deliver AE and challenges from administrators (Moreri, 2011). These barriers involve lack of education in AE and OPs and administrator concern for safety and liability. Moreri (2011) described that a lack of instructional strategies by the educator involved PE teacher education programs courses in the areas of AE and OPs.

These barriers have the potential to alter the intended learning outcomes of AE programs. These learning outcomes include improved self-concept, problem solving skills, and communication skills. Moreri (2011) discovered that a majority of administrators in Botswana were unsupportive of outward bound school trips to deliver the AE principles. Administrators and some faculty in this study had concerns about safety. The concern for safety came mostly from a lack of understanding of AE and OPs and a lack of training the educator. In addition, Lund and Tannehill, (2015) identified that AE and OPs has potential hazards for safety due to lack of control on the environment. These concerns include the PE teacher not being able to determine the potential hazardous events of wildlife, insect bites, and uneven terrain. Administrators also had financial concerns. Administrators felt that it was a waste of money to take students on trips to experience the AE model within the environment.

Parental Views on Inclusive Physical Education

From the perspectives of parents, inclusive PE provides the opportunity for social interaction among children with disabilities and nondisabled peers (Columna, Dillon, Norris, Dolphin, & McCabe, 2017; An & Goodwin, 2007; Lieberman, Haibach, & Schedlin, 2012). In a study by Columna et al., (2017) involving 10 families of children with visual impairments perceptions on physical activity, the authors found one of the major themes to be health, social, and psychological benefits. The authors noted that parents encouraged their children with visual impairments to participate in physical activity as much as possible, they wanted their child to participate in physical activity with sighted children as much as possible because they believed that provided the greatest social benefits. Inclusive PE has the potential to be beneficial in the areas of social interaction can further be supported by the work of An and Goodwin, (2007) who noted that a common benefit to inclusive education from a mother's perspective is social interaction. In a study conducted by An and Goodwin, (2007) involving six mothers' and one grandmother who was the primary caregiver of children with spina bifida, the authors noted that the mothers viewed physical education as a beneficial area in the development of social skills including friendship, a sense of belonging, and self-esteem.

The notion of inclusive PE being beneficial for children with disabilities from a parent's perspective can be further supported from the work of Lieberman et al., (2012) involving a study involving 26 parents of children with CHARGE syndrome. Lieberman and colleagues identified that out of the 11 parents whose children were mainstreamed in inclusive PE and no segregated settings, 8 of the parents were satisfied with this placement. The parents who were satisfied with their child being involved in inclusive PE

felt that way because appropriate modifications were provided to their child and they received direct one-on-one support. Moreover, essential factors for successful inclusion in PE from the perspectives of parents include teacher, parent, and administrative support within school districts.

Further support for the benefits of inclusive PE can be provided by Downing and Rebollo (1999) who performed a study involving 100 parents of children with physical disabilities who were provided instruction in inclusive PE. Downing and Rebollo found that increased program support and interest from parents, teachers, and administrators to be critical when implementing successful integration for SWD. In regards to barriers of inclusive PE, the authors found that class size was the most critical factor to facilitate a successful inclusive PE class. Results indicated that large class sizes make it difficult to successfully facilitate inclusive PE.

Summary

AE and OPs is a curricular model that can greatly enhance a sense of community and belonging amongst peers. Quay et al., (2003) found that students were actively developing close friendships in outdoor activities, whereas friendship was less prevalent in other classes. This concept can be further supported by Gibbons et al., (2010) who discovered that experiential learning activities can increase the perceived social regard for classmates and friends. Therefore, AE/OPS can greatly influence and enhance the social atmosphere of a PE class environment. Furthermore, AE and OPs is a curricular model which can facilitate a positive social environment for students of various ability levels in inclusive PE.

According to Forgan and Jones (2002) implementing experiential AE activities to teach social skills can decrease misbehavior and enhance problem solving skills of students with high-incidence disabilities. Thus, AE and OPs can benefit the behaviors of SWD, which can benefit all students in inclusive PE. Moreover, AE activities incorporate student's problem solving together, communicating with one another to complete a common task, and developing trust amongst each other to be successful. These activities can develop a sense of belonging to build a positive inclusive PE classroom. Goodwin and Watkinson (2000) found that SWD developed a sense of belonging due to supportive interactions between classmates. Goodwin and Watkinson (2000) also found that a sense of belonging was reinforced when SWD were provided encouragement from their peers. This reinforcement can be accomplished through students who choose to participate in AE and OPs as "ground supporters". Zumdy et al., (2009b) defined ground supporters as students who provide compliments and encouragement to their peers participating in certain activities. Therefore, SWD can potentially receive the support and encouragement they need to be successful from their peers while engaged in AE and OPs because of the various participation styles in this model.

AE and OPs can be blended in with peer teaching to enhance the positive atmosphere for students of various ability levels. Klavina and Block (2008) found that close proximity of adult personnel increased dependence on adult support for SWD. Moreover, Klavina and Block (2008) found that implementing peer-mediated instruction in inclusive PE provided SWD a sense of inclusion. According to Quay et al., (2003) AE and OPs increases the caring for peers to build a sense of community. Klavina (2008) found that peer-mediated instruction increased positive feelings of SWD. Therefore,

using peer-mediated instruction in a curricular model that has already shown signs of enhancing feelings of caring amongst peers has the potential to develop substantial gains in social interactions amongst students with and without disabilities.

Implementing AE and OPs in PE can greatly influence the sense of belonging between students of various ability levels. Zmudy et al., (2009a) noted that AE is unique in that there are task systems found in this model that you don't typically see in others. Zmudy and colleagues discovered that the atmospheric system, which focuses more on the affective domain of learning was recognized by both educators and peers. It is apparent that AE has the potential to support the mental and emotional growth of students.

Recommendations for Future Research

Klavina and Block (2008) recommended that future research should investigate the effectiveness of peer mediated instruction across a wider variety of participants, settings, and age groups. Their study took place in elementary PE with a model in which sport units were organized. Therefore, analyzing the effects of peer-mediated instruction which takes place during AE and OPs in a high school setting could further support the findings of Klavina and Block. In addition, Sibthorp et al. (2011) found positive learning transfers in AE. However, this study was conducted amongst individuals who weren't involved in a AE and OPs program where they had the opportunity to support their peers with disabilities. Therefore, future research should investigate the long term benefits of individuals who have been involved in this type of program.

To gain a better understanding of the positive effects in a UDAE program, researchers may consider using approaches that analyze the perspectives of individuals

who participated in actual programs. This may be achieved by using qualitative strategies, semi-structured interviews and observations of this type of program. This type of inquiry would be well supported through triangulation of information described through the perspectives of persons involved in this type of program that include parents, peers, and school faculty. Therefore, the purpose of this study was to investigate the influence of a universal adventure program on students of varying ability levels.

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