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Difference in Participation in Club Volleyball Prior to College and Receiving Collegiate Volleyball Athletic Scholarships in the Midwest

Lindsey L. Smith and Dr. Nita Unruh

ABSTRACT

Club volleyball participation has become a popular method in gaining exposure in order to reach the collegiate level. Obtaining a collegiate athletic scholarship is very competitive in today's globalized world of sports, especially in volleyball as youth participation continues to climb. Volleyball is becoming increasingly more demanding at younger ages, with longer seasons and more specialized hours in elite training. The forecasted product are elite athletes who stand out above the rest, but at a certain cost. Not only are club volleyball programs time-consuming, but very expensive, preventing equal opportunity to athletes. The hypothesis is collegiate volleyball players who participated in club volleyball in their youth received more athletic scholarship dollars on average than those who did not. The purpose of this study is to determine if club volleyball is necessary to receive a collegiate athletic scholarship. This study will give truthful information about club participation and hopefully alleviate economic stress and give more opportunity to athletes to diversify in other sports. Through surveying 110 collegiate volleyball athletes, obtaining information about their club participation prior to college and their current athletic scholarship, there was no significant difference in scholarship dollars between athletes who participated in club and those who did not, concluding that club volleyball participation does not influence the potential amount of athletic scholarship one can receive.

INTRODUCTION

Year-round club sports are becoming more popular among youth with an increased trend in athletes specializing in one sport before puberty under the pressure of today's cutthroat world of sports recruiting as athletes are offered athletic scholarships as early as junior high school. As private club institutions continue to take over public athletic entities such as high school sports, organized club sports have become the norm across the nation with structured play beginning as early as toddler years. Club programs are a significant market in youth sports and are a part of the growing elite youth teams (Riddle, 2014). Club programs can be costly and time consuming as young athletes play year-round and travel across the country. Some of the most elite teams go as far as taking children away from families and school to train (Hyman, 2009). Parents feel the pressure to put their children in elite sporting groups at a young age in order for them to have a successful career as an athlete. These pressures are often put on by coaches, recruiters, and peers. There are many sports that take part in this elite, intense development training at a young age, one of which is volleyball.

Volleyball is the most widely played organized sport in the growing market of athletics (International Olympic Committee, 2005). As more people today are competing in volleyball than ever before, athletes feel the pressure to set them apart from the other elite. Club volleyball programs are a significant market that bring in thousands of players to play year-round volleyball. There are many tournaments, national events, national championships, and showcase camps and tours that give adolescent volleyball players post-secondary exposure and the opportunity to compete against the elite from their age groups. However, these tournaments and

camps are often hosted year-round and make it very difficult to compete in other sports, increasing the percentage of pre-teens who specialize in one sport (Malina, 2010).

Many college volleyball coaches endorse club participation, but there is no data to back whether there is a significant difference in scholarships offered to volleyball players who participated in club volleyball versus those who did not. Although club sports offer a great opportunity to improve skill and gain exposure, is it worth the expense and sacrifice? Do we know if participation in club volleyball is necessary to receive a collegiate scholarship? If so, this produces unfair opportunity to those who do not have the money, time, or access to participating in a club volleyball program prior to college.

The History of Organized Club Sports

Youth sports are a growing market and as of 2008, there are about 60 million boys and girls participating in organized youth sport in the United States (National Council of Youth Sports, 2008). Structured sports differ from "free play" as coaches, officials, spectators, and a set of rules are involved. There are various programs that contribute to youth sports today including, educational institutions, club-sport organizations, and personal training programs (DiFiori, 2002). These programs offer youth athletes year-round services to compete in a sport. Depending on the institution, this consumes a lot of time, especially when three-fourths of youth athletes who participate in organized club sports are involved in more than one club sport (National Council of Youth Sports, 2008). More often than not, these seasons interfere and overlap with one another.

Club sports originated in the late 19th century. During this time, men spent long days in the work force and were not home until after dark. Organized sports were introduced to prevent children from having so many unsupervised hours after school (Wiggins, 1987). It not only

provided an observational service to parents, but also encouraged children, primarily boys as Title IX was not yet introduced, to play and compete in sports. This was also thought of as a way to produce masculinity among boys. Children, both boys and girls, often spent the majority of their time with women, whether it was mothers, sisters, or female teachers (Albrecht & Strand, 2010). This movement, commonly known as "Muscular Christianity," became very popular as it instilled ideals of group loyalty and patriotism, key factors that represent the United States' military, as military men are regarded as masculine and mentally tough. Outdoor competition and recreational play were encouraged to develop youth males' bodies, minds, and spirits (Wiggins, 1987).

Shortly after the movement of developing youth bodies through sports, came the complaints of professional educators in the 1930's discouraging organized youth sports. The belief was that participation in sports outside of school was distracting and took concentration and focus away from classwork (Albrecht & Strand, 2010). E.D. Mitchell (1932), who was a well-known physical educator at the time, stated that premature specialization and involvement in organized sport was damaging to the youth on both a physical and physiological level. He believed that taking kids away from free play and forcing them into structured sport was fatal for their spirit and love for the game and specialization by repetitive movement of muscles and joints could cause physical damage to young bodies, which could alter their development (Mitchell, 1932). After these accusations, organized sports received a blow and did not progress again until the middle part of the 20th century, when parents decided that participation in organized sport was more beneficial than harmful (Koester, 2002).

Throughout the 1970's, various publications were released to educate the general public about the importance of physical activity on psychological, physiological, and sociological

health, specifically in organized club sports as they were a repetitive, continuous activity that promoted physical activity (Wiggins, 1987). Along with an increase in community knowledge, another notable event that encouraged participation in youth sport was the introduction of Title IX in 1972. Title IX was an educational amendment that created equal opportunity for both men and women in the world of sports and participation in the United States (Jennings, 1981).

With the increased awareness of the importance of sports in society gave way to more structured youth organized sport. Not only did parents value the character development through sports, but youth athletes witnessed the media attention given to successful professional athletes. The increased media coverage and women in the workplace sparked the growth of youth sports (Wiggins, 1987).

There were many youth sporting programs developed that still exist today with the mission of accommodating all athletes of all ages from AAU Junior Olympics, National Federation of State High School Associations, the Young Men's Christian Association (YMCA), and countless more (Albrecht & Strand, 2010). With the growth of organized youth sport came the need for specific techniques in coaching to help the youth reach their potential. In 1981, the YMCA released an official coaching certificate program to educate and provide guidelines to youth sport coaches (Wiggins, 1987).

Organized sports have evolved from small after-school leagues into year-round travel teams within the last century. There are many factors that have attributed to this rise in elite youth sports, from media to more opportunity to compete and scholarships. Sports have been used as a tool throughout history to instill values of discipline and work ethic into youth, but have evolved into a multi-billion-dollar franchise and growing market.

Today's Organized Club Sports

Today, youth sports are characterized by lengthy seasons, weekly road trips to competitions and tournaments, specialized training at a young age, and big money. Youth sports have become a huge market in the last twenty years and it only continues to grow (National Council of Youth Sports, 2008). Many coaches, parents, and athletes believe club participation to be a requirement for success and in the hopes of playing collegiately. It is becoming less of a trend for college coaches to recruit and scout high school games as there is often such a variance in talent levels. Another reason there has been a shift in recruiting behavior is because it is difficult for college coaches to attend high school games as high school schedules conflict with collegiate schedules. Therefore, club sports have become a large industry as many national tournaments serve as a one-stop shopping for elite athletes hosting hundreds of college scouts (Riddle, 2014).

Participation in club volleyball can range anywhere from \$1,000 to \$10,000 per season for travel, gear, and player fees (Riddle, 2014). Due to the costs, getting involved with club sports can be a challenge for families, resulting in the athlete getting left behind in skill and participation. According to a SportsDay survey, 72 percent of coaches have had youth athletes drop out of club sports due to the cost of participation (Koester, 2002). It has become a strong recommendation by college coaches for those seeking to play collegiately, especially at a higher level, to participate in club sport (Albrecht & Strand, 2010).

What originated as an activity meant for fun, and to allow for more opportunity to develop and produce character in youth, has developed some serious implications within the last twenty years. There is an increasing trend in youth organized club sports today of injury through repetitive movement and consequent medical costs, use of performance-enhancing drugs, burn-

out, and pressures put on by parents and coaches (Albrecht & Strand, 2010; Ford, Croix, & Lloyd, 2011).

Specialization in Youth Athletes

Sports specialization in youth athletes has become a norm in the last twenty years with the rise of travel club sports. More and more, young athletes are showing early specialization in one skill of one sport as recruitment age to compete at the collegiate level continues to decline (Jayanthi, 2015). Although the belief is that this extra experience and training will get the athlete to the elite level, it often poses more harm than good. As sports specialization occurs earlier with no diversification, it can cause a number of physical and psychological problems (Brenner, 2016).

As time goes on, it is less common to see multi-sport athletes at the high school and collegiate level. To see a multi-sport professional athlete, such as Bo Jackson, is almost unheard of today. There is an increased pressure to specialize early as many youth athletes strive to reach the elite level by receiving a collegiate scholarship, or aspire to be one of the professionals that are publicized by the media. This usually requires year-round competition, often on multiple teams, to get looks by scouts and gain experience. This behavior can encourage programs to engage in selective activity by developing the elite athletes and diminishing opportunities for less experienced players. Due to intensive training and discouragement of nurturing the majority's sports participants, many youth athletes lose the fun of the game. Recent statistics show that as many as 70% of youth participants drop out of sports by the age of 13 (Riddle, 2014).

Specialization in sports are divided into two categories: early specialization and late specialization. Early specialization begins before puberty, while late specialization begins after puberty and factors in early diversification, which is the act of playing multiple sports before

puberty (Hill & Simons, 1989). Early specialization is characterized by deliberate practice, which is defined as "a highly-structured activity that requires effort, generates no immediate rewards, and is motivated by the goal of improving performance rather than inherent enjoyment" (Hill & Simons, 1989). Deliberate practice can be harmful to the mental aspect of sports if introduced too young (Ford et al., 2011). Although sports specialization can be performed in a way that produces successful athletes under correct conditions, early specialization can lead to overuse injuries, overtraining, and burnout among youth athletes (Malina, 2010). Overuse injuries account for about half of all sporting injuries. Overtraining often leads to malnutrition, cardiac, musculoskeletal, and psychological health issues, especially among youth athletes as they are still in their developmental stage (Koester, 2002). Along with the physical issues early specialization causes, there are emotional and social impacts. Youth athletes with early specialization trends tend to show overdependence on others and become socially isolated from their peer groups and families as sports become their priority (Brenner, 2016).

Jayanthi (2015) analyzed 1,190 youth athletes ranging from 7 to 18 years of age with 820 of them being injured. Comparing the injured athletes to non-injured athletes, the study concluded that there is an independent risk of injury in youth athletes who specialize in one sport. The injured athletes were on average in the older category of the youth and spent more hours per week in their specialized sport (Jayanthi, 2015). This was due to overuse over a longer period of time and had nothing to do with growth rate. This study is important for the protection of young athletes and raising awareness to the harm caused by intensive training in sport specialization in youth.

Youth athletes who show trends of early diversification generally have fewer injuries and play sports longer on average than those who specialize before puberty (Koester, 2002). They are

exposed to more psycho-social environments as well, and experience different physical and cognitive atmospheres (Ford et al., 2011). Studies show that late specialization with early diversification leads to longer careers and more athletes joining the elite status at the professional level than those who specialize before puberty (Brenner, 2016).

These research studies are not to say that sports specialization should not occur, as most authorities agree that when achieved at an optimal time, sports specialization leads to higher athletic success (Post, 2016). Post (2016) identified the high school sports specialization patterns of current Division I athletes, "the majority of Division I athletes were not classified as highly specialized throughout high school, but the prevalence of high specialization increased as athletes progressed through high school." Survey results stated that only 17% of collegiate athletes studied had specialized freshman year of high school, but by senior year, 41% had specialized (Post, 2016). The conclusion of the study, Post (2016) stated, "Most athletes who are recruited to participate in collegiate athletics will eventually specialize in their sport, but it does not appear that early specialization is necessary to become a Division I athlete."

Specialization in youth athletics has become more of a trend in the last twenty years as the competitive recruiting process continues to recruit athletes at younger ages. There are several advantages and disadvantages to early specialization, but the majority of researchers agree that it can be beneficial if timed correctly in the athlete's development. In further research, there is no correlating trend of early specialization in top level collegiate athletes and professional athletes of their sport. Therefore, there is no study to suggest that specialization is necessary to compete at an elite level.

Scholarships

Obtaining a collegiate athletic scholarship is no simple task as only about two percent of high school student-athletes receive sports scholarships (National Collegiate Athletic Association, 2019). The NCAA began offering student-athletes scholarships at the end of the 19th century, however, rules and regulations to these scholarships were not officially implemented until the 1950's when more effort was put forth to protecting student-athletes' rights (Washam, 2015).

Winning a scholarship is a huge incentive to many families as the cost of a higher education continues to climb. According to College Board, the average college student graduates with \$35,200 in debt (Ma, Baum, Pender, & Bell, 2015). The average in-state school full tuition scholarship is valued at about \$15,000, average out-of-state valued at \$25,000, and average private institution valued at \$35,000 (Ma et al., 2015). Because athletic scholarships are so rare, only the select elite are given the award. Due to the increasing cost of attending college, student-athletes feel the pressures of needing to obtain a scholarship to alleviate the costs and will go to great lengths to be a top contender for an athletic scholarship. Extra activities youth athletes will do to receive a scholarship to play collegiately include playing year-round and attending showcase events with many college scouts (Riddle, 2014).

This becomes even more difficult when looking at women's volleyball specifically as there are very few full scholarships allotted per division. In the NCAA, Division I schools are allotted 12 full scholarships, Division II has 8, and Division III does not have any athletic scholarship. NAIA (National Association of Intercollegiate Athletics) schools are allotted eight full scholarships. In the NJCAA (National Junior College Athletic Association), both Division I and Division II institutions are allotted 14 scholarships while Division III does not receive any athletic scholarship (Wood, 2009).

Winning a collegiate athletic scholarship is a very competitive business as a small percentage of high school athletes receive an offer to take their game collegiately. Each collegiate volleyball division has separate guidelines and rules to their scholarships and how they can divide them, making it even more difficult to obtain. Club volleyball has served as a platform to jump-start recruiting by gaining more exposure to coaches' eyes and secondary level of competition.

History of Club Volleyball

Volleyball is becoming increasingly popular in the United States with 46 million

Americans playing, creating a growing demand for youth volleyball organizations (Donaghy, 2016). Volleyball originated in Massachusetts in 1895 when William G. Morgan, a YMCA instructor, combined elements of handball, basketball, and tennis to create a game with less physical contact called Mintonette (Donaghy, 2016). The object was to volley the ball back and forth until one side could not keep it off of the ground, and eventually the game pegged the name volleyball (Donaghy, 2016).

The game went abroad as Russia and Japan formed national volleyball leagues along with the United States during the 1920's (Donaghy, 2016). Volleyball was discovered by Europeans during World War II as many allied forces congregated and shared cultures. In 1949, the first male volleyball World Championships were held, with the first women's championship held in 1952. Due to the rapid growth and popularity of professional level volleyball, in 1965, United States Junior Olympic Volleyball (USJOV) was founded, establishing the first youth volleyball league in the United States and giving opportunity for young athletes to participate in elite level volleyball. Shortly after USJOV's establishment, the Amateur Athletic Union (AAU) granted volleyball as a Junior Olympic sport in an effort to pursue the development of junior volleyball

programs within the youth organized sporting structure (Donaghy, 2016). Progress continued in junior development as the Junior Olympic Volleyball committee implemented the Junior Olympic volleyball tournament that is molded after the actual Olympic games with celebration of international teams and an opening ceremony (USOC, 2017).

USA Volleyball (USAV) is one of the many national governing bodies of the United States Olympic Committee. They work to establish volleyball as a primary recreation sport within the youth athletic committee and develop youth players to the elite level of college and professional (Donaghy, 2016). Today, there are countless youth volleyball club institutions, but the three largest programs are USAV, AAU, and JVA (Junior Volleyball Association).

Tournaments are hosted by season on a weekly basis and today serve as prime recruiting grounds for college coaches, eliminating the need to recruit at high school games. All three institutions promote the development of youth volleyball athletes in an inclusive, learning environment. However, some of the largest club teams across the United States are very selective in their tryouts as their top teams are often categorized by purely Division I prospects. An elite program within USAV that allows youth volleyball players from all over the country an unbiased try-out and an opportunity to play for a junior national team is USA High Performance (USOC, 2017). The select few who do make a team travel across the country, sometimes overseas, to compete against international teams.

Volleyball has risen in the ranks as a dominant spectator sport across the world and has resulted in high participation by youth athletes. There are many opportunities for youth to compete at the elite level and receive exposure to college coaches. A popular choice is club volleyball, which is characterized by elite training, travel, and rigorous schedules. However, club is not for everyone as it is costly, time demanding, and risks overuse injuries. Participation in

club can lead to exposure to recruiters and potential scholarship offers. However, the question remains if participation in club volleyball influences the amount of college athletic scholarship dollars received.

METHODS

Participants

A survey was conducted to further understand the trend of club volleyball participation in collegiate volleyball athletes. This was done by contacting multiple four-year institutions with women volleyball programs at the NCAA Division I, NCAA Division II, and NAIA levels in the Midwest region. Universities were chosen at random from the following states: Colorado, Iowa, Kansas, Minnesota, Missouri, Nebraska, and South Dakota. The population size of college programs was 42 with the sample of participating colleges at 17. With 654 possible participants, there were 110 collegiate volleyball players from around the Midwest who participated in the study.

Study

The study began by developing a set of survey questions. Questions specific to the individual's club participation prior to college, athletic scholarship received, and division of college play were asked. Example question is "How many years did you compete in club volleyball?" The survey consisted of 16 questions (*Appendix A*).

Upon completion of the survey, a letter of request for the women's volleyball team members to participate in the survey was sent to the compliance officer of the randomly selected Midwestern universities from the seven states. The following 17 collegiate athletic department compliance officers gave approval to allow their women volleyball players to participate in the study: Briar Cliff University, Chadron State College, College of Saint Mary, Colorado Mesa

University, Culver-Stockton College, Dakota State University, Emporia State University, Kansas Wesleyan University, Northwest Missouri State University, South Dakota State University, University of Central Missouri, University of Concordia-St. Paul, University of Missouri – Kansas City, University of Northern Colorado, University of Sioux Falls, Western Colorado State University, and Wichita State University.

After receiving approval, the survey questions were compiled onto an online survey software. The link was sent to the compliance officers to forward onto the volleyball program of each institution. There were 15 responses received from NCAA Division I volleyball athletes, 53 responses from NCAA DII volleyball athletes, and 43 responses from NAIA volleyball athletes.

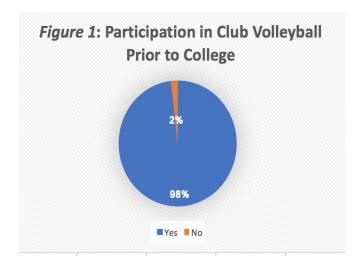
Once all responses were received, the survey was closed and data was analyzed. SurveyMonkey gave percentages and the total number of answers on each question. Pie charts and bar graphs were developed to show the differences. In determining differences in averages between NCAA DI, NCAA DII, and NAIA levels, data on an Excel spreadsheet was compiled of each individual response regarding collegiate level played, how many years spent in club volleyball, specialization prior to college, and scholarship received.

In testing the hypothesis: "Collegiate volleyball players who participated in club volleyball in their youth received more scholarship money on average than those who did not." an ANOVA single factor test was run to determine if there was a significant difference in athletic scholarship dollars received between collegiate volleyball players who participated in club volleyball prior to college and those who did not. This was done by compiling the individual responses for years spent in club and scholarship received onto a spreadsheet. Here, the scholarships received were categorized under the number of years competed in club volleyball. In order to give a number value to scholarships received, the following key was used: Full

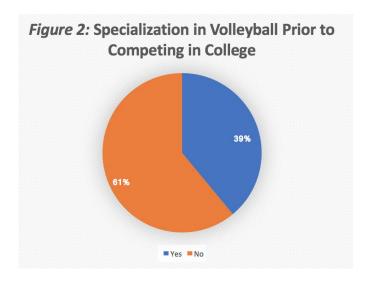
scholarships = \$100,000, Half scholarships = \$50,000, Partial scholarships = \$25,000, and No scholarship = \$0. When the information was organized, a single factor ANOVA test was run as this test is used to determine whether there are statistically significant differences between the means of independent groups.

RESULTS

Throughout the sixteen survey questions, many trends were shown among the collegiate volleyball athletes collectively and by division. In testing club volleyball participation among college volleyball players, a high percentage of surveyed athletes participated in club volleyball prior to college with 108 of the 110 surveyed athletes being former club volleyball athletes (*Figure 1*).



Specialization was evident among college volleyball players prior to college. The majority of participants did not specialize in volleyball prior to college with 61% showing no trends of specialization, meaning these female athletes diversified in sports throughout their athletic career prior to college (*Figure 2*).



Of all major entities in club volleyball, 53% of athletes competed in the USAV structure, a governing body of the United States Olympic Committee. The average time spent participating in club volleyball among the surveyed athletes was 5.64 years (*Figure 3*). NCAA Division I showed the most time spent playing club volleyball prior to college with the average being 6.26 years, followed by NCAA Division II with 6.07 years, and NAIA with the average being 4.95 years. The data cannot conclude if the differences in time spent by division are significant or not, but the means do emphasize the popularity of club volleyball participation. The majority of individual athletes fell between 3-8 years of club volleyball participation.

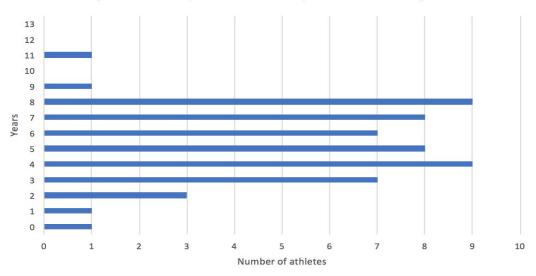
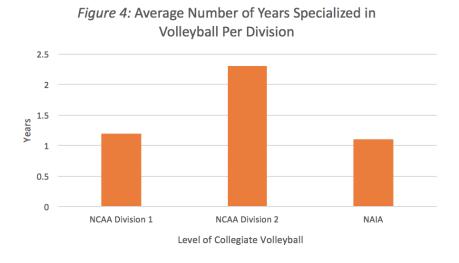
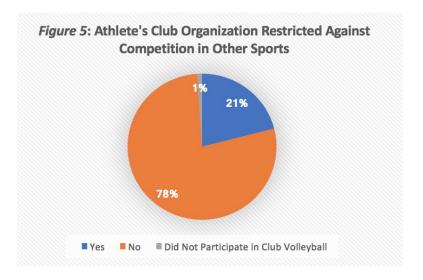


Figure 3: Years Spent in Club Volleyball Prior to College

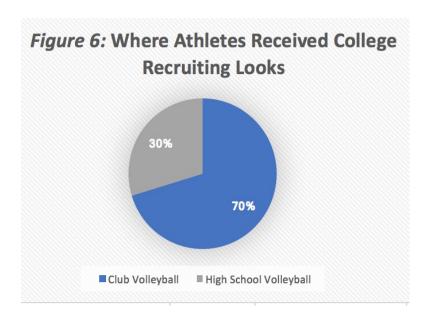
The amount of specialization was calculated by division to test if the higher the level of play, the more time focused purely on their future collegiate sport. The survey results showed the NCAA Division II came in first with the most specialization in volleyball prior to college with the average year of specialization being junior year of high school. Both NCAA Division I and NAIA athletes showed higher diversification in sports prior to college with both averaging about one year of specialization their senior year of high school (*Figure 4*).



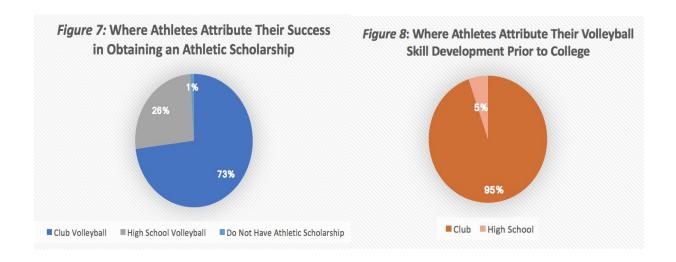
Specialization can occur for many reasons, whether the athlete does it willingly or is forced into specialization due to time restrictions and demanding schedules. Unfortunately, private club organizations are frowning upon or even restricting athletes to compete in other sports outside of high school in the effort to reduce injury and distraction. This can pose man negative effects from burnout to loss of opportunity to diversify. About 1/5th of the total participants (20.7%) stated that their club volleyball organization restricted or frowned upon competition in other sports during club volleyball season (*Figure 5*).



A large part of the reason club volleyball is so popular among youth athletics is because it is a great recruiting platform for those looking to take their game to the collegiate level. Large club tournaments can house hundreds of college coaches looking to fill their rosters. Recruiting happens more during club volleyball today than high school because college seasons overlap during the fall and it can be difficult for coaches to attend. The majority of participants (70.3%) received the most recruiting looks through participation in club volleyball over high school volleyball (*Figure 6*).



Another reason why club volleyball is increasing in membership is because it is a great way to develop skill by playing year-round. The majority of surveyed athletes (73%) attributed their successes in obtaining an athletic scholarship prior to collegiate volleyball to participation in club volleyball rather than high school volleyball (*Figure 7*). Additionally, nearly all participants (94.5%) agreed that club volleyball provided them with more skill over high school volleyball participation (*Figure 8*). The majority of participants (79.3%) agreed that they would not be competing at the collegiate level they are today without participation in club volleyball.



The ANOVA test to determine whether club volleyball participation influences the amount of collegiate volleyball athletic scholarship awarded concluded that there was no significant difference in athletic scholarship dollars received between collegiate volleyball players who participated in club volleyball prior to college and those who did not (p-value = 0.158; f-crit = 1.85; df = 12). Therefore, we can fail to reject the null hypothesis that club volleyball participation is not necessary to receive a collegiate volleyball athletic scholarship (*Figure 9*).

H₀: There is no significant difference in athletic scholarship dollars received between collegiate volleyball players who participated in club volleyball prior to college and those who did not.

H_a: There is a significant difference in athletic scholarship dollars received between collegiate volleyball players who participated in club volleyball prior to college and those who did not.

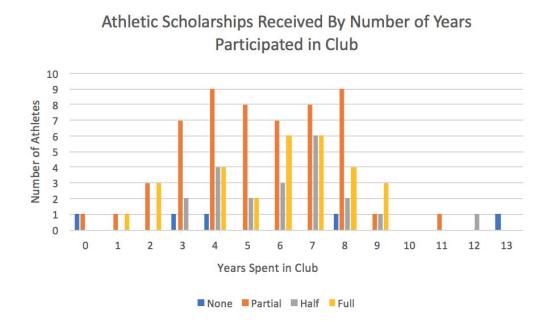


Figure 9: Data of scholarships received by the amount of club participation per athlete.

DISCUSSION

Based on the results of the survey, there is a high percentage of collegiate volleyball players who participated in club volleyball for at least one year prior to college with an average time of participation being 5.64 years. With this information, we can see that participation in club volleyball for several years is a trend among collegiate volleyball athletes. In regards to specialization trends among collegiate volleyball athletes, nearly two-thirds of the surveyed participants showed no specialization prior to college by competing in different sports throughout high school.

Based on the results of the ANOVA single factor test to find any significant differences in scholarship dollars received and years played in club, the test concluded that there is no significant difference in those who participated in club volleyball for several years and those who did not participate in club volleyball. Therefore, we can fail to reject the null hypothesis as there is no significant difference in club participation and receiving a collegiate athletic scholarship.

Other trends shown through the study show that most former club volleyball participants believe that club volleyball aided in their skill development more than high school competition and even attributed their success in obtaining a collegiate scholarship to participation in club volleyball. Other data that was collected was whether club organizations allowed participants to compete in other sports during club volleyball season. The majority of clubs did not restrict competition in other sports, however, there was about one-fifth of participant who were encouraged not to participate in sports outside of volleyball. This is important information and data to know when discussing the evolution of club volleyball and the exponential growth and individual demand of youth participants in club sports.

Testing errors that may have occurred throughout this research are participants' perceptions on questions. Observing data throughout the course of four months, I noticed that some participants would answer that they did not specialize in volleyball prior to college, but when asked in the following question to what year they specialized in, would give a year that they specialized in volleyball. This data contradicts each other and may have produced error in the final results. Another form of error may come from the number of participants themselves. With 110 participants, this may not be enough to effectively conclude whether club participation is necessarily to receive scholarship money. There was also a significant imbalance between Division I participants versus Division II and NAIA participants. If I were to conduct this study again, I would strive for a more equal balance between the two and open my discussion to collegiate schools outside of the Midwest region.

CONCLUSION

It is no secret that club volleyball as well as other privatized sporting organizations have become increasingly popular over the years. The elite status of club volleyball entices parents and players to overconform through weekends of travel, busy year-round schedules, elite training, and dollar expense. Many factors attribute to this through increased publicity of sports and the growing franchise market of youth athletics. As clubs continue to thrive, free entities such as high school and other public leagues are becoming less of a means of recruiting and reaching elite status. This becomes a problem for players of families who cannot afford or expend the time for these club events to get noticed by college coaches.

Along with club volleyball and the cutthroat environment of recruiting comes early specialization. There are several advantages and disadvantages to specialization, but overall, specialization prior to puberty does not show any trend of better future success in athletics.

Through this research study and literature review, there is no correlation to prove that early specialization, or any specialization prior to college, results in higher scholarship dollars.

Through the conclusions of literature review and surveying athletes, participation in club volleyball and early specialization is not necessary to obtain a collegiate scholarship. Although scholarship dollars are not impacted significantly through participation in club volleyball, a large percentage of collegiate volleyball athletes played club at some point in their athletic career prior to college. In addition, the majority of the surveyed athletes attributed their success in volleyball and scholarship to their participation in club volleyball more than any other organization. This reaffirms the thesis that club volleyball participation has become strongly recommended in order to reach the collegiate level.

Club volleyball participation is not necessary to receive a collegiate athletic scholarship, however it is a popular trend for collegiate volleyball players to have participated in club volleyball prior to college. With the data showing that the majority of collegiate athletes attribute their successes and scholarship offers to participation in club volleyball prior to college, there is a need to create equal opportunity and access to club volleyball. In doing this, club volleyball costs need to be lowered and schedules need to be more flexible. Many families cannot afford the price or time that club volleyball takes from travel to training. With this being said, the recommended changes are to provide more options within the club volleyball structure by implementing less cost and less travel to willing teams.

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APPENDIX A

- 1. Did you participate in organized club volleyball?
 - a. Yes
 - b. No
- 2. Did you participate in USAV, AAU, JVA, or other?
 - a. USAV
 - b. AAU
 - c. JVA
 - d. Multiple of these organizations
 - e. Did not participate in club volleyball
 - f. Other, please specify
- 3. How many years did you participate in club?
 - a. Text box provided to state number of years of participation
 - b. Did not participate in club
- 4. Did you specialize in volleyball before college (only played volleyball)?
 - a. Yes
 - b. No
- 5. If you answer yes to question 4, what year did you specialize?
 - a. Senior year of high school
 - b. Junior year of high school
 - c. Sophomore year of high school
 - d. Freshmen year of high school
 - e. Junior High
 - f. Before junior high
- 6. If you were a multi-sport athlete, did you play in other organized club sports besides volleyball?
 - a. Yes
 - b. No
 - c. Was not a multi-sport athlete
- 7. Did your club volleyball organization restrict or frown upon competition in other high school sports (e.g. basketball, track)?
 - a. Yes
 - b. No
 - c. Did not participate in club volleyball
- 8. What year in high school did you commit to playing collegiate volleyball?
 - a. After senior year
 - b. Senior year
 - c. Junior year
 - d. Sophomore year
 - e. Freshmen year
 - f. Before freshmen year
- 9. Have you received a collegiate athletic scholarship for volleyball?
 - a. Yes
 - b. No
- 10. Is this scholarship full, half, or partial?

- a. Full
- b. Half
- c. Partial
- d. Do not have a collegiate athletic scholarship
- 11. When being recruited for volleyball, did you receive the most college coaching looks on your high school volleyball team or on your club/travel volleyball team?
 - a. High school team
 - b. Club/travel team
- 12. Would you attribute your volleyball scholarship from participation in club or high school?
 - a. Participation in club volleyball
 - b. Participation in high school volleyball
 - c. Did not receive collegiate volleyball scholarship
- 13. If you do not have a scholarship, would you attribute your walk-on to participation in club or high school?
 - a. Participation in club volleyball
 - b. Participation in high school volleyball
 - c. Received a volleyball collegiate scholarship
- 14. Do you feel that participation in club volleyball provided you with more skill?
 - a. Yes
 - b. No
 - c. Did not participate in club
- 15. Do you, personally, believe that if you had not participated in club volleyball, you would not have gotten to the level you are today?
 - a. Yes
 - b. No
 - c. Did not participate in club
- 16. What level of collegiate volleyball do you compete in?
 - a. NCAA DI
 - b. NCAA DII
 - c. NAIA