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An Analysis of Scholarship Distribution by Division I Softball Coaches

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An Analysis of Scholarship Distribution by NCAA Division I Softball Coaches

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Abstract

The purpose of this study was to explore fairness factors used by NCAA Division I head softball coaches in scholarship distribution. Research by Hums & Chelladurai introduced Distributive Justice principles to intercollegiate athletics; indicating need was a popular distribution principle. Continued research by Mahony, Hums, & Riemer determined need as a common distribution principle in athletics. Prior to this study, no research has been done to examine distribution principles by NCAA Division I softball coaches based on distributive justice principles. This study used a single scenario of grant-in-aid distribution with six possible decisions coaches make to determine fairness of grant-in-aid allocation, using a one-way between subjects ANOVA measuring fairness of allocation principles by NCAA Division. Division results varied between fairness perceptions. FBS Autonomy 5 participants perceived an athlete's performance the previous year to be most fair, while FBS, FCS, and I-AAA participants perceived student-athletes who play key positions to be most fair. In addition, participants were asked to determine which of the six allocation methods was most fair and determined student-athletes who play key positions was most fair and those student-athletes with the greatest need as least fair.

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Dedication

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CHAPTER 1

INTRODUCTION

The following dissertation examines NCAA Division I head softball coaches' ratings of scholarship distribution principles. The primary question answered was what do NCAA Division I softball head coaches determine as fair or unfair when distributing or taking away scholarship resources within their respective programs? NCAA Division I softball programs are allowed 12 scholarships to distribute as the coaches determine to fill the desired roster. Rosters at NCAA Division I institutions will range anywhere from 15 to 25 student-athletes. Because the necessary roster numbers exceed the allotted scholarships, coaches must be strategic in how they allocate the limited resources. As well, not all programs receive the maximum 12 scholarships if the respective university decides not to fully fund the program.

Softball Participation

It is estimated that over three million girls participated in over 50 interscholastic sports in the 2014 – 2015 academic year (Participation Statistics, 2016). At the inception of Title IX in 1972, less than 300,000 girls participated in only 14 sports. In the 43 years, since Title IX was implemented certain sports have maintained their popularity. Basketball, track & field, volleyball, cross country and fast-pitch softball have been within the top six for schools who sponsor these activities and participants. The National Federation of High School Sports first began figuring sport and participation ranks in 1982 and since that year, fast-pitch softball has been as low as sixth in most sponsored sports and fourth in most participation. It has been as high as fourth most popular sport sponsored by schools and fourth most popular sport based on participation numbers (Participation Statistics, 2016). In 1972, upon the passing of Title IX, only 373 schools across America sponsored interscholastic softball for girls. This allowed 9,813 girls

to play fast-pitch softball. By the end of the 2015 – 2016 academic year over 15,000 high schools sponsored fast-pitch softball for girls, allowing for more than 350,000 participants in 48 states. The growth of fast-pitch softball is not limited to high school participation.

The Amateur Softball Association (ASA) was founded in 1933 when the sport had grown to require governance and rules consistency (History of USA Softball, 2015). Softball, at the time, was considered fast-pitch and the ASA was the exclusive softball organization for over 50 years. Additional softball organizations, such as the United States Slow-pitch Softball Association (USSSA) was formed in the late 1960's to provide a new form of play to the game that was dominated by pitching. The USSSA underwent a name change in 1998 to the United States Specialty Sports Association, beginning girls' fast-pitch softball. In the summer of 2016 the USSSA registered over 15,000 girl softball teams between the age groups of 12-Under and 18-Under. The ASA had 71,780 youth softball teams register with their organization in 2015 (ASA/USA Softball, 2015). The ASA was the exclusive softball organization for over 50 years but the creation of competitor organizations, designed to challenge and draw teams away from the ASA, began in the mid 1980's with the creation of the National Softball Association. The growth of softball continued between these two organizations creating extreme softball tournament numbers (Tanier, 2012). Another player in the competitive softball world in an organization formed in 2013 called Premier Girls Fast-pitch (PGF). This organization is primarily housed in California but the highest-level teams across the country play PGF and top college coaches now recognize it as a viable recruiting tool. As mentioned before, the implementation of Title IX made today's growth of youth sports, especially girls' sports, possible (Cheslock, 2007).

The history of women's athletics is extensive and there have been many iconic figures who have influenced the evolution. When a young, female physical educator named Senda Berenson took Dr. James Naismith's rules of basketball and adapted them to give women an indoor activity at Smith College, she unknowingly established an opportunity for participation that was societally unacceptable (Acosta & Carpenter, 2014; Oslin, 1999; Rayl, 2006). Women's teams have evolved from non-running basketball, as Berenson developed, to today's WNBA professional league (Melnick, 2007; Rayl, 2006). Softball has been part of American culture since its creation in 1933 but it was not until softball was added to the 1996 Olympics did participation numbers in summer softball programs begin to increase (Dickson, 1994).

Intercollegiate Softball Scholarships

Due to increased participation at the youth travel ball level and at the interscholastic level there are more players seeking scholarships at the collegiate level. According to scholarshipstats.com (n.d.), 1,673 collegiate softball programs provide intercollegiate softball opportunities to 31,406 student-athletes with an average roster of nineteen. Because softball scholarships are equivalency based, meaning partial scholarships can meet the allowed limit, there are more opportunities for softball student-athletes to receive a scholarship, though not likely full.

Table 1

Odds of a Female High School Softball Student-Athlete Competing at a College Level

Category and Classification of Play	Percentages
High School Softball Players	371,891
Intercollegiate Softball Players	30,874
Percentage of High School Softball Players playing Intercollegiate Softball	8.30%
% of high school athletes playing at the NCAA Division I level	1.60%
% of high school athletes playing at the NCAA Division II level	1.50%
% of high school athletes playing at the NCAA Division III level	2.00%
% of high school athlete playing at the NAIA level	1.10%
% of high school athletes playing at the NJCAA level	1.60%
% of high school athletes competing in other levels	0.50%

According to scholarshipstats.com (2016), the 2015 – 2016 academic year showed an average of 19 scholarships awarded per NCAA Division I institution, with a low number of 13 and a high number of 24. This resulted in an average award amount of $20,715 per scholarship. The low scholarship reported was $7,281 and the high was $47,624. It is important to recognize the need for softball programs to evenly distribute their scholarships through their recruiting classes. Therefore, theoretically, only 25% of the allotted scholarships are distributed each recruiting year.

If a student-athlete wishes to receive a scholarship to play intercollegiate softball, they will go through the current process of exposure. Most students gain exposure by participating in summer travel softball organizations that play tournaments where college coaches and recruiters come to judge player's abilities. Then coaches can reach out and inquire about a player,

ultimately offering them a scholarship to play softball at their institution. Once the student-athlete has signed the National Letter of Intent (About the NLI, n.d.), the scholarship is renewable each year at the discretion of the coach. This discretion is what leads to the need to better understand how coaches distribute their scholarships and on what factors they base their distribution.

NCAA "Counter"

According to the NCAA, a "counter" is determined in one of three ways. First, any student-athlete who has received any amount of athletics scholarship is a counter. Secondly, any student-athlete who receives a scholarship or grant-in-aid from a source outside of the university, for which athletics ability or participation plays a major role in their selection. This means the student-athlete must be an athletic participant to be considered for the scholarship or athletics participation is a major consideration in the selection of the recipient. Thirdly, a student-athlete in football and men's and women's basketball who receives a non-athletics scholarship or grant, in any amount, from or through the university that does not meet NCAA's academic exemptions, and the student-athlete participates in a varsity contest, is a counter. In head-count sports, once a student-athlete becomes a counter, they count as "one" towards the team limit. In equivalency sports, once a student-athlete becomes a counter, any other "countable" financial aid now counts towards their equivalency, as well as the team limit (NCAA, 2016a).

NCAA Divisions

NCAA Division I Football Bowl Series (FBS) Institutions. As mentioned, the NCAA classifies sports into head-count and equivalency. This differentiation occurs at the NCAA Division I and Division II levels. NCAA Division I football is a head-count sport at the FBS Autonomy 5 and FBS classifications. FBS Autonomy 5 universities include those within the

Atlantic Coast Conference (ACC), Big Ten Conference (B1G), Big 12 Conference, Pac-12 Conference, and the Southeastern Conference (SEC). The FBS institutions include universities within the American Athletic Conference (AAC), Conference USA (C-USA), FBS Independents, Mid-American Conference (MAC), Mountain West Conference, and the Sun Belt Conference.

NCAA Division I Football Championship Series (FCS) Institutions. In addition to the FBS programs, NCAA recognizes institutions within the Football Championship Series (FCS). These programs are equivalency-based programs, unlike the head-count programs of the FBS. FCS programs consist of universities who compete against other institutions with a maximum scholarship limit of 63 to a roster number of 85 student-athletes (NCAA, 2016b).

NCAA Division I-AAA Institutions. NCAA I-AAA institutions include the 85 NCAA Division I institutions that do not sponsor football.

There is prior research addressing fairness of resource distribution within intercollegiate athletics (Mahony, Hums, & Riemer, 2002 & 2005; Hums & Chelladurai, 1994; Mahony & Breeding, 1999; Mahony & Pastore, 1998) and fairness of resource distribution, conversations drift toward addressing athletic program funding of revenue versus non-revenue sport (Mahony et al., 2005). Mahony & Pastore (1998) presented questions that lie at the heart of this debate. Should institutions be required to provide proportional opportunities and resources for non-revenue sports? Do revenue sports deserve a significantly larger share of opportunities and resources because they produce more revenue? Do revenue sports produce revenue? Does men's revenue sports need to spend as much money as they do? Is dropping non-revenue sports an appropriate means to Title IX compliance? Though these questions are viable for discussion, this research will focus on the basis in which collegiate softball coaches distribute scholarship monies. To do this research one must look at the roots of Organizational Justice Theory.

Organizational Justice Theory

Organizational justice is defined as the study of the role of fairness as a consideration in the workplace (Greenberg, 1990). The study of organizational justice is concerned with the fairness of outcomes, procedures, and interactions between the organization and its employees (Greenberg, 1990). According to Colquitt, Greenberg, and Zapata-Phelan (2005) organizational justice can be divided into four waves or directions of theoretical research. These four theories include distributive justice, procedural justice, interactional justice, and integrative justice. Distributive justice focused on fairness in the distribution of resources. Procedural justice focused on the fairness of the methods used for reward distribution. Interactional justice addressed the interpersonal aspects of fairness. Finally, integrative justice combined the previous three areas of organizational justice (Mahony, Hums, Andrew, & Dittmore, 2010).
This research will address distributive justice theory as it relates to how coaches determine scholarship monies for student-athletes.

Organizational justice research in sport has been conducted is various capacities. Much research was done to better understand how organizational justice affected interscholastic team performance and high school girls' coaches job satisfaction (Whisenant & Jordan, 2006; Whisenant & Smucker, 2006, 2007, 2009). Organizational justice research finds that people create perceptions of fairness based on four criteria (Cropanzano & Greenberg, 1997; Jordan, Gillentine, & Hunt, 200q4). These criteria include: the fairness of outcomes, policies and procedures used to determine outcomes, interpersonal treatment, and decision justifications. Understanding these four criteria will assist coaches who are trying to influence athlete perceptions of fairness. Organizational justice theory led to distributive justice theory, which provided a path for researchers to determine how sport administrators determine distribution and

retribution principles when determining resource allocation. This knowledge can educate student-athletes, similarly, to understand what factors are important to coaches when seeking a scholarship.

Statement of the Problem

Though much research has identified perception of fairness in athletic fund distribution in intercollegiate athletics (Mahony, Hums, & Riemer, 2002 & 2005; Hums & Chelladurai, 1994; Mahony & Breeding, 1999; Mahony & Pastore, 1998), there are no studies to determine factors coaches use for grant-in-aid distribution. Since youth sport organizations provide more products to illicit scholarship offers by universities, studies of coaches' factors of priority for grant-in-aid distribution is crucial. Furthermore, even if previous studies provided evidence that gender and division affected distribution of athletic monies (Mahony & Pastore, 1998), no studies have been conducted on the relationship between coaches' determination of importance for grant-in-aid distribution and NCAA division.

Head-Count v. Equivalency

Currently, the NCAA differentiates sports into head-count sports and equivalency sports. Head-count sports includes NCAA Division I men's and women's basketball, FBS football, women's tennis, women's gymnastics, and women's volleyball. Head-count sports cannot divide scholarships among players, rather student-athletes who receive a grant-in-aid in a head-count sport, receive a full scholarship, which accounts for tuition, room & board, fees, and books. These sports may have more student-athletes than scholarships but must convince the student-athlete to walk-on. Those student-athletes who walk on are not "counters" for the program or the institution. Equivalency sports are all others who can divide scholarship monies between student-

athletes to complete the desired roster. NCAA Division I softball is an equivalency sport and student-athletes may receive a full scholarship, but likely most do not.

Scholarship Totals

There are seven collegiate organizations recognized as providing intercollegiate softball opportunities. These include NCAA Divisions I, II, and III, NAIA, USCAA and other four-year institutions not governed by the previous four organizations, NJCAA, and the CCCAA and other two-year institutions not governed by the NJCAA. Of the seven organizations, only four allow athletic scholarships. Those include NCAA Division I (12 scholarship maximum per program), NCAA Division II (7.2 scholarship maximum per program), NAIA (10 scholarship maximum per program), and the NJCAA (24 scholarship maximum per program).

Purpose of the Study

The study is designed with the intent of accomplishing the following main three objectives:

1. To determine what coaches identify as most important athlete characteristics for grant-in-aid distribution.
2. To analyze the effect of NCAA division on perception of fairness for grant-in-aid distribution.

Research Question

RQ1: Are there differences based on NCAA division in perceptions of fairness for grant-in-aid distribution.

Research Hypotheses

RH1a: Coaches at FBS – Autonomy 5 institutions consider athletic ability of student-athletes most important, whereas coaches at

RH1b: NCAA I-AAA institutions consider student-athlete's academic ability most important when determining grant-in-aid distribution.

Limitations of the Study

It is important to acknowledge limitations and delimitations of this study. The first limitation was surveying coaches in June, the time of year when coaching changes occur, thus creating 16 email addresses that returned undeliverable. As well, 17 universities would not release the email of the head coach after requests via telephone. There are 295 NCAA Division I softball programs and reducing that number by 33 allowed for 262 potential respondents. With 42 respondents, the response rate for this study was 16%.

A second limitation was the online survey method. Because of the nature of online survey and repeated email distribution to the same sample, one participant could take multiple surveys with no means for prevention. Despite this disadvantage, the online survey is a frequently used research method by many prior studies. Therefore, this limitation will not affect the analysis of this study.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of the study was to examine the items NCAA Division I softball coaches use to determine scholarship distribution, to understand what coaches determine as fair or unfair when they decide to offer scholarship monies, reduce scholarship amounts, or rescind scholarship monies altogether. The justification for the present study emerged from an extensive review of literature addressing organizational justice and its principle subsets. Previous studies examining organizational justice, applied in the context of intercollegiate athletics, focused on distributive justice and perceived fairness, while allocating resources (Hums & Chelladurai, 1994a; Mahony et al., 2002). This review of literature highlights: (a) an overview of organizational justice, (b) a discussion of distributive justice, (c) studies addressing distributive justice and intercollegiate athletics, and (d) the justification for the present study.

History of Women's Athletics

Women's athletics has evolved from physical activity through the latter half of the 19th century to today's high level of competition at youth sports, interscholastic, intercollegiate, international, and professional levels. Prior to the 20th century, men, for men (Masteralexis, Barr & Hums, 2012), ran sports. Before that, according to Dulles (1965), America evolved from the industrial age to find more recreational opportunities, not because there was more time, rather the work was easier and they had the physical energy to pursue recreational activities. The evolution continued through the later part of the 19th century where football teams helped create interscholastic and intercollegiate athletics. President Theodore Roosevelt was instrumental in the creation of an organization that oversaw intercollegiate athletic competition due to the large number of deaths of football players. He threatened the coaches to clean it up and make it safe or

he would shut football down. The NCAA formed in 1905 because of Roosevelt's push (Masteralexis, et al., 2012).

While men's athletics had been in place since the 1850's, the only athletic opportunities for women were in figure skating, tennis, and golf (Gems, Borish, & Pfister, 2008). The latter two were professional opportunities, and figure skating was an amateur, international opportunity (Gems, et al., 2008). Intercollegiate athletics between women's programs had yet to progress to a point of necessary governance and recognition. In 1966, the Commission on Intercollegiate Athletics for Women (CIAW) was created as the first governing body for women's athletics. It led to the Association for Intercollegiate Athletics for Women (AIAW), created in 1971 (Acosta & Carpenter, 1985). The NCAA, formed in 1905 for men's athletics, was a sports power. There was a struggle between the NCAA and the AIAW. The NCAA philosophically believed women should not be competing. The AIAW did not want participation to face the type of corruption men's athletics endured. Members sued the AIAW for not providing championships to its participants, which caused the NCAA to add Division I championships for women's athletics in 1981, primarily because the organization realized the money that could be made. The AIAW dissolved its organization in 1982 after the NCAA's "takeover" (Morrison, 1993). This led to the evolution of today's NCAA, which awards 87 national championships annually (NCAA, 2016a).

Women in intercollegiate athletics have had greater challenges for equity than their male counterparts since competition began in the early 1930's (Acosta & Carpenter, 2012; Gems et al., 2008). At that time, women created and ran women's intercollegiate programs. Since the inception of Title IX in 1972, women's programs have increasingly made strides to provide the best opportunities for females to compete at higher levels. Noted by Acosta & Carpenter (2014),

they shared the most recent numbers for women participation in intercollegiate athletics, 9,274 teams, with nearly 43% of women's teams being coached by females. Participation numbers increased from 1972 to 2014 primarily because more institutions offered more women's athletics programs. However, there is a decline in the number of females coaching women's teams. In 1972, females, down to 43% in 2014, coached 90% of women's teams (Acosta & Carpenter, 2014). Many men do a good job of coaching and administering women's sports, but unless girls and young women see women in decision-making positions in their programs, they are unlikely to envision themselves as full participants in sports and sport organizations. When women are not visible leaders in sport programs, it appears that women's abilities and contributions in sports are less valued than men's are. This conclusion limits further progress toward gender equity (Hogshead-Maker and Zimbalist, 2007; Ligutom-Kumura, 1995).

Title IX

Throughout the rise of intercollegiate athletics, there was an ongoing push for equity by females who competed recreationally. Though Title IX was not created for the sport benefits that are gained from its creation, the 1972 educational amendments act forbids discrimination based on gender. Arguments were made that there have been many positive experiences and opportunities derived from the installation of Title IX. The creation of sports has increased sport opportunities from 2.5 sports per institution in 1972 to 8.75 sports per institution in 2014 (Acosta & Carpenter, 2014).

This process has also brought about tragedies that many people consider the downfall to Title IX. Suggs reports (2005) a consistent decline in male sport opportunities from the latter half of the 1980's to our present time, despite an increase in male participants. Sports, such as men's swimming and diving, has shown consistent decline due to decisions made by administrators as

to the best way to address Title IX. Wrestling has also seen consistent decline in sport offering, due to the choices made by administrators. The number of wrestling programs has declined by as many as 30% (Walton & Helstein, 2008) because men's programs must be dropped to achieve a more proportional balance to the universities male to female ratio.

The decline in programs like wrestling or swimming has caused lawsuits to be filed, challenging the rights of those participants who are no longer offered the scholarships they once had due to the cuts in the program offerings. Yuracko (2003) argues that Title IX's proportionality requirements are defensible in court and that more men's programs have debated their rights in the judicial system, providing the terms of Title IX to be challenged and re-evaluated.

The debate continues among sports minded males, whenever females address the need for gender equity, males interpret that as a desire for gender equality. Often men make comments that women are not equal and should not be equal in sport settings. Women express a need for opportunity. Cooky & McDonald (2005) address women's desire to be given the opportunity to play to gain and prove their abilities to compete in equitable environments, not equal environments. Hardin and Whiteside (2009) address the same points when defining gender equality v. gender equity and the need for sport administrators to be able to substantiate the point that women do not ask to compete against men, but to be able to compete against other women, comparatively to men.

According to Acosta and Carpenter (2014), intercollegiate athletics for women is at an all-time high. There are more sports for women than ever before and more opportunities for women to participate in intercollegiate athletics than ever before. Many programs are creating junior varsity programs to provide even more students the chance to compete while increasing

school enrollments, meeting the financial constraints of the economy. As these programs continue to grow society would be tempted to focus on the efforts of those currently competing citing travel rigors or scheduling conflicts as great challenges to today's student-athletes (Acosta & Carpenter, 2014). These rigors or challenges have not slowed participation of interscholastic and recreation softball.

Overview of Organizational Justice Theory

Greenberg (1990) defined organizational justice as an individual's perceptions of fairness within an organization. The theory of organizational justice attempts to explain the role fairness has on the functioning of an organization. (Patrick, 2004). Organizational justice literature attempts to describe and explain the role of fairness as a workplace factor (Greenberg, 1990). Rawls (1971) identified justice as the first virtue of social institutions, ensuring it as a topic of study in social sciences. Guenin (1997) based his work on Rawls' justice principle and addressed a wave of organizational justice, which he called distributive justice, in intercollegiate athletics.

Organizational justice is rooted in research conducted by Adams (1963; 1965) and Deutsch (1975). Within his research, Adams (1963) introduced a theory of social inequity. According to Adams inequity is defined when a "Person" receives greater responsibilities and duties than "Other" people in the organization. This variance is affected by one's perception of various factors, identified by Adams (1965). These characteristics include age, education, experience, and skill and are elements that may be provided by an employee in the work exchange process. Adams recognized the relationships between some variables that affect a worker's perception of fairness. Age and seniority is an example as many workers with seniority are older and want the consideration for their age and the time spent in the organization. Not receiving that and losing benefits in the exchange can challenge a worker's view of fairness.

According to Adams, these factors contribute to the organization's perception by its workers. In addition to Adams work, as previously mentioned, Deutsch (1975) noted that using the theory of equity as a single identifier of justice was limiting and failed to address non-economic relationships that have an impact on how people perceive justice. Deutsch (1975) brought the concept of need into the organizational justice conversations and identified its significance for consideration. Adams (1963) and Deutsch (1975) established the theory of distributive justice, defined as the perceived fairness of an organization based upon the allocation of resources (Greenberg, 1990).

Organizational justice literature is comprised of four waves of research and theory development, the distributive justice wave, procedural justice wave, interactional justice, and integrative wave (Mahony et al., 2010). This study will address distributive justice; therefore, that wave will be addressed last. The integrative way of organizational justice combines pieces of the other three waves of organizational justice. The interactional justice wave addresses the interpersonal aspects of justice. Interactional justice was defined as the interpersonal treatment and communications used while implementing the procedures (Bies & Moag, 1986; Mahony et al, 2010). Procedural justice was rooted in the work of Thibault and Walker (1975). This is best described as the fairness of the procedures used to allocate resources. Each wave has established research but only distributive justice was used as a theoretical base in research focusing on intercollegiate athletics.

Distributive Justice

Distributive justice, as defined by Greenberg (1990), is an individual's judgment or perceived fairness of resource allocation, based upon the produced outcomes of the individual compared to the expected inputs. As mentioned, Adams' (1963, 1965) theory of inequity is

rooted in distributive justice theory. Adams recognized that people evaluate equity when they review the effort and reward each contributes to the organization while comparing their contributions to other workers within the same organization. If an individual feels their contributions outweigh a co-worker's, yet the co-worker receives more in terms of resources, recognition, or reward, there is a justifiable anger. Because of this, according to Adams (1965), workers will reduce their workload to adjust their perceived fairness.

Distributive Justice in Intercollegiate Athletics

As previously mentioned, organizational justice research, in sport, has focused on distributive justice. Most work focused on organizational justice in intercollegiate athletics begins with the work of Hums and Chelladurai (1994a, 1994b). Their initial work was grounded in Thornblom & Jonsson's (1985) work that identified contributions according to (a) effort, (b) ability, or (c) productivity of the team member. These three can be described with an example from athletics. Contributions based on effort means the team who works hardest receives the greatest amount of resources. Contribution based on ability means the team with the most highly skilled players receive greater resources than those teams with lesser skilled players. Contributions based on productivity means the team that wins the most receives more resources than others (Thornblom & Jonsson, 1985) do.

At the center of the distributive justice controversy in intercollegiate athletics are multiple questions regarding financial resources available to all programs. For example, (a) Do men's revenue sports (football, basketball, possibly baseball) produce most of the revenue. (b) Do men's revenue sports need to spend as much money as they currently do? (c) Is dropping non-revenue men's sports (swimming and wrestling) an appropriate means to Title IX compliance? In addition to the previous question toward Title IX, additional questions include: (d) should

institutions be more compliant with Title IX? In addition, (e) Do men deserve more because they produce more revenue for the athletic department (Mahony & Pastore, 1998).

According to Hums & Chelladurai's (1994a) research, seven principles of allocation were used. Those include (a) equality of treatment; (b) equality of results; (c) quality of opportunity, as well as contributions based on (d) productivity; (e) effort; (f) ability; and (g) need. As well, they added (h) spectator appeal as a contributory factory. This third factor was added because sport, in America, is unique and certain sports like football and basketball will attract more spectators regardless of a team's win-loss record (Mahony et al, 2010). In addition to the eight principles of distributive justice that were applied in the distribution or retribution of money, facilities, and support services differences among subgroups were defined by (a) gender, (b) divisional membership, and (c) position (Hums and Chelladurai, 1994a). The subgroup of gender notes the difference between coaches and administrators and their perceptions of distributive justice, which is grounded in performance. In addition to the variable of gender, there is thought that distributive justice principles vary according to the division in which they participate. Emphasis is likely to be different in divisions between spectator appeal, media coverage, and possible revenue generation. The researchers also identified the variance between positions and their ideas of distributive justice. It is likely that coaches and administrators differ in the emphasis of distribution (Hums & Chelladurai, 1994a).

Hums and Chelladurai (1994a) took a stratified random sample of 100 athletic administrators from each of the three NCAA divisions, I, II, and III, which included 50 men and 50 women, producing a total sample size of 300 athletic administrators. After institutions were randomly selected, a male or female was randomly selected from that institutions list of administrators. The coaches were selected similarly. They surveyed 300 athletic administrators

and 300 coaches from divisions I, II, and III. They received 328 usable instruments, which included 152 males and 176 females. There were 101 respondents from Division I, 117 from Division II, and 110 from Division III. Fifty-eight subjects identified themselves as administrators, 132 identified themselves as coaches only, and 138 identified themselves as coaches and administrators (Hums & Chelladurai, 1994a).

The instrument used in this study was developed by Hums and Chelladurai (1994b) and included scenarios depicting resource distribution and resource retribution. The resources were money, facilities, and support services. Within each scenario, subjects rated the justness of each distribution principle on a 7-point Likert scale and chose which principle they, individually, would use. As stated above, comparisons were made by gender, division, and position (coach, athletic administrator, coach/athletic administrator) (Hums & Chelladurai, 1994a; Mahony et al., 2010). The initial pilot study used a stratified random sample of 20 administrators from each of Divisions, I, II, and III for a total of 60 administrators (Hums & Chelladurai, 1994a).The results showed the principles evaluated highest by all three subgroups (gender, position, and divisions) were equality of treatment, need, and equality of results (Hums & Chelladurai, 1994a; Mahony & Pastore, 1998; Mahony et al., 2010). Test-retest reliability was established by distributing a shorter version (6 scenarios) to 100 randomly selected subjects who had responded to the longer version (12 scenarios). Their ratings of the eight principles in the shorter version (posttest) were correlated with the corresponding ratings in the same scenarios in the previous and longer version (pretest). This resulted in 48 correlations, all of which were significant (Hums & Chelladurai, 1994a).

Additional research has been derived from the foundations set by Hums and Chelladurai. Mahony & Pastore (1998) examined participation opportunities, revenues, and expenses at

NCAA institutions from 1973 to 1993. Their support of the original research by Hums and Chelladurai was to better understand whether need and equality were the main principles affecting distributions. Mahony et al., (2002) went directly to the resource distribution heads and examined responses by intercollegiate athletic directors and athletic board chairs. This study was distinctly different because of its sole focus on financial resource allocation in intercollegiate athletic departments. The results of this study were not significantly different from Hums and Chelladurai's (1994a) study. The primary difference was in the results between divisions of play. Division I respondents noted that equity was fair if results were quantifiable and, similarly, if resources were to be taken away, it could be justified as equitable so long as it could be quantified. There is concern, however, by Mahony et al., (2002) that respondents may have held their responses back because their answers may not be socially acceptable (Mahony et al., 2010). This variance in responses prompted Mahony et al., (2005) to complete a follow-up study in intercollegiate athletics.

Mahony et al. (2005) study surveyed intercollegiate athletic directors and athletic board chairs with the goal of answering the following four questions: (a) Which sport teams do the decision makers believe have the most needs? (b) What factors do the decision makers believe make one team's needs greater than another's does? (c) Are there differences in perceptions of need by position? In addition (d), are there differences in perceptions of needs by division? Division I and Division III athletic directors and athletic board chairs were surveyed to determine which athletic team had the greatest financial needs and why that was true.

Without surprise, Division 1 athletic directors noted that football had the greatest financial need for men's sports. Board chairs identified track and field as having the greatest financial need. For women's programs, the athletic directors identified basketball, track and

field, softball, and volleyball as the programs facing the greatest financial need. Athletic board chairs recognized women's basketball as having the greatest need. Across divisions and positions, football was recognized as having the greatest financial need. There was a discrepancy between Division III athletic directors and board chairs as related to the greatest needs for women's athletics programs. Athletic directors identified track and field and basketball as programs having the greatest financial need and athletic board chairs identified softball as having the greatest needs.

Mahony et al. (2005) research identified three general reasons why the sports had the greatest needs. They include: (a) a lack of resources available for the team, (b) the high costs associated with the team, and (c) the level of resources needed by the team to be competitively successful. This concept is not new as previous research identified a lack of resources as a significant factor for identified need. This lack of resources indicates decision makers recognize the new difference between a greater need for financial resources and the previous thoughts that if one had less than others did, it deserved more. Because of the nature of the two positions, athletic directors and board chairs view need differently (Mahony et al., 2010). The primary category of need was the lack of available resources (Mahony et al., 2005). This category is consistent with previous research conducted by Deutsch (1975) and Hums & Chelladurai (1994a). The challenges of need were addressed in capital and scholarships. Scholarships were also referred to as human capital (Mahony et al., 2005). Without the funds needed to fully fund scholarships athletic directors recognized the challenges for program success.

Subgroups of Distributive Justice

Additional studies were completed by Mahony, Riemer, Breeding, and Hums (2006) in support of previous research conducted by Mahony et al., (2002, 2005). Their 2006 study

examined the perceptions of college athletes, other college students, and their ideas of resource distribution in intercollegiate athletics in a two-study set. The first study examined perceptions in intercollegiate athletics setting. Participants were divided into five categories: (a) male non-athletes, (b) male revenue sport athletes, (c) male non-revenue sport athletes, (d) female non-athletes, and (e) female athletes. Results, as expected by this researcher, showed male revenue sport athletes and male non-athletes rated equity principles highest. This result is logical and reflects self-interest (Mahony et al., 2010).

The second study, Mahony et al., (2006) tested a for-profit company, New Balance, rather than that of intercollegiate athletes, as was done in all previous research. They used the same scenarios in the second study as the first but the changed the decision maker to New Balance rather than the athletic director. This study resulted in a consistent rank of equity principles but equality of treatment and needs was considered fair.

Patrick, Mahony, & Petrosko (2008) conducted follow-up research to the Mahony et al., (2005) study. This study was done to examine perceived fairness on the three subprinciples of need, the most preferred equality principles (equality of treatment) and equity principles (revenue production) that was addressed in previous studies. By using new scenarios related to financial resources, the researchers identified a consistent use of the traditional definition of need (Deutsch, 1975) as opposed to the prediction of Mahony et al., (2002, 2005).

Kim, Andrew, Mahony, and Hums (2008) examined student-athlete perceptions of fairness in intercollegiate athletics. Kim et al., (2008) focused exclusively on perceptions of Division I student-athletes at one Midwestern university. They noted football, men's and women's basketball were considered revenue sports. They note that women's basketball was not financially profitable but was funded like a traditional revenue sport. The research compared

sport type (revenue vs. non-revenue) and gender. As expected, revenue sport respondents, men and women, perceived they were treated based on equality and need. Though the authors expected to find gender differences, they discovered some differences exist in perceived fairness among sports. Non-revenue producing sports are much more likely to perceive their sport as being treated unfairly as they base this on their perception of treatment and funding. Kim et al., (2008) were unable to achieve a desired response rate, limiting their analysis. They note a need to expand future research to more than one Division I institution and to expand to include BCS and FCS universities.

A study by Andrew, Kim, Mahony, and Hums (2009) used the foundational pieces of distributive justice in intercollegiate athletics and created a model to examine the impact of distributive justice in intercollegiate athletics on three variables: (a) outcome satisfaction, (b) affective organizational commitment, and (c) organizational citizenship behavior. The population for Andrew et al.'s (2009) study consisted of student-athletes at a Division I Midwestern university. Among 463 distributed questionnaires, 169 were returned and 159 (34%) were usable for the study (Andrew et al., 2010). The results indicated athletic directors need to focus on student-athlete's perception of fairness as it relates to equality and need (Andrew et al., 2009).

Organizational justice is rooted in research conducted by Adams (1963; 1965) and Deutsch (1975). Adams (1963) and Deutsch (1975) established the theory of distributive justice, defined as the perceived fairness of an organization based upon the allocation of resources (Greenberg, 1990). Organizational justice literature is comprised of four waves of research and theory development, including the distributive justice wave. (Mahony et al., 2010).

Distributive justice, as defined by Greenberg (1990), is an individual's judgment or perceived fairness of resource allocation, based upon the produced outcomes of the individual

compared to the expected inputs. Most work focused on organizational justice in intercollegiate athletics begins with the work of Hums and Chelladurai (1994a, 1994b). Their initial work was grounded in Thornblom & Jonsson's (1985). Additional research has been derived from the foundations set by Hums and Chelladurai. Mahony & Pastore (1998) examined participation opportunities, revenues, and expenses at NCAA institutions from 1973 to 1993. Additional studies were completed by Mahony, Riemer, Breeding, and Hums (2006) in support of previous research conducted by Mahony et al., (2002, 2005). Their 2006 study examined the perceptions of college athletes, other college students, and their ideas of resource distribution in intercollegiate athletics in a two-study set. As well, research by Mahony et al., (2010) addressed distributive justice in intercollegiate athletics.

CHAPTER 3

METHODOLOGY

The purpose of the study was to examine what Division 1 head softball coaches consider fair or unfair as they decide how to distribute scholarship dollars. Differences across gender, race, years of head coaching experience, and at which levels their experience comes from. This chapter explains the methods used in carrying out the examination of fairness and experience and their effect on the eight fairness principles. The section includes the research design, and explanation of the participants, instrument used, procedures used, and data analysis. The chapter concludes with a summary of the methodology.

Research Design

This study incorporated a survey design. In this study, the entire population of NCAA Division I softball coaches was included in the sample. To advance the existing body of work on the fairness principles established by Hums and Chelladurai (1994a), the research perspective utilized for the present study was a quantitative study.

Internet survey design has both advantages and disadvantages. Advantages of internet survey design include: (a) ease of access to many demographically diverse participants. (b) Ease of access to specific participant populations. (c) A stronger justification for generalizing findings of internet experiments to the general population compared to laboratory experiments. (d) Generalizability of findings to more settings and situations, since external validity is high in internet experiments compared to laboratory experiments. (e) Avoidance of time constraints. (f) avoidance of organizational problems; (g) voluntary participation; (h) ease of acquiring the optimal number of participants for achieving high statistical power while being able to draw meaningful conclusions and (i) cost savings (Reips, 2000).

Disadvantages of internet survey design include: (a) multiple submissions are possible; (b) dropout is high; (c) data error due to unclear instructions or a misunderstanding of participants; (d) dependence on availability of technology could limit responses due to inconvenience of participants (Reips, 2000).

To design effective web-based surveys, Dillman (2000) suggests using (a) personalized contacts through email, if possible while keeping the invitation brief. (b) Begin with a question that is interesting but easy to answer. (c) Introduce a web survey with a welcome screen that is motivational, emphasizes the ease of response, and instructs respondents to proceed to the survey. (d) Present each question in a format like a conventional paper survey. (e) Do not set an order of response; and (f) make it possible for each question and possible response to each question to be visible at one time.

To increase response rates for web-based surveys, Dillman (2000) recommends sending a pre-notification e-mail a few days before administering the survey. As well, follow-up reminders should be sent first via email and then through more expensive methods such as paper mail (Schaeffer & Dillman, 1998). Multiple contacts with respondents has shown to increase response rates for e-mail surveys (Mehta & Sicadas, 1995; Smith, 1997). To ensure only the desired participants completed the survey, it was protected with a password within the website link that was sent to each subject, trying to limit the number of submissions completed from people not within the population. Finally, the survey was administered through Qualtrics, which restricted possible data tampering.

Participants

Participants were based on a list of colleges and universities who offer softball at the Division I level of the National Collegiate Athletic Association (NCAA) as of May 2017. This

list comprises a list of the institutions, their classification (Division I), conference, and state (NCAA, 2016b). The subjects were head coaches at the listed NCAA Division I softball institutions. The list provided a web-based link to the university's athletic website where the head softball coach was identified and the email address for the head softball coach was recorded. Based on the information provided by the NCAA list, 295 surveys were e-mailed to head softball coaches.

Procedures

Internet survey methodologies were incorporated into this study. Two weeks prior to the date of the survey, May 29, 2017, e-mails were sent to each head softball coach to notify them of the upcoming surveys (Appendix C). Another email was sent to participants to remind them of the survey one week prior to the survey's launch (Appendix D). Next, emails containing the link to the online survey and related instructions were sent to the selected sample on June 12, 2017 (Appendix E). For three consecutive Mondays, head softball coaches in the sample were sent a reminder e-mail to complete the survey (Appendix F).

Instrumentation

Scenario Formulation. Because this study was determining what characteristics NCAA Division I softball coaches use to decide how to allocate grants-in-aid, one scenario was used with five examples for fairness. The scenario was formulated based on established works by Hums and Chelladurai (1994a; 1994b), Mahony and Breeding (1999), and Mahony et al., (2002). Subjects viewed one scenario to highlight fairness as related to grants-in-aid distribution. The scenario evaluated fairness by asking the coach to rate the six examples for which grants-in-aid may be distributed. In addition to the scenario, demographics were requested and importance of student-athlete characteristics was asked.

Pilot Study. Face validity, the degree to which the instrument measures what is expected, was established through a pilot study. The instrument was presented to 10 head softball coaches in a south-central NAIA conference to establish whether the scale was readable and understandable. An example of the pilot study survey is included in Appendix B.

Operationalization of the Independent Variables. Based on the review of literature, the two independent variables in this study were gender and NCAA level. As noted in the literature review, both variables produced statistically significant results in previous studies addressing athletics and distributive justice. Gender will be nominally scaled and defined as male or female, which respondents will select in the online survey.

NCAA division was a nominally scaled variable with four levels: FBS Autonomy 5, FBS, FCS, I-AAA. As the coaches are aware of their institution's NCAA divisional affiliation, it is expected they will note the correct classification on the online survey. Based on Mahony et al., (2001), NCAA division warranted further study as divisional differences, such as need, was a consistently cited principle, but need could be due to several factors.

Operationalization of the Dependent Variables. The instrument was interval scaled and based on prior studies (Hums & Chelladurai, 1994a; Mahony & Breeding, 1999; Mahony et al., 2001; Mahony et al., 2002; Mahony & Pastore, 1998; Thornblom & Jonsson, 1987). Respondents read a scenario and rated five statements based on a 7-point Likert scale measuring the perceived fairness of five distribution methods. Equality of treatment was a distribution method that subjects in prior studies rated a preferred method of distribution. The following statement is an example of this:

All money would be distributed equally among the teams in the athletic department.

1	2	3	4	5	6	7
Very Unfair			Neither Fair Nor Unfair			Very Fair

Because no research on fairness of grant-in-aid distribution has been done, a scenario was written to incorporate the distribution of scholarship monies for softball student-athletes. Respondents read the scenario, (Appendix B) regarding allocation of annual softball grants-in-aid and then rated the perceived fairness of equality of distribution, previous season performance, student-athlete's financial need, hardest working student-athletes in the previous season, and equal distribution for returning student-athletes with incomers equally sharing remaining monies.

Data Analysis

Data were imported into SPSS from Qualtrics and then an ANOVA was conducted in SPSS. Descriptive statistics were produced from five student-athlete characteristics measuring respondents' perception of importance as measured on a 7-point Likert type scale. A one-way ANOVA was conducted for each of the five characteristics against each of the four NCAA divisions. As well, descriptive statistics were produced from one scenario asking respondents to determine levels of fairness of six student-athlete characteristics measured on a 7-point Likert type scale. A one-way ANOVA was conducted for each of the six characteristics of fairness against each of the four NCAA divisions. Finally, because no statistical significance was found between any of the 11 characteristics and NCAA divisions, post hoc test of effect sizes were calculated using a Cohen's *d* test.

CHAPTER 4

RESULTS

The purpose of the study was to examine what Division 1 softball coaches consider fair or unfair as they decide how to distribute scholarship dollars, according to division of play, gender, and years of head coaching experience. The following chapter details the results obtained from the statistical procedures outlined in Chapter 3. The results of the scenarios are presented separately. There are 295 NCAA Division I softball programs in 2016 – 2017. Due to the time of distribution, 16 emails were invalid and 17 universities would not release the email addresses of the head coach. Therefore, 262 online surveys, using Qualitrics, were distributed to NCAA Division I softball coaches. There were 42 responses for a return rate of 16%.

As suggested by Dillman (2000) a pre-notification email (Appendix C) was sent to coaches two weeks prior to distributing the survey. One week later a second email (Appendix D) was sent to coaches to remind them to look for the survey that would be coming. The week of June 12, 2017, a third email was sent to coaches that included the introductory letter and survey instrument (Appendix E). For two consecutive weeks, a reminder email with a link to the survey (Appendix F) was sent to the coaches. Data were evaluated beginning July 17, 2017.

Table 2

Numbers of Participants by Gender

	Frequency	Percent
Male	16	38.1
Female	26	61.9
Total	42	100.0

Table 3

Number of Participants by Division

	Frequency	Percent
FBS Autonomy 5	11	26.2
FBS	8	19.0
FCS	15	35.7
I-AAA	8	19.0
Total	42	100.0

Survey participants were asked to indicate how important they perceived five student-athlete characteristics were when deciding grant-in-aid allocation. Respondents rated Athletic Ability as most important (M = 6.61, SD = 0.49) and Proximity as least important (M = 2.80, SD = 1.69). See Table 4 for complete results.

Table 4

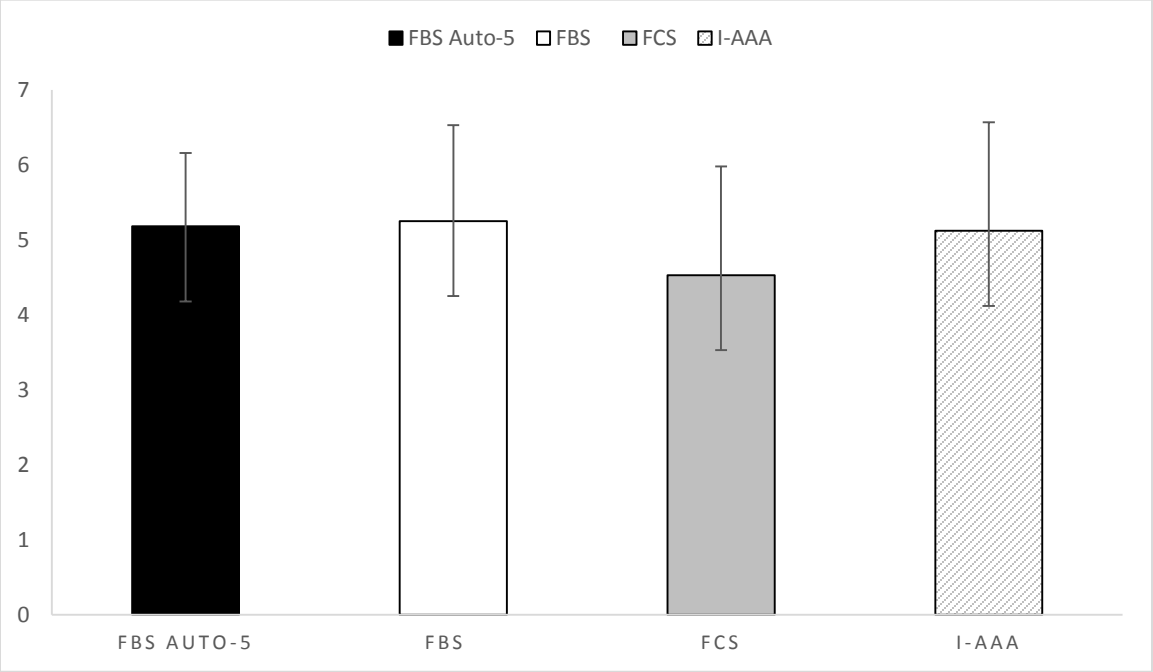
Perceived Importance of Student-Athlete Characteristics

Variable	Overall M (N = 42)	Overall SD	FBS Auto 5 N	FBS Auto 5 M	FBS Auto 5 SD	FBS N	FBS M	FBS SD	FCS N	FCS M	FCS SD	I-AAA N	I-AAA M	I-AAA SD
Financial Need	4.95	1.30	11	5.18	0.98	8	5.25	1.28	15	4.53	1.45	8	5.12	1.45
Athletic Ability	6.61	0.49	11	6.81	0.40	8	6.62	.51	15	6.53	.51	8	6.50	0.53
Family Situation	4.76	1.12	11	4.81	1.07	8	5.00	0.75	15	4.46	1.24	8	5.00	1.30
Academic Ability	6.14	0.78	11	6.09	0.70	8	6.00	0.92	15	6.13	0.83	8	6.37	0.74
Proximity	2.80	1.69	11	3.00	1.84	8	3.25	2.18	15	2.86	1.55	8	2.00	1.19

Question 1 rated the perceived importance on the student-athlete's financial need. The Financial Need x Division interaction was not significant, F (3, 38) = 0.80, p = .50. See Figure 1 for a graph of means by division.

Figure 1

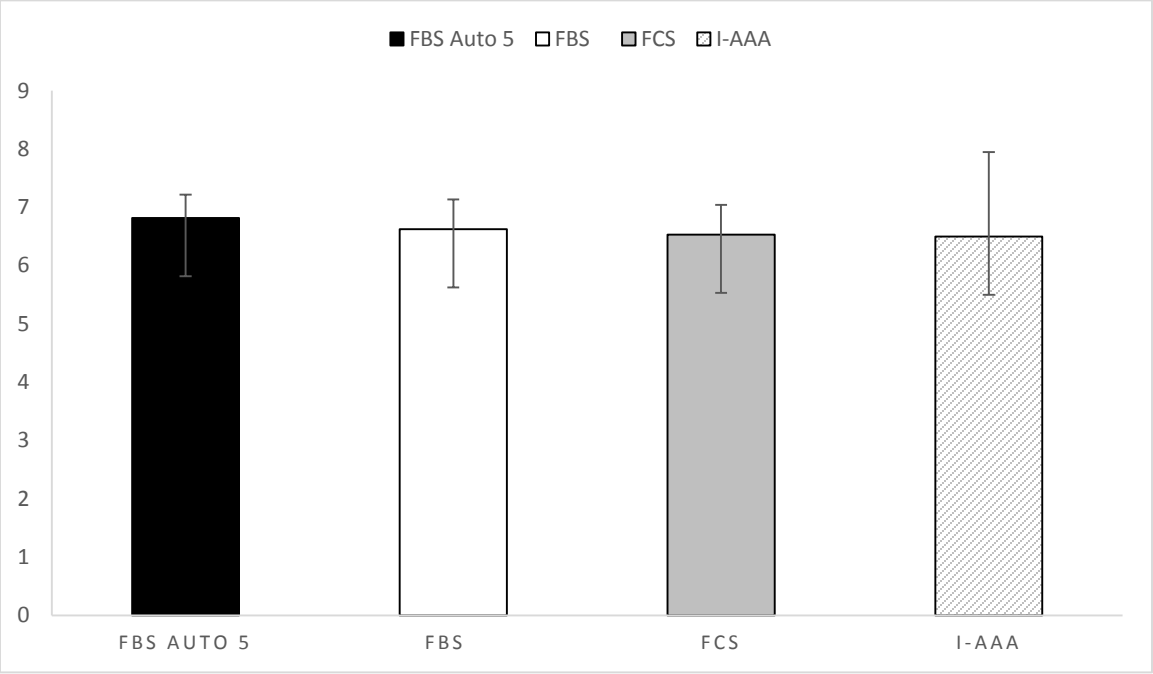
Means of Perceived Importance of Financial Need by NCAA Division



Question 2 rated the importance on the student-athlete's athletic ability. The Athletic Ability x Division interaction was not significant, F (3, 38) = 0.90, p = .44. See Figure 2 for a graph of means by division.

Figure 2

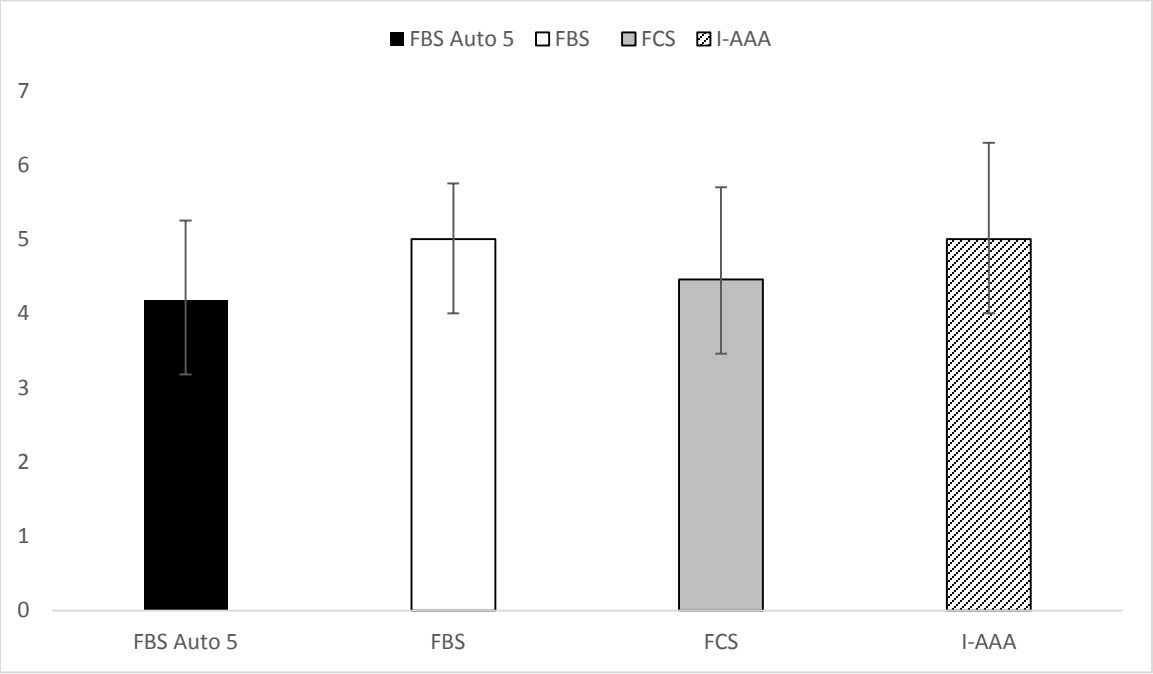
Means of Perceived Importance of Athletic Ability by NCAA Division



Question 3 rated the importance on the student-athlete's family situation. The Family Situation x Division interaction was not significant, F (3, 38) = 0.57, p = .63. See Figure 3 for a graph of means by Division.

Figure 3

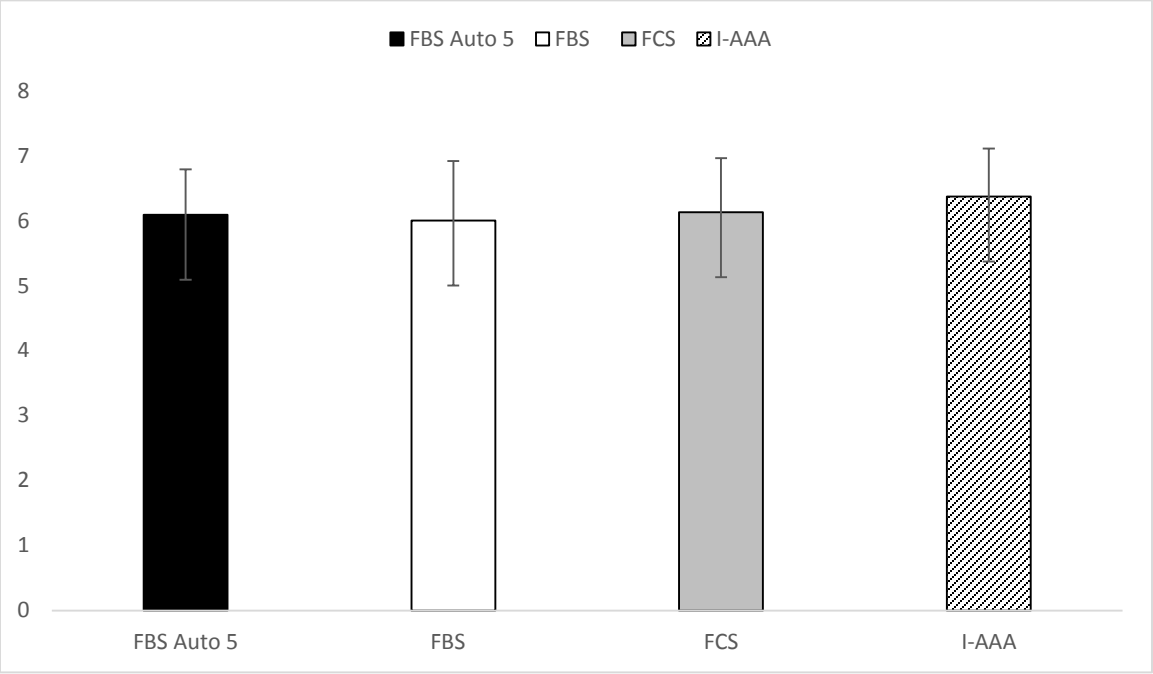
Means of Perceived Importance of Family Situation by NCAA Division



Question 4 rated importance on the student-athlete's academic ability. The Academic Ability x Division interaction was not significant, F (3, 38) = 0.32, p = .80. See Figure 4 for a graph of means by Division.

Figure 4

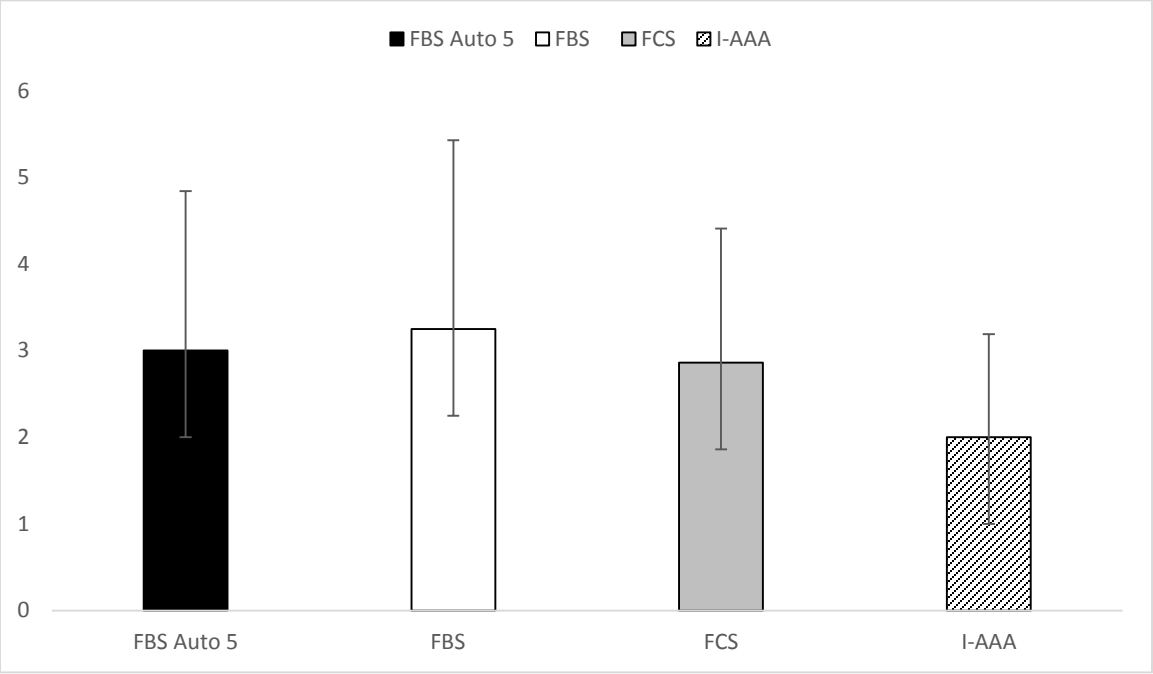
Means of Perceived Importance of Academic Ability by NCAA Division



Question 5 rated the perceived importance of proximity of student-athletes hometown to campus. The Proximity x Division interaction was not significant, F (3, 38) = 0.82, p = .48. See Figure 5 for a graph of means by division.

Figure 5

Means of Perceived Importance of Proximity by NCAA Division

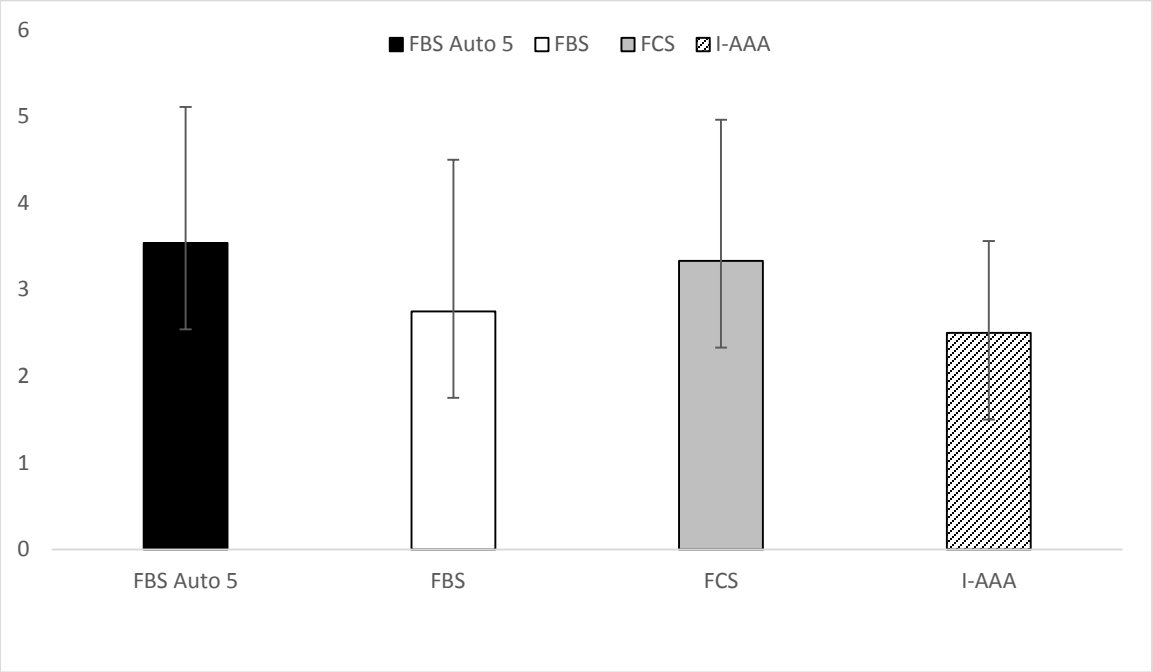


In addition to the questions of importance, this study asked respondents to rate six responses to the following scenario regarding grants-in-aid allocation: When making decisions regarding allocation of annual softball grants-in-aid, how fair do you perceive each of the following allocation decisions? A one-way between subjects ANOVA was conducted to compare the level of fairness on the four divisions of competition.

The first allocation decision rated perceived fairness on whether equal amounts of aid should be given to each student-athlete. The Equal Aid x Division interaction was not significant, F (3, 38) = 0.94, p = .42. See Figure 6 for a graph of means by division.

Figure 6

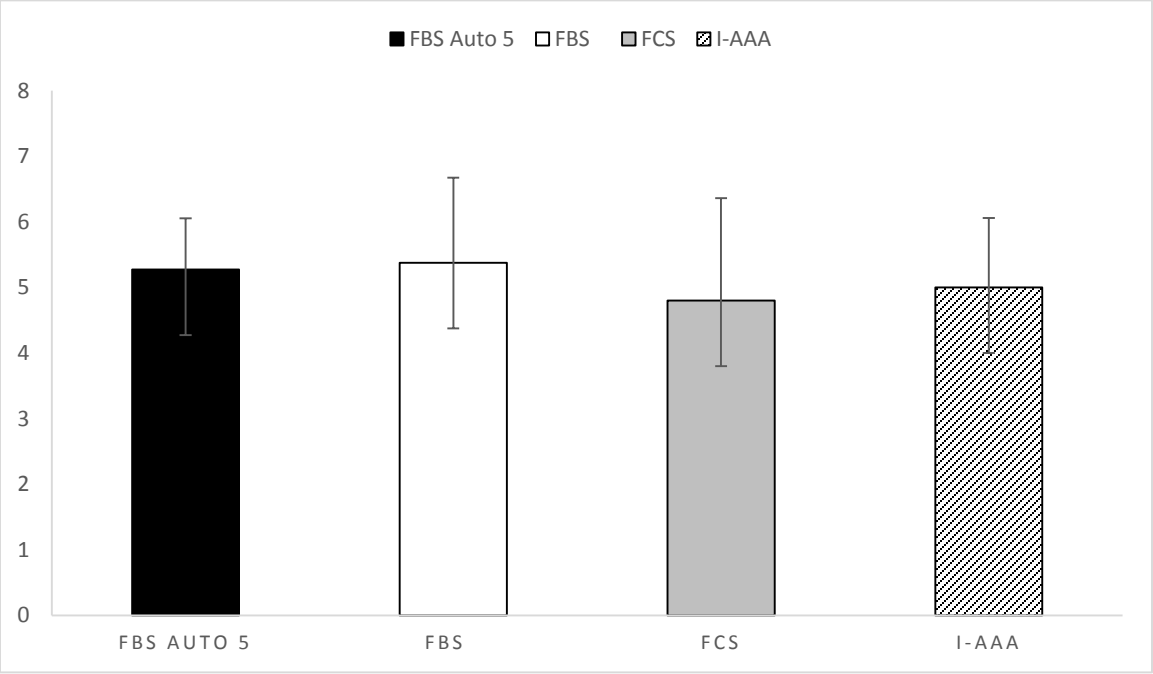
Means of Perceived Fairness of Equal Aid by NCAA Division



The second allocation decision rated perceived fairness on whether student-athletes who performed best on the field in the previous season should receive the most aid. The Previous Performance x Division interaction was not significant, F (3, 38) = 0.48, p = .69. See Figure 7 for a graph of means by division.

Figure 7

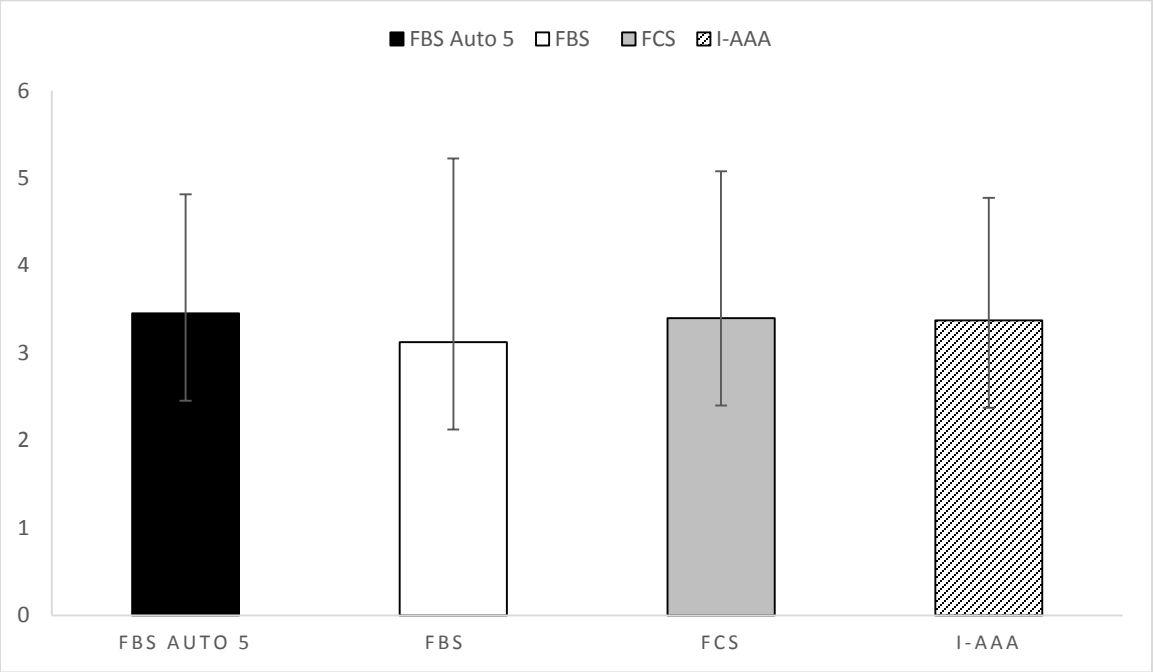
Means of Perceived Fairness of Previous Performance by NCAA Division



The third allocation decision rated perceived fairness on whether student-athletes who need the money the most should receive the most aid. The Greatest Need by Division interaction was not significant, F (3, 38) = 0.07, p = .97. See Figure 8 for a graph of means by division.

Figure 8

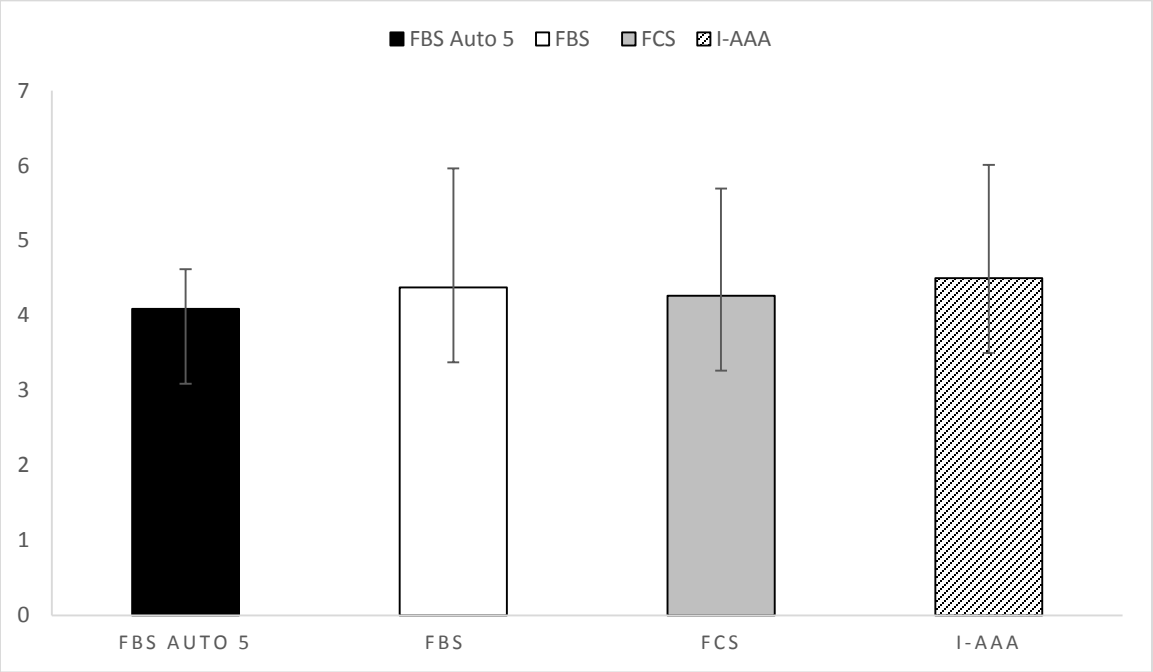
Means of Perceived Fairness of Greatest Need by NCAA Division



The fourth allocation decision rated perceived fairness on whether student-athletes who worked the hardest the previous season should receive the most aid. The Worked Hardest x Division interaction was not significant, F (3, 38) = 0.16, p = .92. See Figure 9 for a graph of means by division.

Figure 9

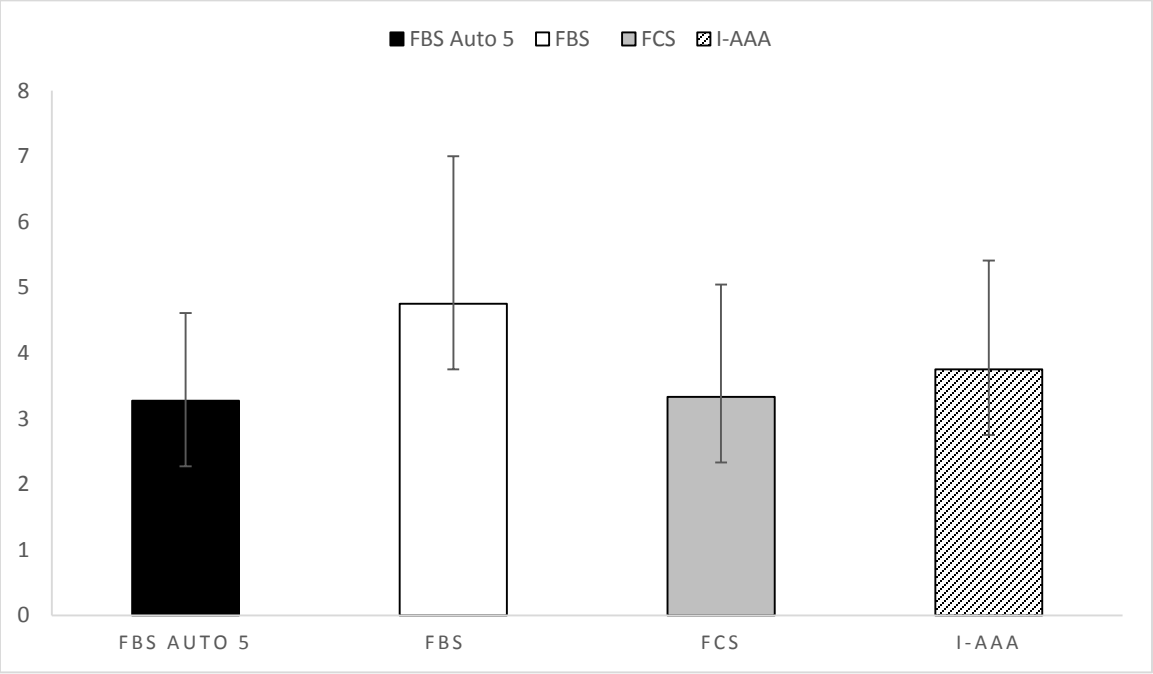
Means of Perceived Fairness of Worked Hardest by NCAA Division



The fifth allocation decision rated perceived fairness on whether returning student-athletes should receive the same amount of aid as the previous year, with incoming student-athletes sharing equally the remaining aid amount. The Returners Same Aid x Division interaction was not significant, F (3, 38) = 1.41, p = .25. See Figure 10 for a graph of means by division.

Figure 10

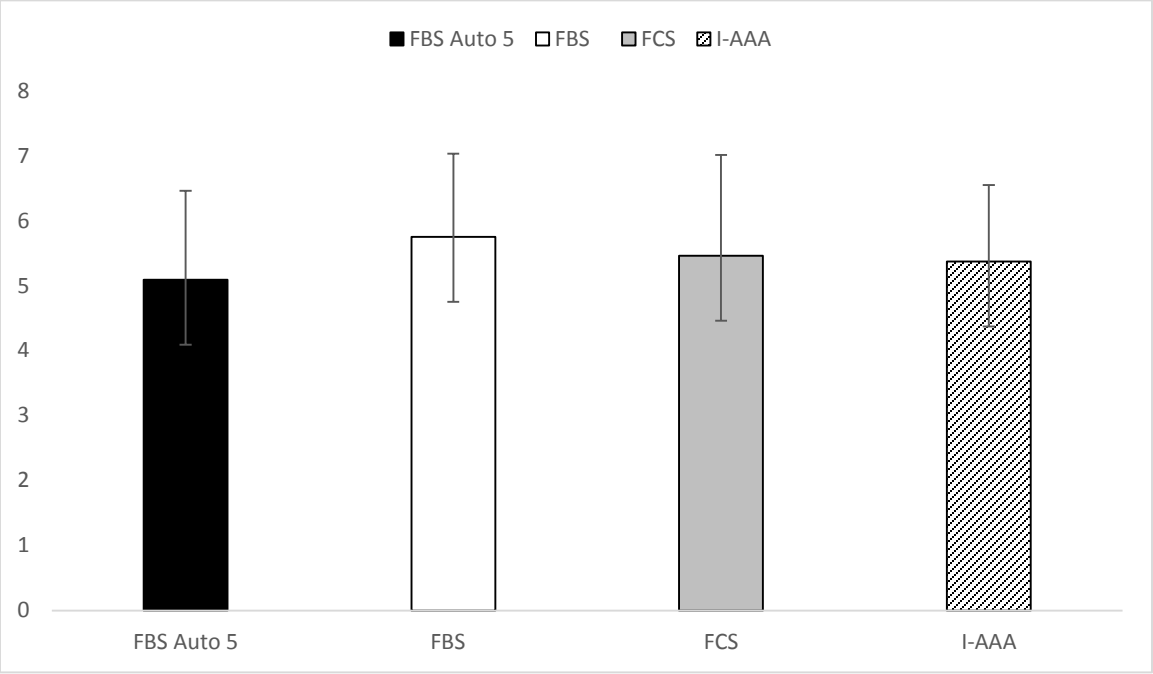
Means of Perceived Fairness of Returners Same Aid by NCAA Division



The sixth and final allocation decision rated perceived fairness on whether student-athletes who play key positions should receive the most aid. The Key Position x Division interaction was not significant F (3, 38) = 0.36, p = .78. See Figure 11 for a graph of means by division.

Figure 11

Means of Perceived Fairness of Key Positions by NCAA Division



In addition to the previously addressed questions of fairness, respondents were asked to rate which of the six allocation decisions regarding distribution of annual softball grants-in-aid were most fair.

Table 5

Descriptive statistics of questions of fairness

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Equal aid	42	1.00	6.00	3.11	1.54
Previous performance	42	2.00	7.00	5.07	1.23
Greatest need	42	1.00	6.00	3.35	1.58
Worked hardest	42	1.00	7.00	4.28	1.27
Returners same aid	42	1.00	7.00	3.66	1.76
Key positions	42	2.00	7.00	5.40	1.36

Table 6

Questions of fairness frequency distribution

	Frequency	Percent
Equal aid	7	16.7
Previous performance	8	19.0
Greatest need	1	2.4
Worked hardest	3	7.1
Returners same aid	5	11.9
Key positions	18	42.9
Total	42	100.0

Because there was no statistical significance when evaluating respondent's perception of importance, a post-hoc effect size analysis was run. There was a moderate effect between FBS Autonomy 5 and FCS (d = 0.53) and between FBS and FCS (d = 0.52) respondents when determining importance of the financial need of the student-athlete. FCS respondents averaged fewer scholarships to distribute implying they may rely more on student-athletes who qualify for federal or state monies to supplement the scholarship. When determining importance of a student-athlete's athletic ability there was a moderate effect (d = 0.61) between FBS Autonomy 5 and FCS as well as a moderate effect (d = 0.66) between FBS Autonomy 5 and I-AAA respondents. FBS Autonomy 5 universities place a greater importance on winning and determine athletic ability as a significant factor. Determining importance of a student-athlete's family situation did not result in statistical significance but did reflect a moderate effect (d = 0.53) between FBS and FCS coaches. There were multiple effects when coaches determined importance of a student-athlete's proximity of their hometown to campus. There was a moderate

effect (d = 0.66) between FBS Autonomy 5 and I-AAA coaches, a moderate effect (d = 0.74) between FBS and I-AAA coaches, and a moderate effect (d = 0.63) between FCS and I-AAA coaches.

In addition to respondents' perceptions of importance, statistical analysis was run to determine significance between coaches' perceptions of fairness and divisions. Because there was no statistical significance, a post-hoc effect size analysis was run to determine effect size between divisions for each of the six questions of fairness. There was a high moderate effect (d = 0.79) between FBS Autonomy 5 and I-AAA respondents when determining perceived fairness when asked if equal amounts of aid should be given to each student-athlete. As well, a moderate effect (d = 0.71) was found when determining coaches' perception of fairness between FBS and FCS coaches when asked if returning student-athletes should receive the same amount of aid as the previous year, with incoming student-athletes sharing equally the remaining aid amount. In addition to the moderate effect between FBS and FCS coaches, there was a high effect (d = 0.82) between FBS Autonomy 5 and FBS coaches when asked the same question.

CHAPTER 5

DISCUSSION

The purpose of this study was to examine the differences of NCAA division on coaches' fairness perceptions of grant-in-aid allocation. Results included in Chapter 4 reflected results that were not statistically significant. The ensuing discussion focuses on the results. NCAA Division I institutions place a high emphasis on winning and thus responses were reflective of this priority. The previous research by Mahony et al., (2002) reflected perceived fairness on multiple scenarios of income distribution and retribution. This study is grounded in the same distributive justice theory used to evaluate coaches' perceived fairness of grant-in-aid allocation at the four levels of NCAA Division I softball. Coaches determine importance of student-athlete characteristics differently. Athletic Ability had the greatest overall mean (M = 6.61), whereas proximity of the student-athletes hometown to campus was deemed least important (M = 2.80).

As noted previously, the study was designed to determine what athlete characteristics coaches identify as most important for grant-in-aid distribution and to analyze the effect of NCAA division on perception of fairness for grant-in-aid distribution. The question whether there are differences based on NCAA division in perceptions of fairness for grant-in-aid distribution is difficult to confirm as no statistical significance was found. It is thought that athletic ability of student-athletes is most important to coaches at all levels, but certainly, for those at FBS Autonomy 5 institutions whose career is determined by victories. As well, at I-AAA institutions where pressure to win is not considered to be as high, one would expect other factors to be most important when determining grant-in-aid distribution. There was a moderate effect (d = 0.66) between FBS Autonomy 5 and I-AAA respondents.

The study presented five student-athlete characteristics, asking coaches to determine levels of importance when allocating grant-in-aid monies. In addition to factors of importance, the study presented six situations on which grant-in-aid distribution might be based. Coaches were asked to determine levels of fairness for each of those six situations. Finally, coaches were asked to determine which one of those six factors was the most-fair grant-in-aid distribution principle. Examples of the factors of importance and situations of fairness are in Appendix B. With all 11 points, five factors of importance and six factors of fairness, no statistical significance was found.

Levels of Importance Means Summary

Evaluating the means of the five questions of importance did not reflect significance. Question one of importance, financial need of the student-athlete, did not reflect statistical significance but differences between FCS and the other divisions suggest a varied view of importance when it comes to scholarship distribution based on the financial need of the student-athlete (Figure 1). Seven FCS programs were fully funded (12 scholarships) while eight programs averaged 8.32 scholarships, ranging from zero to 11. Of those programs not fully funded, the average roster size was 20.50 student-athletes, with an average grant-in-aid distribution of 0.40 scholarships per student-athlete. It is possible that coaches perceived the importance of financial need of the student-athlete to utilize federal assistance monies awarded to student-athletes who meet financial levels of need, reducing the need for scholarship monies to them, allowing more monies to distribute to student-athletes who do not meet the federal threshold for assistance. This is supported by the moderate effect between FBS & FCS on the financial need of the student-athlete ($d = 0.52$) as well as a moderate effect between FBS Autonomy 5 and FCS ($d = 0.53$).

A second question of importance, the student-athlete's athletic ability, as well did not reflect significance but the variance between FBS Autonomy 5 coaches and I-AAA coaches was interesting (Figure 2). Scholarship distribution philosophies vary from coach to coach and coaches have the right to distribute grants-in-aid, as they deem necessary. The thought that a student-athlete's playing ability is the exclusive factor for evaluation is inaccurate according effect sizes between FBS Autonomy 5 and FCS (d = 0.60) and between FBS Autonomy 5 and I-AAA (d = 0.66). This factor is important when a coach distributes grants-in-aid to potential student-athletes. Though it is not a surprise that athletic ability is a priority for all divisions (M = 6.61, SD = 0.49); it is interesting that those institutions without football (I-AAA) place athletic ability lowest in their factors for scholarship distribution (d = 0.66) between FBS Autonomy 5 & I-AAA.

The third question of importance, student-athletes' family's financial situation, again did not reflect statistical significance. The average number of scholarships at FCS institutions is 10.04 scholarships while the average roster size within FCS reflected 20.90 student-athletes per institution. This results in an average distribution of 0.48 scholarships divided between student-athletes. Realizing that not all student-athletes receive equal amounts, coaches whose programs have fewer scholarships to distribute might make the family's ability to contribute to the student-athlete's tuition a priority to allow for the possibility of getting better players with less grant-in-aid monies.

A fourth question of importance, the student-athlete's academic ability, did not reflect statistical significance. There were only low effect sizes between the four divisions. It is possible that had response rates been higher there would have been significance between the various divisions as related to a student-athlete's academic ability. If a university does not have football

and the revenue it creates, scholarship monies may be limited in non-power and non-revenue sports like softball. This may cause coaches to place more importance on a student-athlete's academic ability to provide academic monies to pay for the athlete's cost of attendance. This would allow the coach to use fewer athletic grant-in-aid resources on high academic achievers, saving softball grants-in-aid for those who do not achieve as high, academically. Of the eight I-AAA respondents, four programs were fully funded with 12 scholarships. The average number of scholarships for this division is 9.40 divided by an average roster size of 21.25 only allows 0.44 scholarships per roster member at the I-AAA institutions who responded.

The fifth and final question asked coaches to rate the importance of the proximity of the student-athletes hometown to campus. As noted in Figure 5, the mean scores of divisions do not reflect statistical significance but reflect a difference between divisions. There was a moderate effect (d = 0.73) between FBS and I-AAA coaches, a moderate effect (d = 0.65) between FBS Autonomy 5 and I-AAA coaches, and a moderate effect (d = 0.63) between FCS and I-AAA coaches. Similarly, as viewed in Table 9, there is no significance between divisions when reviewing the level of importance each place on the proximity of a student-athletes hometown to campus. However, it is surprising that I-AAA coaches rated the importance of proximity as low as they did considering the perception that FBS schools recruit nationwide and lower level programs recruit from a smaller radius from campus. This supports the thought that I-AAA universities, typically more regionally based, consider student-athletes who live closer who could live at home while attending classes and playing softball, resulting in a decreased cost and less reliance on more scholarship dollars.

Level of Fairness Means Summary

One scenario for grant-in-aid distribution was presented to coaches to reflect perceived fairness of six allocation decisions. None of the allocation decisions reflected statistical significance. However, effect sizes reflect the actual difference between divisions.

Question of fairness one, equal amounts of aid should be given to each student-athlete, found in Table 6 and Figure 6, did not reflect statistical significance but revealed I-AAA coaches thought distributing grants-in-aid equally between student-athletes was the least fair method of allocation distribution. This is somewhat surprising considering FBS Autonomy 5 coaches scored this highest in importance than any of the four divisions. It would be presumed that FBS Autonomy 5 coaches would be least likely to distribute grants-in-aid equally because of the increased expectation for performance, whereas lower level programs are perceived to need to be competitive but is not likely to be able to perform at a similar level as power 5 universities.

A second question of fairness, student-athletes who performed best in the previous season should receive the most aid does not reflect statistical significance. There is, however, a difference between FBS coaches and FCS coaches as they determine fairness. When reviewing the means of the four divisions (Figure 7), one notices the drop between a much higher level of importance by FBS coaches (M = 5.37) than FCS coaches (M = 4.80). This implies FBS coaches are more likely to reward student-athletes with increases in grant-in-aid distribution for exceptional play from one season to another. FCS coaches, however, do not imply performance from year to year affects their decisions for grant-in-aid distribution. This implies the coaches stay consistent with grant-in-aid distribution and once an amount is agreed upon, that amount remains throughout a player's time at the institution. Because FCS programs have fewer grants-

in-aid to distribute than FBS Autonomy 5 and FBS programs, they may be more limited in their allocation flexibility.

When reviewing the means by division from the third question of fairness (Figure 8), student-athletes who need the money the most should receive the most aid, no statistical significance was found.

The fourth question of importance presented to the coaches, student-athletes who worked the hardest the previous season should receive the most aid, was not statistically significant but indicated a difference between FBS Autonomy 5 coaches' perception and I-AAA coaches' perception. The mean for FBS Autonomy 5 coaches (M = 4.09) was noted in Figure 9 as obviously lower in fairness than I-AAA coaches (M = 4.50). Again, this reflects the flexibility in certain levels of others. Coaches of I-AAA programs clearly recognize and reward allocation flexibility to student-athletes whose work hardest. I-AAA coaches are most likely to allocate more grant-in-aid monies to student-athletes who reflect a greater work ethic.

Coaches were asked to rate the level of fairness for the allocation decision, returning student-athletes should receive the same amount of aid as the previous year, with incoming student-athletes sharing equally the remaining aid amount, no statistical significance was found. Only FBS coaches (M = 4.75) indicated fairness above the mid-point of the scale suggesting most coaches do not believe this allocation decision to be appropriate. One FBS program reported not being fully funded (six scholarships to the others with 12). It appears that, based on the data, once a coach decides the amount that will be awarded to a student-athlete, they are most likely to receive the same amount throughout their eligibility, thus creating a cycle of high years and low years depending upon how the awards were distributed. Based on the FBS coaches' level of fairness, they indicate a willingness to see a player through without adjusting scholarship

monies for good performance or poor play. There is little surprise to this effect as there is a perceived need to be competitively successful by FBS Autonomy 5 coaches, thus creating a greater effect between FBS Autonomy 5 and FBS respondents (d = .81).

The final allocation decision presented to the coaches was to determine their level of fairness of student-athletes who play key positions should receive the most aid. The participants tended to agree on the fairness of distribution to athletes who play key positions as less than .7 points separate the highest mean (FBS, M = 5.75) and the lowest mean (FBS Autonomy 5, M = 5.09). This is surprising, as one would expect FBS Autonomy 5 coaches to consider key positions as more important than other divisions because there is a greater emphasis on winning at higher levels. Factors include higher coaches' salaries, greater resource allocation to programs, and a greater need by administrators to see a return on investment. FBS Autonomy 5 institutions have greater resources than those at I-AAA levels who do not have football to supplement athletic department budgets. Key positions appear to be an equally critical component for all divisions and is an important factor for grant-in-aid distribution. Coaches who place greater importance on specific positions, they would award more scholarship money to those players.

In addition to evaluating coaches' measure of five questions of importance and six questions of fairness, coaches were asked to choose which of the six allocation decisions they felt was most fair. Participants identified option F, student-athletes who play key positions should receive the most aid, as most fair (M = 5.40) and option A, equal amounts of aid should be given to each student-athlete (M = 3.12) as least fair (Table 5). However, when forced to choose one distribution principle, participants indicated option A, equal amounts of aid, was cited the third most (16.7%) while option C was mentioned the least (2.4%) (Table 6). It is not a surprise that option F, student-athletes who play key positions should receive the most aid, was

cited as the option most participants would choose (42.9%). Research identified a dichotomy between how respondents rated importance and fairness and their actual perceptions of the same factors. The responses of coaches in this study suggest social pressures may influence them to respond in a way that would reflect societal acceptance more than their personal perceptions of fairness. This observation is consistent with the findings of intercollegiate athletic administrators (Mahony & Pastore, 1998).

Limitations

There are certain limitations with all closed-ended, forced-response questionnaires, especially with items like resource allocation. Allocation decisions can depend on many factors and would be analyzed on a case-by-case basis, influenced by specific points of need with the respective coach and program based on division, conference, returning players, etc. A second limitation is the generalizability of the scenario offered and limited number of allocation decisions that were offered.

A third limitation to the study was the response rate. With only 42 respondents of the 295 NCAA Division I softball programs, statistical significance was difficult to find. A challenge to research with coaches as respondents is how the timing of their seasons has broadened and the concept of off-season has declined, though contact hours are still limited by the NCAA, expectations of activity of student-athletes is still high and coaches are actively involved in those processes, within the boundaries of the NCAA. An additional limitation is participants were not provided definitions of importance and fairness, as part of the instrument and, therefore, it is possible that respondents viewed these constructs differently. Future research should endeavor to define these for their participants.

Finally, as noted in Mahony et al., (2002), there is a concern that respondents answer in a socially acceptable manner and not respond in a way that reflects how they truly feel. This "politically correct" response does not gather what the respondent feels is truly fairest.

Suggestions for Future Research

For this study, the use of a scenario was based on previous research from Mahony et al., (2002) that different means of resource allocation may attribute to fairness perceptions. In general, *Student Athletes Who Play Key Positions Should receive the Most Aid*, was deemed most fair by nearly half of the respondents. This study revealed that there are still points of discrepancy between what the softball public perceives coaches use for scholarship distribution, and what coaches perceive as important or most fair. This matches findings from Mahony & Pastore (1998). This similar approach to resource allocation would best be tested by surveying coaches at all three NCAA divisions (I, II, III) as well as at the NAIA level. Evaluating the foundational purpose of athletics at each of the seven divisions would offer a different perspective in what coaches consider important as well as most fair. With the expectation that NCAA Division I softball programs distribute grants-in-aid to those the coaches deem most skilled, it would be interesting to compare the same distribution options with NCAA Division III coaches and even NAIA coaches whose programs are typically rooted in faith based institutions.

Statistical data that was not reviewed for this study is the number of years respondents have been a head coach. Future research could review the median split of respondents and compare the years of experience to perceptions of fairness and importance. This could also be compared to those at the three NCAA divisions (I, II, & III), as well as NAIA. Another consideration would be to determine perceptions of student-athletes as to what they perceive head coaches perceive as important and fair. Current and former players of the coach as well as

surveying prospective student-athletes who have yet to make a decision to where they will attend could do this.

Conclusion

The purpose of the study was to examine the effect of NCAA division on Division I head softball coaches' fairness perceptions of grant-in-aid distribution. The study did not reveal statistical significance between NCAA divisions and any of the five options for importance nor for the six options for fairness. The study found moderate and high effects between the four NCAA divisions and perceptions of importance and fairness.

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APPENDIX A

UNIVERSITY OF ARKANSAS

Office of Research Compliance
Institutional Review Board

February 6, 2017

MEMORANDUM

TO:	Donovan Nelson Steven Dittmore
FROM:	Ro Windwalker IRB Coordinator
RE:	New Protocol Approval
IRB Protocol #:	16-12-361
Protocol Title:	*An Analysis of Scholarship Distribution by Division I Softball Coaches*
Review Type:	☒ EXEMPT ☐ EXPEDITED ☐ FULL IRB
Approved Project Period:	Start Date: 02/06/2017 Expiration Date: 02/05/2018

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (https://vpred.uark.edu/units/rscp/index.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 295 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 109 MLKG Building, 5-2208, or irb@uark.edu.

109 MLKG • 1 University of Arkansas • Fayetteville, AR 72701-1201 • (479) 575-2208 • Fax (479) 575-6527 • Email irb@uark.edu

APPENDIX B

January 27, 2016

Dear Head Softball Coach:

Part of the challenge in college softball is finding and recruiting the best players for the scholarship monies, a coach is provided. I coached college softball for fifteen years and personally experienced this challenge. With that said, it is important to know how to best reach the players that could impact your program. It is obvious their athletic abilities catch our eyes but how does their academic success influence our pursuit? How does their family's financial situation affect how we recruit a player? In what way does their level of play from one year to another affect their scholarship?

Who better to answer these questions than college softball coaches? Your responses will help me educate high school students and their parents on the process for recruitment and how they can make themselves more appealing to you as a potential student-athlete.

The online survey lists several questions regarding you, your background, and your softball program. **This is not an evaluation of your program.** Responses will not be associated with any individual intercollegiate softball program. Responses from coaches across the NCAA will be combined to present a picture of what factors coaches use to determine how scholarships will be distributed to potential student-athletes.

This survey takes less than 10 minutes to complete. Because the information is sensitive, anonymity is guaranteed.

Thank you for your time. I will share the summative results of this study upon completion of my dissertation defense.

If you have questions or concerns about this study, you may contact Donovan Nelson or Dr. Stephen Dittmore at (479) 575-6625 or by email at dittmore@uark.edu. For questions or concerns about your rights as a research participant, please contact Ro Windwalker, the university's IRB Coordinator, at (479) 575-2208 or by email at irb@uark.edu.

Sincerely,

Donovan J. Nelson
Ed.D. Candidate
University of Arkansas

Demographic Information

1. To which NCAA Division does your institution belong?
    a. FBS Autonomy 5
    b. FBS
    c. FCS
    d. I-AAA

2. How many fully funded softball grants-in-aid does your institution allocate?

3. What is your current roster size?

4. Please indicate how important the following student-athlete characteristics are when making a decision regarding grant-in-aid allocation.

	Not at All Important						Very Important
A. Financial need of the student-athlete	1	2	3	4	5	6	7
B. Student-athlete's athletic ability	1	2	3	4	5	6	7
C. Student-athlete's family's financial situation	1	2	3	4	5	6	7
D. Student-athlete's academic ability	1	2	3	4	5	6	7
E. Proximity of student-athlete's hometown to campus	1	2	3	4	5	6	7

5. What is your gender?
    a. Male
    b. Female

6. What is your age?

7. How many years have you been in your current position?

8. What is your current position?
    a. Head coach
    b. Assistant coach
    c. Recruiting coordinator

This study is concerned with one's personal beliefs about how grant-in-aid should be distributed to intercollegiate softball student-athletes. You are requested to participate in the study by responding to the following scenarios. All responses will be pooled and no individual answers will be identified.

The following scenarios describe different situations in which softball grants-in-aid are distributed to a softball student-athlete. After each scenario, five different methods of distributing softball grants-in-aid are presented. Please rate the fairness of each of the five methods and select which method you perceive to be most fair.

When making decisions regarding allocation of annual softball grants-in-aid, how fair do you perceive each of the following allocation decisions?

	Very Unfair			Neither Fair nor Unfair			Very Fair
A. Equal amounts of aid should be given to each student-athlete.	1	2	3	4	5	6	7
B. Student-athletes who performed the best on the field in the previous season should receive the most aid.	1	2	3	4	5	6	7
C. Student-athletes who need the money the most should receive the most aid.	1	2	3	4	5	6	7
D. Student-athletes who worked the hardest the previous season should receive the most aid.	1	2	3	4	5	6	7
E. Returning student-athletes should receive the same amount of aid as the previous year, with incoming student-athletes sharing equally the remaining aid amount.	1	2	3	4	5	6	7
F. Student-athletes who play key positions should receive the most aid.	1	2	3	4	5	6	7

In your opinion, which option is most fair? A B C D E F

APPENDIX C

Dear Head Softball Coach:

Part of the challenge in college softball is finding and recruiting the best players for the scholarship monies a coach is provided. I coached college softball for fifteen years and personally experienced this challenge. With that being said, it is important to know how to best reach the players that can impact your program. It is obvious their athletic abilities catch our eyes but how does their academic success influence our pursuit? How does their family's financial situation affect how we recruit a player? In what way does their level of play from one year to another affect their scholarship?

Who better to answer these questions than college softball coaches? Your responses will help me educate high school students and their parents on the process of recruitment and how they can make themselves more appealing to you as a potential student-athlete.

In two weeks, I will email you a link to an online survey. This survey lists several questions regarding you, your background, and your softball program. **This is not an evaluation of your program.** Responses will not be associated with any individual intercollegiate softball program. Responses from coaches across the NCAA will be combined to present a picture of what factors coaches use to determine how scholarships will be distributed to potential student-athletes.

This survey will take less than 10 minutes to complete. Because the information is sensitive, anonymity is guaranteed.

Thank you for your time. I will share the summative results of this study upon completion of my dissertation defense.

If you have questions or concerns about this study, you may contact Donovan Nelson or Dr. Stephen Dittmore at (479) 575-6625 or by email at dittmore@uark.edu. For questions or concerns about your rights as a research participant, please contact Ro Windwalker, the university's IRB Coordinator, at (479) 575-2208 or by email at irb@uark.edu.

Sincerely,

Donovan J. Nelson
Ed.D. Candidate
University of Arkansas

APPENDIX D

Dear Coach,

Last week you received an email from me regarding a study of NCAA Division I head softball coaches. In one week, you will receive another email from me with instructions and a link to the online survey.

Should you have any questions or concerns you may contact me directly at this email (Donovan.Nelson@gmail.com) or you may contact my dissertation chair, Dr. Steven Dittmore at dittmore@uark.edu.

Thank you, again, for your willingness.

I look forward to sharing my findings.

Sincerely,

Donovan Nelson
Ed.D. Candidate
University of Arkansas

APPENDIX E

Dear Coach,

Thank you for your willingness to participate in this study.

The online survey lists several questions regarding you, your background, and your softball program. **This is not an evaluation of your program.** Responses will not be associated with any individual intercollegiate softball program. Responses from coaches across the NCAA will be combined to present a picture of what factors coaches use to determine how scholarships will be distributed to potential student-athletes.
This survey takes less than 10 minutes to complete. Because the information is sensitive, anonymity is guaranteed. The link to the survey is:

https://evangeluniversity.co1.qualtrics.com/jfe/form/SV_ehq1y0qMcNe5zed

Thank you for your time. I will share the summative results of this study upon completion of my dissertation defense.

Sincerely,

Donovan Nelson
Ed. D. Candidate
University of Arkansas

APPENDIX F

Dear Coach,

This is a reminder email asking you to take a few moments to complete the online survey at the link provided below.

The online survey lists several questions regarding you, your background, and your softball program. **This is not an evaluation of your program.** Responses will not be associated with any individual intercollegiate softball program. Responses from coaches across the NCAA will be combined to present a picture of what factors coaches use to determine how scholarships will be distributed to potential student-athletes.
This survey takes less than 10 minutes to complete. Because the information is sensitive, anonymity is guaranteed. The link to the survey is:

https://evangeluniversity.co1.qualtrics.com/jfe/form/SV_ehq1y0qMcNe5zed

Thank you for your time. I will share the summative results of this study upon completion of my dissertation defense.

Sincerely,

Donovan Nelson
Ed.D. Candidate
University of Arkansas

CURRICULUM VITAE

EDUCATION

UNIVERSITY OF ARKANSAS
Fayetteville, Arkansas
Doctor of Education, Anticipated, December 2017
Major: Recreation and Sport Management

WICHITA STATE UNIVERSITY
Wichita, Kansas
Master of Education, May 2003
Major: Sport Administration

GRACELAND UNIVERSITY
Lamoni, Iowa
Bachelor of Arts, May 1998
Major: Physical Education & Health; Athletic Training
Minor: Spanish

EMPLOYMENT HISTORY

August 2007 – Present	Evangel University – Springfield, Missouri Coordinator, Sport Management Program (2012 – Present) Coordinator, Physical Education Program (2010 – Present) Assistant Professor, Kinesiology (2007 – Present) Director, Intramural Sports (2007 – 2009) Softball Pitching Coach (2007 – 2015)
August 2006 – May 2007	South Harrison High School – Bethany, Missouri Assistant Principal, 7 – 12th Grades (2006 – 2007) Director of Athletics, 7 – 12th Grades (2006 – 2007) Head High School Softball Coach (2006)
August 2004 – May 2006	Prairie Grove High School – Prairie Grove, Missouri Teacher, Health & Physical Education (2004 – 2006) Head Coach, Junior High Volleyball (2004 – 2006) Head Coach, High School Volleyball (2004 – 2006) Head Coach, High School Softball (2004 – 2006)
June 2003 – August 2004	University of Arkansas – Fayetteville, Arkansas Graduate Assistant, Lake Wedington Project (2003 – 2004) Graduate Teaching Assistant, Recreation (Spring 2004)

August 2002 – May 2003	Wichita State University – Wichita, Kansas Graduate Assistant, Intramurals (2002 – 2003) Graduate Faculty Intern, Sport Administration (Spring 2003)
August 2001 & August 2002	National Baseball Congress – Wichita, Kansas Stadium Operations
August 2001 & August 2002	Wichita Wranglers – Wichita, Kansas Game Day Operations
October 2000 – May 2002	Tabor College – Hillsboro, Kansas Head Coach, Softball (2000 – 2002) Assistant Athletic Trainer (2000 – 2002) Instructor, Physical Education (2000 – 2002)
September 1999 – October 2000	Miller Swim School – Tulsa, Oklahoma Coordinator, Aquatics Safety (1999 – 2000) Instructor (1999 – 2000)
Summer, 1998 – Summer, 1999	Lamoni High School – Lamoni, Iowa Head Coach, Softball (1998 – 1999)

RESEARCH

ACADEMIC PUBLICATIONS

1. Comfort, P.G., Stoldt, G.C., & Nelson, D.J. (2003). Improving player and team performance. KAHPERD Journal, 74 (2), 29 – 34.

2. Comfort, P.G., Stoldt, G.C., & Nelson, D.J. (2003). The coach as an ethical leader. KAHPERD Journal, 74 (2), 21 – 25.

PROFESSIONAL PRESENTATIONS

1. King, K., Nelson, D., Hardy, K. (2015, November). A comparison of three base running lead offs in fast-pitch softball. Presented at the Missouri Alliance for Health, Physical Education, Recreation, and Dance convention, Lake Ozark, Missouri. (State Meeting)

2. Nelson, D.J. (2014, November 15). Coaching your softball pitcher, one adjustment at a time. Presented at the Missouri Alliance for Health, Physical Education, Recreation, and Dance convention, Lake Ozark, Missouri. (State Meeting)

3. Getty, C.M., Nelson, D.J. (2014, November 14). Hitting a homerun with a kettlebell: Applying general strength principles to the softball field. Presented at the Missouri

Alliance for Health, Physical Education, Recreation, and Dance convention, Lake Ozark, Missouri. (State Meeting)

4. Nelson, D.J. (2012, August 11). Sportsmanship and Respect in High School Athletics. Presented at the Missouri State High School Activities Association Sportsmanship Summit, Nixa, Missouri.

5. Nelson, D. J. (2011, October 11). Can't pitch a softball? You can teach it. Presented at the Missouri Alliance for Health, Physical Education, Recreation, and Dance convention, Lake Ozark, Missouri. (State Meeting)

6. Nelson, D.J. (2011, October 11). Improve hitting mechanics in seven steps. Presented at the Missouri Alliance for Health, Physical Education, Recreation, and Dance convention, Lake Ozark, Missouri. (State Meeting)

7. Nelson, D.J. (2010, October 12). Using technology as feedback for softball hitting and pitching. Presented at the Missouri Alliance for Health, Physical Education, Recreation, and Dance convention, Lake Ozark, Missouri. (State Meeting)

8. Comfort, P.G., Nelson, D.J. (2002, November). The coach as an ethical leader. Paper presented at the Kansas Association for Health, Physical Education, Recreation, and Dance convention, Wichita, Kansas. (State Meeting)

9. Comfort, P.G., Nelson, D.J. (2002, November). The coach as a socializing agent. Paper presented at the Kansas Association for Health, Physical Education, Recreation, and Dance convention, Wichita, Kansas. (State Meeting)

UNPUBLISHED CONTRACTUAL RESEARCH REPORTS

1. Stoldt, G.C., Nelson, D.J., & Miller, L.K. (2003). A consumer analysis of Wichita Thunder season ticket holders. Wichita, KS: Wichita State University.

RESEARCH IN PROGRESS

1. King, K., Nelson, D., Hardy, R.K. (2015). A comparison of three base running starts in collegiate softball. Springfield, MO: Evangel University

REFEREEING ACTIVITY

1. Prepublication review of: Rein, I., Shields, B., & Grossman, A. (2012). The Sports Strategist: Managing Critical Issues in the Sports Industry. Los Angeles: Sage Publishing.

TEACHING

UNDERGRADUATE COURSES TAUGHT (Evangel University)

1. Introduction to Sport Management (SMGT 124)
2. Sport Marketing (SMGT 200)
3. Sport Facility Management (SMGT 222)
4. Sport Practicum (SMGT 300)
5. Sport Event Management (SMGT 315)
6. Organization & Administration of Sport (SMGT 324)
7. Risk Management in Recreation & Sport (SMGT 422)
8. Sport Management Capstone (SMGT 496)
9. Sport Internship (SMGT 497)
10. Outdoor Adventure Activities (PHED 124)
11. Sports Practicum (PHED 298)
12. Theory of Coaching I (PHED 310)
13. Theory of Coaching II (PHED 410)
14. Psychology of Sport & Physical Activity (PHED 327)
15. Sociology of Sport (PHED 328)
16. Methods & Materials in Health Education (PHED 333)
17. Methods of Secondary Physical Education (PHED 336)
18. Teaching Techniques of Individual Sports (PHED 338)
19. Methods of Teaching Team Activities (PHED 339)
20. Outdoors in the Ozarks (REC 231)
21. Technology in Recreation (REC 235)
22. Sophomore Seminar in Recreation (REC 297)
23. Methods in Outdoor Education (RESM 354)

UNDERGRADUATE COURSES TAUGHT (University of Arkansas)

1. Innovative Practices in Recreation Management (RECR 4003)

UNDERGRADUATE COURSES TAUGHT (Wichita State University)

1. Organization & Administration of Sport (KSS 380)

UNDERGRADUATE COURSES TAUGHT (Tabor College)

1. Aerobic Activities (PE 104)
2. Intermediate Swimming (PE 117)
3. First Aid / Responding to Emergencies (PE 120)

SERVICE

ACADEMIC/PROFESSIONAL ORGANIZATIONS

1. Missouri Association for Health, Physical Education, Recreation, and Dance
   College Chair – Elect (2014 – 2015)
2. American Alliance for Health, Physical Education, Recreation, and Dance
   Member (2006 – Present)
3. Missouri Association for Health, Physical Education, Recreation, and Dance
   Member (2006 – Present)
4. National Fastpitch Coaches Association
   Member (2004 – Present)
5. Kansas Association for Health, Physical Education, Recreation, and Dance
   Member (2002 – 2003)
6. Wichita State University Sport Administration Student Association
   President (2002 – 2003)
   Member (2001 – 2003)
7. North American Society of Sport Management
   Member (2002)

UNIVERSITY

1. EU: Member, Core Curriculum Committee (2014 – Present)
2. EU: Advisor, Theta Alpha Honor Society (2014 – Present)
3. EU: Member, Faculty Affairs Committee (2013 – 2016)
4. EU: Physical Education Program, Undergraduate Advisor (2007 – Present)
5. EU: Sport Management Program, Coordinator, Student trip to Sport Career Night at NWA Naturals, Springdale, AR (2011 – 2015)
6. EU: Sport Management Program, Coordinator, Student volunteers to NAIA National Basketball Championships, Kansas City, MO (2012 – Present)
7. EU: Kinesiology Department, Coordinator, Student trip to state & national AAHPERD conference (2008 – Present)

COMMUNITY

1. Springfield Amateur Softball Association: Organizer, Heart of the Ozarks men's fast-pitch tournament
2. Missouri State High School Softball Championships: Coordinated student volunteer staff for event management (2010 – Present)
3. Missouri State High School Softball Championships: Radio broadcaster (2010 – Present)
4. Missouri State High School Tennis Championships: Coordinated student volunteer staff for event management (2010 – Present)

CONTINUING EDUCATION

CONFERENCES / WORKSHOPS ATTENDED

1. 2015 Missouri Alliance for Health, Physical Education, Recreation, and Dance Conference
2. 2014 Missouri Alliance for Health, Physical Education, Recreation, and Dance Conference
3. 2012 Missouri Alliance for Health, Physical Education, Recreation, and Dance Conference
4. 2011 Missouri Alliance for Health, Physical Education, Recreation, and Dance Conference
5. 2010 American Alliance for Health, Physical Education, Recreation, and Dance Convention
6. 2010 Missouri Alliance for Health, Physical Education, Recreation, and Dance Conference
7. 2009 Missouri Alliance for Health, Physical Education, Recreation, and Dance Conference
8. 2008 American Alliance for Health, Physical Education, Recreation, and Dance Convention
9. 2008 Missouri Alliance for Health, Physical Education, Recreation, and Dance Conference
10. 2007 National Sports Softball Clinic, Kansas City
11. 2006 National Sports Softball Clinic, Kansas City
12. 2005 National Sports Softball Clinic, Kansas City
13. Sport marketing presentation by best-selling author, Jon Spoelstra, March 2003
14. 2002 Kansas Association for Health, Physical Education, Recreation, and Dance Conference
15. 2002 National Sports Softball Clinic, Kansas City
16. 2001 National Sports Softball Clinic, Kansas City
17. 1998 National Sports Softball Clinic, Kansas City
18. 1996 National Sports Softball Clinic, Kansas City

SPORT SERVICE REVENUE

1. Evangel University Homeschool Physical Education Program, 2017 - 2018 $965.00
2. Missouri State High School Activities Association, Softball Championships, Fall 2017 $2,000.00
3. Missouri State High School Activities Association, Softball Championships, Spring 2017 $300.00
4. Missouri State High School Activities Association, Softball Championships, Fall 2016 $500.00
5. Evangel University Homeschool Physical Education Program, 2015 - 2016 $1,415.00

6. Evangel University Homeschool Physical Education Program, 2014 – 2015 $1,940.00
7. Evangel University Homeschool Physical Education Program, 2013 – 2014 $650.00
8. Evangel University Homeschool Physical Education Program, 2012 – 2013 $510.00
9. Evangel University Homeschool Physical Education Program, 2011 – 2012 $1,090.00
10. Evangel University Homeschool Physical Education Program, 2010 – 2011 $490.00
11. Evangel University Homeschool Physical Education Program, 2009 – 2010 $830.00

HONORS AND AWARDS

1. John Hansan Fellowship, Wichita State University, 2001 – 2002