A Volunteer Basketball Clinic for Children with Disabilities

Professional Development Impact on Student-Athletes and Physical Therapy Students

Peter Altenburger, PhD, PT
Anne M. Wilson, PhD

The purpose of this study was to assess the change in perceptions of student-athletes, physical therapy students, and parents of children who helped to facilitate an athletic skills camp for children with disabilities. Participants experienced 3 hours of basketball activity yearly. Data were collected for 3 consecutive years from a total of 51 parents, 15 student-athletes, and 22 physical therapy students. Pre- and post-survey data were evaluated by two independent researchers. Common themes were developed for all participant groups and cross-group comparisons were evaluated. Findings indicated a synergistic benefit for student-athletes and physical therapy students derived from their impact and children with disabilities. Perceptual changes in students included a decrease in fear in working with disabled children, an appreciation for the value of having fun, and increased growth in civic identity and desire to volunteer. J Allied Health 2017; 46(2):65–71.

There is general agreement that all children need to be engaged in physical activities, especially children with disabilities.1 Some studies have suggested as high as 18% of children and adolescents in the general population have a chronic condition or physical disability which may limit their ability to fully participate in physical activities.2 Participating in recreation and leisure activities for children with disabilities, especially voluntary activities, can be especially challenging.3 Research has identified appropriate ways to increase the inclusion of children with disabilities in the full spectrum of physical activities that includes sports.1

Sports camps and clinics have become more popular, especially on university campuses. While children with disabilities are not excluded from these camps and clinics, the resources to fully include all children in these sports experiences are not yet in place. For this and other reasons, there are specialized camps for children with a variety of disabilities,4–7 such as the University of Detroit Mercy which provides a basketball camp targeted to participants 12 years of age or older.8 Similarly, Ohio University has a basketball camp for participants with disabilities who are between the ages of 9 and 21.9 The National Wheelchair Basketball Association often affiliates with universities to offer youth wheelchair basketball camps.10,11

The limited opportunity for children with disabilities to participate in organized sporting activities on university campuses has led to the development of the Butler Basketball Camp for children with disabilities. The goal is to provide a basketball experience that fosters a desire to be more active by continuing to participate in organized or unorganized basketball-related activities. Creating this experience requires commitments from support personnel dedicated enough to provide a valuable learning experience.

To create a meaningful experience, college basketball players and student physical therapists (PTs) were asked to volunteer as camp facilitators. Studies have shown that student-athletes who are engaged in other areas of campus life, other than athletic activities, demonstrate more positive outcomes than students who are less engaged.12 PT programs have participated in a variety of community engagement, including service learning,13,14 volunteering,15 and pro bono experiences.16,17 The benefits to PT students engaging in these activities have been well documented. Research indicates that volunteering in community-based activities increases self-awareness, which in turn fosters improved personal identity and a greater sense of self.18

The purpose of this study was to assess the impact participation in a basketball clinic for children with disabilities had on existing perceptions found in student-athletes, PT students, and parents. We hypothesized that parents would experience growth in their understanding...
of what their child was capable of achieving athletically. We hypothesized further that both student-athletes and PT students would experience a greater awareness of sense of self and civic identity following their participation in the clinic. Also, we hypothesize that the synergies between these three participant groups would provide a valuable experience for the participants, student-athletes, and PT students. To our knowledge, this is the first sports clinic for children with disabilities using volunteer players from a Division I basketball program and volunteer facilitators who are PT students.

**Methods**

**Participants**

Clinic participants were recruited from the Indianapolis area through local hospitals, word-of-mouth, and contact with the principal investigators. The Butler University men’s basketball coaching staff recruited student-athlete volunteers. PT students were recruited by the principal investigators and were from Indiana University (IU) Department of Physical Therapy.

In 2013, 14 children, 7 student-athletes, and 2 PT students participated in the clinic. In 2014, 17 children, 5 student-athletes, and 6 PT students participated in the clinic. Of these participants, 7 children, 2 student-athletes, and 0 PT students had participated in the previous year. In 2015, 27 children, 8 student-athletes, and 7 PT students participated in the clinic. Of these participants, 15 of the 27 children, 6 of the 8 student-athletes, and 6 of the 7 PT students had not participated in the basketball clinic the previous year.

**Clinic**

The format of the clinic consisted of a group warm-up, three stations (shooting, dribbling, and passing), countdown shooting (last-second shot), free shoot-around, a final dunk or alley-oop (participant choice), and a closing group activity. In the first year, these activities took 2 hours. In the second and third years, an additional hour of court-time activities was added for a total of 3 hours.

After the warm-up, the participants were broken into three groups. In the first year, participants were divided by age and physical ability. In the second and third years, participants were divided by age alone. One to two basketball players were assigned to each group and followed the participants from station to station. The PT students and volunteers also divided among the groups. The three stations focused on basic basketball skills adapted for each of the participant’s needs. Members of the coaching staff were facilitators for each of the stations, the student-athletes were the leaders and demonstrators of each activity, and the PT students provided individualized assistance to each of the clinic participants. A photographer documented all of the court-time with the camp in the second and third years.

The closing conversation involved watching a video and group participation by the clinic attendees. In 2013, the coach walked through the last 5 minutes of a critical game, giving a play-by-play of event from the perspective of a coach. In 2014, the head coach recruited the clinic participants as if they were the next class of the basketball team. In 2015, the video presentation took place in the newly renovated locker room. Attendees received Butler basketballs and t-shirts and were encouraged to talk with the players after the clinics.

**Data Collection and Analysis**

In seeking to measure the influence of camp participation, we considered both closed and open-ended measurement. Closed-ended questions are highly reproducible but require the administrator to accurately select all of the possible responses that participants might experience. As limited data exist on sports camp participation related to students in athletics and the health professions, creating a valid closed-ended survey format would have been very difficult. It has been reported that respondents subjected to closed formatting will confine their answers to the choices provided even when the response of “other” is offered. Another consideration in measurement format was the camp-time period of less than a day, requiring the researchers to develop a tool that would not bias the respondents with a pretesting design.

In contrast, open-ended questions have been shown to be as reliable and valid as closed-ended formatting with less risk for bias. This type of formatting has also been shown to elicit responses beyond the expected or obvious, lending themselves to a more robust data set. Based upon these findings, open-ended formatting was used to measure changes in attitudes and behaviors of participants.

Open-ended surveys were created to collect data on demographic information, general information on past experiences, reasons for participating in the clinic, perceptions about their experiences assisting children with disabilities, and their overall belief in civic engagement. Open-ended questions related to perceptions and civic identity were created based upon prior research and data from the Civic-Minded Professional (CMP) survey instrument. This closed-ended instrument has been validated for measurement outcomes related to civic-mindedness but, based upon the nature of the camp, would not be appropriate to administer; therefore, open-ended questions were created.

Surveys were administered to all three groups prior to and after the clinic ended. A total of 51 parent, 22 student-athlete, and 15 PT volunteer responses were collected over the 3-year period.

Two evaluators read the responses independently, coding for consist comments. Researchers compared
comments analyzing statements for consistency within the groups and between groups. Comparisons between each year of the camp were also made. Frequency counts were added to indicate the amount of agreement between and across groups.

Results

The participant demographics are displayed in Tables 1 and 2. For the student-athletes, all 13 were males between the ages of 18 and 22. There were only 4 female participants in 2014 and 5 in 2015.

Themes by Group

Student-athletes chose to participate in the clinic for a variety of reasons. Many cited the opportunity for personal growth. Several had worked with people with disabilities before. Notably, two players expressed a desire to see this target group have a good experience with basketball. One player was drawn to the unique nature of this opportunity.

Before the clinic, student-athletes articulated a variety of fears. In the first year of the clinic, most of the student-athletes were concerned that they would say or do the wrong thing or otherwise offend the participants (85%). In the second year, the student-athletes were more concerned about pushing the campers too hard or challenging participants beyond their abilities (80%). In the third year, there were fewer concerns expressed by the student-athletes (44%). The majority of the fear focused on understanding the child’s physical capabilities. In addition, the student-athletes wanted to ensure that all participants had fun during the clinic.

Post clinic, 100% of the student-athletes stated that they would recommend participation in this clinic to another student-athlete (Figure 1). Only 1 of the 22 student-athletes had participated in a service activity like this prior to these clinics. Many (80%) of the student-athletes indicated that they would look for other opportunities like this, and several named specific service or volunteer options such as “Best Buddies” and volunteering with the local children’s hospital. There was an overwhelming sense that the best part of the clinic was getting to know the participants better and that they were just like the other children who attended other basketball camps. One student-athlete commented, “I learned that these children should be treated like a regular child and we should help them have the most fun they can.”

The PT students also chose to participate in the clinic for a variety of reasons. Several of the participants did not intend to specialize in pediatrics (25%) but felt that volunteering for this clinic might be helpful. A few PT students indicated that this was a different experience from the clinic or classroom (10%), and many indicated that they enjoyed volunteer opportunities (45%). In addition, many of the PTs enjoyed basketball themselves and admitted that a basketball clinic was interesting to them (40%).

Before the clinic, the PT students also expressed fears. Most of their concern was about working with children with unknown needs and having to quickly adapt for participant limitations (25%). One PT student, for example, did not want to push participants too hard, echoing the concern of the student-athletes. PT student fears appeared to focus more on concerns about the children’s health condition and how it would translate to sports activity. Lastly, PT students expressed more concern about ensuring the safety of the participants during the activities (33% overall; 50% in year 1, 20% in year 2, and 57% in year 3).

Post clinic, 100% of PT students would recommend this experience for other PT students as well (Figure 2). Most of the therapy students felt that they learned to be adaptable and focused more on the fun of the activities rather than the therapeutic benefits. From the comments, it was clear that the PT students were able to meet the needs of the children through prompt adjust-

<table>
<thead>
<tr>
<th>TABLE 1. Participant Demographics, n=31</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>1st–3rd grade</td>
</tr>
<tr>
<td>4th–6th grade</td>
</tr>
<tr>
<td>7th–9th grade</td>
</tr>
<tr>
<td>10th–12th grade</td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 2. PT Student Demographics, n=8</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
</tr>
<tr>
<td>Gender: Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>School: U Indy</td>
</tr>
<tr>
<td>IU</td>
</tr>
</tbody>
</table>

| FIGURE 1. Changes in student-athletes’ fears related to assisting children within a sports camp. |
ments, and 100% of therapy students indicated an interest in continuing service in the community.

Parent responses indicated that the draws to the clinic, aside from basketball (43%), were a desire to interact with the basketball players (23%), trying something new (10%), and interacting with other kids (27%). One parent remarked, “I think she was just so excited that there was an athletic camp she could do! Other camps don’t discourage participation, but it’s intimidating.” All of the parents were confident that the Butler student-athletes would work with their children well and the clinic would be a positive experience.

Remarkably, the parents of the clinic participants had the least fears prior to the clinic. They expressed mild concerns about specific activities, a child being shy, attention span, and a need to have activities demonstrated at a level that their child could replicate. However, the parents did not have high expectations that there would be a great deal of skills development that would take place, indicating that it was far more important for their children to have fun (43%).

Post clinic, there was once again 100% agreement by the parents that they would recommend the clinic to other parents. The children enjoyed working one-on-one with the players (27%), with many of them indicating that they enjoyed shooting (20%) and dunking the ball (15%) the most.

Comparison Across Groups

Some consistent themes emerged among all three groups. The first theme dealt with primary benefit of participation, while the second involved the personal connections made with the children. A third theme of civic mindedness emerged among the student-athletes and PT students.

In post-surveys, the three groups expressed the concept that “having fun” was the most important aspect to providing a successful experience for the children. Student-athletes reported that the participants having fun was the best part of the clinic experience (36%), often singling out particular children by name (14% of comments). Several PT students identified fun as more important than doing a particular activity correctly and made it their primary focus (33%). The parents of the participants indicated specific activities in which their child had had the most fun (shooting, dribbling, and dunking).

All three groups also pointed out that making a personal connection with the children was a significant component of the experience (22% of student-athletes, 20% of PT students, 22% of parents). The student-athletes mentioned building relationships and working with the group. Several PT facilitators specifically noted the interaction between the players, coaches, and participants as being particularly successful. The parents of the participants were the group that identified the interaction most strongly as a key element of the clinic. In addition to several parents noting that there were a correct number of volunteers (both student-athletes and PT students) to participants, several specifically noted that this ratio fostered an effective personal connection during the activities.

Following participation, both student-athletes (50%) and PT students (73%) expressed a greater appreciation for the value of engaging in community activities. Some focused specifically on the basketball camp, indicating they would seek out participation in similar activities. Others expressed a desire to seek out additional opportunities in other areas within the community.

Discussion

Student-Athlete and PT Student Themes

Prior to participation, the student-athletes and PT students expressed different forms of fear and anxiety about managing the children during the camp. The fear was primarily caused by a personal desire to want to provide each child with an appropriate experience and not understanding the child’s disability would limit their impact. In the end, the student-athletes and PT students learned that the child’s experience only needs to focus on “having fun” and not on physical limitations. The desire to provide a great experience and the realization of their ability to do so is a foundation for both groups’ core values.

Butler University has an institutional commitment to service and providing opportunities for students to engage with the community. In addition to extracurricular requirements, there is a curricular community requirement that all students must complete to graduate. In addition, the athletics program promotes the “Butler Way,” which demands commitment, denies selfishness, accepts reality, yet seeks improvement everyday while putting the team above self.

The American Physical Therapy Association has a list of core values for PTs which includes accountability,
altruism, compassion/caring, excellence, integrity, professional duty, and social responsibility. Themes from PT student responses showed correlations to the core values of altruism (putting patient needs above the therapists’ and providing pro bono services), compassion/caring (designing patient interventions congruent with patient needs and focusing on the highest potential for the patient), excellence (participating in collaborative practice to promote quality outcomes), and social responsibility (promoting community volunteerism).

Providing a benefit by focusing on “having fun” demonstrates a consistent core value for both student-athletes and PT students (Table 3). It shows a commitment to the participant and not to one’s self. The second theme of personal connection to benefit others can also be measured within each of the two profession’s core values. The Butler student-athletes are committed to putting the group or others ahead of self, while PTs are asked to be altruistic in their professional endeavors. These core values are exemplified by the responses from both groups when discussing the need to make that personal connection. It shows the true desire to invest in something other than self-interest.

Both groups (athletes and PT students) expressed an increased level of self-worth and self-awareness that fostered a desire to explore varying degrees of continued volunteerism (77% of student-athletes and 93% of PT students). Quotes exemplifying these attitudes include:

<table>
<thead>
<tr>
<th>Student-Athlete Core Values</th>
<th>PT Student Core Values</th>
<th>Clinic Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment and seeks improvement</td>
<td>Excellence</td>
<td>Understanding the benefit “having fun”</td>
</tr>
<tr>
<td>Denies selfishness and team above self</td>
<td>Altruism and compassion/caring</td>
<td>Personal connection to help others,</td>
</tr>
<tr>
<td>Community engagement</td>
<td>Social responsibility</td>
<td>Willingness to volunteer again or seek out other opportunities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parent Themes</th>
</tr>
</thead>
</table>

The comments from the parents of the participants also had common themes, engagement and compassion. The parents noted that facilitators expressed a high level of engagement which correlated to the personal connection expressed by the facilitators. Several parents commented on the one-on-one interaction, when needed, as a significant value and important for the children. Others pointed out the high activity level of all of the participants as being very positive. Lastly, several parents noted the overall interaction of all of the leaders of the clinic. Quotes included:

Great job with the one-on-one when kids needed it. Very good pace of camp and always kept kids attention.

Great engagement with everyone.

Very impressed, very thankful for the players taking time out for these kids & being so patient & fun with them.

Parents also noted that the players, facilitators, and coaches were compassionate. Every parent’s fear is related to their child’s ability to “measure up or perform”
to the expectations, but this may have been greater for these partners given the physical limitations of their children. Parent comments singled out the leaders’ kindness and patience with the children as significant: “Well run! Players & coaches were compassionate & patient.”

Overall, the parents expressed a strong desire for more camps that would allow their children to participate fully. All parents believe participation by their child in the camp was extremely valuable to the child and would likely improve their overall outlook. Responses did not provide a conclusive interpretation on whether parents appreciate the need for ongoing physical activity and realization of their own child’s capabilities.

Common Themes

Common themes of having fun and providing an environment of positive interactions have been supported by the comments from the basketball players, PT students, and parents of the clinic participants. We feel that these comments support our hypothesis that the synergies between these three participant groups would provide a valuable experience for the participants, student-athletes, and PT students. By ensuring that there was an appropriate ratio of volunteers to participants, we maximized the interaction between all three groups and fostered an environment where the synergies could take place. Quotes supporting this view include:

[The relationship is] . . . a very positive one since we are building relationships with everyone. (student-athlete)

Both sides are really appreciative of the relationships we created today. (student-athlete)

Observing the interactions between the campers, players and coaches, the kids seemed to really have a blast and it was great to see their enjoyment. (PT student)

[My child enjoyed the] . . . interaction with the staff & other campers. (parent)

Limitations

There are some clear limitations to this work. First, we were not able to obtain responses from all the parents or caregivers from 2013 and 2015, limiting our data in this category. While 41 children with disabilities participated in the clinic in 2013 and 2015, we had only 17 parent responses. In 2015, the larger number of participants made it difficult to garner responses from all the parents.

The number of student-athletes participating was not consistent across years. During the 3 years of this study, there was also an athletic conference change, three different head coaches, and several men’s basketball players transferred to other programs. Despite these challenges, the commitment of the men’s basketball staff to this clinic fostered the participation of the student-athletes.

Third, only 15 PT students participated in the clinic. While numbers significantly improved from 2013 to 2014 and remained stable in 2015, this does limit the qualitative data. While a 1:1 ratio of PT student to student-athlete seems to be successful, it is not clear if this is the optimal ratio.

The clinic was offered only three times, in June of 2013, 2014, and 2015. With only three clinic experiences to evaluate, it is not clear if format changes or the comfort level and confidence of the student-athletes and coaching staff, or all of the above, were contributing to the perceived improved experience for the participants. As there is a paucity of comparison data in the literature, it is not yet clear if we have identified all of the requisite elements to create a successful clinic for children with disabilities.

Conclusions

Our findings indicate that a basketball clinic for children with disabilities provides an opportunity for collaboration between student-athletes and PT students. This overwhelmingly positive experience impacted the professional development of both the student-athletes and the PT students, especially in the core values of altruism and social responsibility. Both groups experienced an increased level of self-worth by connecting with the community through service. 100% of participants indicated a desire for continued exploration for additional community engagement opportunities.

The authors gratefully acknowledge the Butler University Men’s Basketball Staff for their time in support of this project.

References