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CHAPTER I

INTRODUCTION

Significance of the Problem

Throughout history, athletics have been enjoyed by many people both as participants and as spectators. Athletics have played a major role in the lives of many university and college students. It is not uncommon for a student-athlete to receive financial assistance to attend a university and many times this assistance comes as a full athletic scholarship. For these selected student-athletes, many other benefits come their way including top-quality athletic equipment, possible local and national recognition, first-rate training facilities, special academic advising and registration, and many times an athletic dormitory and dining hall that caters to the nutritional needs of the student-athlete. With all of these benefits provided to student-athletes, it is possible for exploitation of these benefits to occur.

Regulations have been developed by the National Collegiate Athletic Association (NCAA) to standardize benefits given to student-athletes. Controls are placed on universities to insure that they follow the rules. Proposals are constantly evolving to prevent violations of NCAA rules and regulations.

Violations of NCAA rules may take many forms, ranging from sex discrimination to illegal recruitment to inappropriate perquisites. Sanctions placed on universities vary according to the type and intent of the infraction. Penalties may include loss of scholarships, loss of post-season events, and even the loss of eligibility to the athlete. Recently, several instances of universities violating one or more rule has been disseminated in the media.

Another concern of the NCAA has developed within the universities. This deals with the segregation of student-athletes from non-athlete students. This segregation/integration issue at universities has become a more visible concern in the last few years. According to Lederman (1991), proposals have been made and adopted to minimize the time demands on student-athletes and to integrate them more into normal campus life.

This concern centers around the fact that while non-athlete students have more time for campus activities, some student-athletes are provided with additional benefits of which other students are deprived. Such benefits include special training facilities, full scholarships, special advising and registration, personal dormitories and an athletic dining hall. Boone and Walker (1987) noted that the university should promote a student identification among athletes by integrating their housing, dining, academic advising and registration with that of the total student body. This controversy leads to the purpose of this study. Can student-athletes become more fully integrated into the student body when eating, living and working in specialized facilities where non-athlete students are excluded. Of particular interest to this study is the athletic dining hall.

Problem Statement

It has been proposed and voted unanimously that the NCAA limit the number of meals provided to scholarship athletes by the year 1996, and eventually eliminate athletic dining halls altogether (Lederman, 1991). The purpose of this study was to investigate athletic dining halls and their impact on the well-being of student-athletes in NCAA Division I universities. The main focus was the following:

(1) the discussion of an athletic dining hall during the recruiting process of student-athletes;

(2) the relationship between student-athletes and coaches/athletic staff, other student-athletes, and non-athlete students;

(3) student-athletes' perception of the food they eat and nutrition information they receive from the athletic dining hall;

(4) the importance of nutrition on student-athletes' performance;

(5) and the importance of nutrition information about the pregame meal on student-athletes' performance.
Of secondary interest were the following: means of feeding student-athletes (athletic dining services or student body services); the flexibility for dining service hours; and the value of the athletic dining hall for the university according to the student-athletes.

Definition of Terms

Athletic Dining Hall--is the facility where scholarship athletes, and non-scholarship athletes who pay money, eat their meals during the fall and spring semesters and before an event or game.

NCAA--National Collegiate Athletic Association, which is the governing body for college and university athletics.

Pregame Meal--is a term used for the meal eaten by the student-athlete before an event or game.

Student-Athlete--is a student attending a college or university and taking at least 12 hours of credit while participating in organized sports that offer scholarships.

Well-Being--is a term used for student-athletes who are healthy and content (Webster's Dictionary, 1991).

Research Questions

The research questions selected for this study were:

1. Is the presence of an athletic dining hall as an important issue to student-athletes when recruited to attend a university?
2. Does dining in an athletic dining hall impact the student-athletes' relationships with:
   a. athletic coaches/staff?
   b. other student-athletes?
   c. non-athlete students?
3. How do student-athletes perceive the quality of the food they eat in the athletic dining hall?
4. How do student-athletes perceive the nutrition information they receive in the athletic dining hall?
   a. according to the student-athletes' perception, does nutrition impact athletic performance?
   b. according to the student-athletes' perception, does nutrition information about the pregame meal impact athletic performance?

Scope and Limitations

This study was conducted during the spring semester of 1993 at the athletic dining hall at Texas Tech University. Since the survey was personally administered, the participation rate was higher than if the survey had been mailed to the student-athletes.

Participants of the study were all athletes who ate in the athletic dining hall at Texas Tech University, and who volunteered to answer the questionnaire. The goal of this survey was a census, but not all student-athletes who eat in the athletic dining hall accepted or completed at least 90% of the questionnaire. Since the instrument was administered to student-athletes at Texas Tech University, generalization of the results will be limited to this campus.

CHAPTER II

REVIEW OF LITERATURE

Impact of Athletics

Athletics has been an important aspect of university and college life for many years. Every weekend during the school year at least one college sports program can be viewed on television. There are special events dedicated to certain sports with bowl game festivals for football, "March Madness" for basketball, and the college world series for baseball. Enthusiasts pay large sums of money every year for season tickets to watch their favorite team play. College teams travel nationwide and even internationally to play in special events or tournaments.

It is not uncommon to see college sports clothing worn by individuals ranging from infants to the elderly. Many individuals, alumni and communities take great pride in their favorite college and university teams. Communities decorate the streets and buildings in school colors and paraphernalia during the sport seasons. Seeing this kind of enthusiasm from the university and community is a very exciting and attractive atmosphere for prospective student-athletes during the recruiting season. A successful sports program generates publicity for the players and the university, and helps develop a strong sense of pride throughout the university and the community.

Athletics also has a large economic impact on a community. During sports seasons, individuals may travel hundreds of miles to watch their favorite team or individual(s) play. With the long travel, these people often stay more than one day in the city, which means extra money for the businesses in town. Hotel rooms are occupied and restaurants are crowded during these times. Buying a hot dog and soda at the concession stand within a five minute period during half-time is impossible. People spend money freely during major sporting events. According to Morse and West (1993), during the 1991-1992 academic year, the economic impact of Texas Tech University athletics on the local community was $10,171,980 in expenditures from out-of-town visitors. This amount of money would indeed affect the economy of any city.

Athletics also impact the student-athlete who receives a chance to obtain a five-year education by means of an athletic scholarship. Athletic scholarships give individuals, including those who would otherwise be unable to afford a college education, the chance to receive a degree in any field the college/university offers. Some student-athletes may have the chance to live their dreams of becoming doctors, lawyers, engineers, hotel managers, or coaches. The student-athlete is given an opportunity to experience a life on his/her own and participate in college or community organizations. An athletic scholarship may also provide a "family" and a source of discipline for some individuals through relationships with teammates and coaches. An athletic scholarship offers an individual a place to live and three well-balanced, nutritious meals a day. It ultimately affects the well-being of a student-athlete, who then may affect the college/university as well as the community.

The Role of the National Collegiate Athletic Association

The National Collegiate Athletic Association (NCAA) is a voluntary, unincorporated association of public and private four-year institutions of higher education that was formed in 1906. It was originally committed to enhancing the competitive atmosphere of collegiate sports. The NCAA now functions as the primary regulatory body for intercollegiate athletics. The basic policy of the NCAA is to maintain intercollegiate athletics as an integral part of the student body and, by so doing, retain a clear line of demarcation between collegiate athletics and professional sports (Gaona, 1981). Membership into the NCAA by colleges and universities is voluntary.

The NCAA also deals with reform plans for university and college athletics. Congress, the general public, athletic administrators and staff, university and college presidents and faculty also play a major role in regulating the functions of NCAA athletics. According to Becker, et al. (1986), since much of the control that has existed on most campuses has been exercised through some sort of athletic committee or board, dominated in most instances by faculty members and, to a lesser extent, administrators, plans have been made to strengthen or alter the locus of control. Recently, Congress has become more involved in influencing the NCAA. Congress passed a law in 1992 requiring all institutions that give athletic scholarships and receive federal aid to publish graduation rates of their athletes and other students (Lederman, 1992 a, 1992b). The NCAA has been pressured to release graduation rates by race on a college-by-college basis (Lederman, 1992c). The federal law also requires colleges to provide graduation rate forms to prospective athletes and their parents, to guidance counselors, and to high school coaches. The main purpose of a university or college is to provide individuals with a sound education. An increased emphasis on this sound education for student-athletes has precipitated many changes in NCAA rules recently. In the past, universities and colleges could award unlimited athletic scholarships, now each sport is limited to a maximum number. It has been proposed to cut the number of football athletic scholarships in Division I-A from 95 to 85 (Lederman, 1991). Unlimited hours of practice times per week had been possible. Now with the new rules, NCAA athletes are limited to 20 hours per week for practice, meetings, and conditioning, and 8 hours per week in the off-season. Other workouts must be voluntary and unsupervised (Monaghan, 1992). It is unfortunate for a student-athlete to complete his or her athletic eligibility in 4 to 5 years under an athletic scholarship and not receive a diploma within a six-year time period. For this reason, the graduation rate among student-athletes has become an important issue in the past few years. Universities have been placed on death penalty status (no athletic participation for a stated number of years for the penalized sport) for violating rules that the NCAA enforces. Other universities may receive lesser penalties (athletic probation) based on their rule violations.

Some universities have seen the need for assisting student-athletes in their education by creating mandatory study halls and providing tutors. Many NCAA campus media guides around the country describe computer labs the student-athletes can use in their education. Universities typically provide special assistance for student-athletes who have a difficult time adjusting to a college life of academics and athletics. Zahm (1985) noted that if the school makes a conscious decision to develop a competitive athletic program, then the school, particularly the athletic department, should accept the responsibility of seeing that athletes make it through school with a degree, and on to a career. Where athletic associations are financially successful, at least a portion of discretionary revenues might well be expected to be invested in the academic well-being of athletes as young adults with futures at stake (Kleiber & Malik, 1989).

Recruiting of Prospective Student-Athletes

Major colleges and universities recruit prospective student-athletes from all across the United States and internationally in an attempt to win national recognition in their sport. The recruiting process can be very exciting to the student-athlete. It may include letters from athletic coaches/staff, high school or home visits from coaches, and personal visits to the campus. During the recruiting process, the prospective student-athlete is provided with information about the institution and all the facilities it has to offer. These facilities may include location of classrooms, academic support facilities (tutors, computer labs, study halls), training facilities, the playing field, and living and eating areas. Information about the community and its offerings are many times also provided.

Since four-year colleges and universities voluntarily become members of the NCAA, the NCAA becomes involved in the recruiting process by placing rules and regulations on recruiting practices. The NACADA Journal (1981) provides a list of permissible and non-permissible activities athletic coaches/staff, bona fide alumni organization members, faculty members, and current/ex-athletes can participate in while recruiting prospective student-athletes. A violation of any of these rules may place the institution on probation, and may jeopardize the prospective student-athlete's future athletic eligibility.

Student-Athlete Relationships

As individuals, we all need special relationships in our lives. Athletes are many times placed on a pedestal and viewed as different or as not needing special relationships. This is not true. Human relationships are vital to the success of athletes. In the athletic arena, the student-athletes are closest to their coaches, other athletes and parents, but not necessarily in that order. Athletes need emotional and physical support from these people in order to progress in their career. An athlete needs a special working relationship and good communication with the coach because he/she will be spending much time with this person during his/her career. Occasionally this relationship is shallow consisting of meetings, practices, and events where there is high stress. The relationship, in most cases should go beyond this formal structure. The athlete and the coach might come in contact with each other at the training table. Here, the atmosphere should be relaxed and enjoyable so few pressures are on the athlete. An athlete should be able to talk to the coach informally, but respectfully, about academics, sports, and life in general. A coach not only teaches sports, but should also be a role model for academics and other aspects of life. Bobby Cremmins, head basketball coach of Georgia Institute of Technology says,

> The coach plays a very important role in helping an athlete recognize the importance of success in the classroom. I feel that my role as a coach is to provide the leadership necessary to help the athlete understand the importance of academic success. (Bingham, 1989, p.16)

Athletes also have a special relationship with other athletes. In team sports, it is important to have a close-knit group of players who get along and support each other. Athletes tend to become like a family because they are around each other so often. They participate in meetings, practices and other events together. They eat and sleep in the same facilities. Many times they have classes together. These activities can fill an entire day; the only relaxing times with each other, as with coaches, may be in the dining room. Here, the athletes can enjoy each others' company without the pressures of academics and sports. In short, teams provide athletes with ready-made social systems in which they can satisfy their personal needs (Melnick, 1981).

Athletics and classes are two demanding priorities for a student-athlete. After classes and practice, many student-athletes do not have time to participate in any other aspect of campus life. Getting to know many other students and participating in different organizations that the college/university has to offer are also a vital aspect of a person's education. Reforms, which sought to minimize the time demands on athletes and integrate them more into normal campus life, were adopted by the NCAA and other regulatory bodies almost without exception (Lederman, 1991). The important concept of the reforms is integrating student-athletes into normal campus life. Stone and Strange (1989) noted that, compared with non-athletes, athletes tend to have lower levels of involvement or integration in many of the social and cultural dimensions of campus life. Ryan (1989), however, found that athletes were actually more satisfied with their overall college experience than were non-athletes. Integration is one of the main reasons to eliminate athletic dormitories and limit meals to one per day in an athletic dining hall for student-athletes. Opposition to this reform seems to be geographic in nature. Despite opposition from many universities in the South, Division I colleges voted 278 to 31 to eliminate athletic dormitories or athletic-dominated floors in regular residence halls, and to limit training tables for athletes to one meal a day, instead of the current three, effective 1996 (Lederman, 1991).

Dining Facilities

University students need a place to live and eat. Consequently most universities provide housing and dining facilities for students. These facilities can range from standard living arrangements to luxurious, modern facilities. These can become a recruitment factor for many universities to attract new students. According to Werring and Burkhalter (1987), in this age of declining enrollments, changing student demographics, and enhanced student consumerism, housing administrators are trying to find effective ways of improving residential living environments to attract potential customers and retain current ones. With these innovations, trends are developing to satisfy student needs now and in the future. Included in the inducements are: facilities to enhance the services and programs offered to students (e.g., computer rooms, physical fitness areas, TV lounges, and studies); life-style options such as coed living arrangement, quiet floors, special interest wings, and non-smoking floors; and living arrangements (apartments, suites, private baths, and cluster living arrangements). The dining trends are also varied. Werring and Burkhalter (1987) and Bowers (1987) found that some dining facilities include: a variety of meal plans provided to students (e.g., a' la carte service and guest meal programs); menus that provides more fish, poultry and pasta to address nutritional concerns; cash sale enterprises to include snack bars, credit card meal charges, pizza sales, restaurant sales, and bakery sales; and facility options designed to enhance food service to students (e.g., restaurants, grocery stores and food carts).

Bowers found that those who operate college food service are finding that students are increasingly particular about what they eat and that their tastes are becoming more diverse. Many students want the option of eating at on-campus dining facilities other than the traditional residence hall cafeteria. According to Bowers (1987), dining managers can expect to provide: (a) healthful dining and lighter cooking preparations; (b) smaller, more varied portions and a choice of appetizer like foods, a phenomena known as grazing; (c) return to "homemade" American foods; (d) acceptance of novel foods and ethnic cuisine; and (e) increased awareness of quality and freshness in foods.

One of the environmental factors facing strategic planners in developing and renovating housing and dining facilities is the concern with students' educational and personal development (Werring & Burkhalter, 1987). Werring and Burkhalter (1987) found that this confirmed the positive arguments of having students live in residence halls and the need to provide this opportunity for all students. This is similar to athletic dormitories and dining facilities. Renovations are continually being made to these facilities to attract student-athletes. New features might include a computer lab, study hall area, and a well-equipped TV room, decorated in school colors with year-to-year team pictures on the walls.

Reviewing the more recent NCAA Division I university media guides throughout the nation, it is noticeable to see that the housing and dining facilities are becoming a recruiting tool that is similar to other campus housing and dining facilities noted above. At Baylor University, the male student-athletes are housed in the Quadrangle Apartments. These apartments are cable ready and include a full kitchen, two bedrooms, and 1-1/2 bathrooms. There is an athletic dining hall located within the complex that serves three meals per day. The complex includes a swimming pool, a hot tub, a club room with a 46-inch television, and a study room (Baylor Media Guide, 1992). A six million dollar renovation was conducted at the University of Tennessee's Gibbs Hall (University of Tennessee Media Guide, 1992). Georgia Tech University apparently saw the need for renovation to attract prospective student-athletes. Georgia Tech has a commitment to providing the finest training table in the country. Expansion plans include enlarging the kitchen to create an in-house bakery and multiple serving stations for soup, salad and deli bars. They have also renovated to the academic center to the latest in computerized academic aids and a spacious area for studying and tutoring (Georgia Tech University Media Guide, 1990). Like Texas Tech University, administrators of North Carolina State University recognize the need for flexibility of athletic dining hall hours due to the academic and athletic demands placed on the athletes. The meal schedule is molded around the class and practice schedules of the athletes, which allows them an extra advantage in budgeting their time (North Carolina State University Media Guide, 1992). North Carolina State University also recently completed remodeling of its athletic dining hall. The North Carolina State University media guide also claims that daily menus are nutritional, varied and all-you-can-eat. For Wolfpack athletes, it all adds up to "eating to win." At Texas A&M University, the housing facility is spacious and the academic computer center, along with many quiet study areas, are provided for the student-athletes. The athletic dining hall is recognized for much more than nutrition; it has earned the reputation as "the best restaurant in town" (Texas A&M Media Guide, 1992). Home-cooked meals served three times per day, all-you-can-eat style have been powerful lures in bringing top-quality athletes to College Station. An interesting aspect of Cain Hall at Texas A&M is that many non-athletes also live there, allowing student-athletes to develop close ties to students outside of athletics. The close-knit family-like atmosphere also provides ample opportunity for a student-athlete to become involved with the social aspects of campus life (Texas A&M University Media Guide, 1992). It is apparent that Texas A&M University is concerned with the well-being of their student-athletes by providing well-balanced, nutritious meals, a family-like atmosphere, academic computer and study centers, and a means of integration of student-athletes with non-athletes. Ranging from academic computer and study centers, to relaxation lounges with big screen televisions, to "home-cooked" nutritional meals, it appears that many NCAA Division I universities are very concerned with the well-being of student-athletes. Many of these athletic housing and dining facilities are used as recruiting tools to bring in top-quality student-athletes, just as many other on-campus housing and dining facilities renovate for change to attract potential students and to retain current ones.

Nutritional Aspects of Athletic Dining Halls

Nutrition is a vital aspect of our daily lives. For student-athletes, nutrition has been stressed more in the last few years. Wheeler (1989) notes the importance of proper nutrition for athletes' performance, claiming that nutrition is tied to maximum training, endurance, delay of fatigue and recovery. Not too long ago there was a great push for athletes to eat large quantities of red meat and potatoes in order to obtain high amounts of protein and energy in the diet. The pregame meal for many athletes included a large steak and potatoes, which was a psychological factor instead of nutritional benefit. The thinking on this subject has changed, but the transition was not easy. According to Lazare (1991, p.26), a dietitian who manages the cafeteria at the athletes' dormitory at Louisiana State University, "It took four years before I could convince them to change, but we did it gradually. First we had to convince the players and then work on the coaches." Lazare claims the change was shifted from steaks four times per week to lots of chicken and pasta. Based on this change, the athletes have provided Lazare with positive feedback. According to Lazare, they see a difference in the way they play. They see that the food makes a difference. There is a similarity between Louisiana State University's athletic dining hall and the dining hall at Texas Tech University. The athletes are allowed to eat as much as they desire, and there are at least five entrees served per meal. With the greater variety of entrees, athletes have a better chance to choose from high-quality protein and carbohydrate rich foods.

It is commonly known that in order to become better at something, one must train to do so. Nutrition plays an important role in improving the training of athletes, and thus their overall endurance and performance. Protein used to be the major focus of an athletes' nutrition. Many nutritionists believe the current Recommended Daily Allowance (RDA) of .8 gm protein/kg body weight/day is enough to cover most athletes because of the built in margin of safety (McCarthy, 1989). The safety factor is about one-third of the RDA; any exercise-induced increase in protein requirement would be compensated for by this margin of safety. Other nutritionists believe that high endurance athletes, such as long-distance runners, need the extra protein (McCarthy, 1989). Along with protein, carbohydrates have been studied in great detail. The increased amounts of carbohydrate-type foods are noticeable in diets. Carbohydrates, in preference to protein, provide energy essential during training, before and during competition, and immediately afterward for optimal performance of athletes (Wheeler, 1989; Coyle, 1991). When athletes do not consume adequate calories, especially carbohydrate calories, muscle carbohydrate stores (glycogen) become depleted, and endurance and performance decrease. In addition to carbohydrate intake, approximately fifteen percent of the dietary calories should come from protein sources and twenty-five percent from fats (Wheeler, 1989).

Proper nutrition is not only essential for competition periods, it is also important for the day-to-day well-being of individuals. According to Clark (1986), sports active people of all ages and abilities have come to recognize the positive effect of a wholesome diet not only on day-to-day performance, but also on overall health and future well-being. Student-athletes learn this information about nutrition through proper nutritional education. Since most students do not specialize in diet and nutrition, it is up to a dietitian or trainer to educate the student-athlete about the proper foods to eat at the training table. According to Tucker (1991), many universities provide their athletes with a training table, but an informal survey revealed that few provide nutrition education. At Boston College, Sheila Tucker educates the student-athletes about proper nutrition. She provides the athletes with a well-balanced, high calorie diet everyday, so the student-athletes receive a daily nutrition lesson via the food choices available to them. To augment what is learned at the training table, the athletes attend a lecture outlining the optimal diet to follow for improved performance both during the season and off season when weight training and conditioning regiment tax the body for fuel. Sheila Tucker raised an important point about off season conditioning related to nutrition. Many athletes feel that during the off season, nutrition is not as important as during the regular season. The off-season is a time for relaxation and "good times." The consumption of alcoholic beverages tends to rise during the off-season. Nutrition is just as important in the off-season because this is when athletes should be training their hardest for the coming season.

Without proper nutrition during off-season training, the activities will not be as productive, which in turn will lead to less productive preparation for the coming season. According to Metzger (1991), it is clear that high-fat diets also rich in sugar are inconsistent with maintenance of optimal body weight and with the ability to sustain proper conditioning and training.

Texas Tech University Athletic Dining Hall

The athletic dining hall at Texas Tech University has been feeding student-athletes since the spring of 1971. The facility originally catered only to the male athletes. In the fall of 1986, female athletes were included. Texas Tech University's athletic dining hall is currently feeding 158 male and female athletes. Men's sports include football, basketball, baseball, track, tennis and golf. Women's sports include basketball, track, tennis, golf and volleyball. The majority of these student-athletes are on athletic scholarship, but some of them are "walk-ons" who pay extra to eat in the athletic dining hall. Depending on the type and amount of scholarship, a meal plan is prescribed to each individual athlete ranging from six meals to twelve meals a week in the athletic dining hall. The student-athletes are allowed to eat in the athletic dining hall only during dining hall serving hours. If the student-athlete is unable to make the serving times due to class time conflicts, then he or she is provided with a sack lunch.

The athletic dining hall at Texas Tech University provides the student-athletes with a well-balanced, high nutrient meal. For each meal, the student-athlete has a choice of five entrees, five vegetables, a salad bar, fruit bar, sandwich bar, pasta bar, soup bar, cereals, ice cream and yogurt machines, and beverages that include milk, juices, tea, Gatorade, and sodas. The student-athletes are permitted to go through the serving line as many times as desired, which means they are guaranteed adequate portion sizes. Theme nights are also provided to add interest and prevent boredom.

The educational assistance facilities, academic offices for athletes, and the TV lounge are in the same building as the athletic dining hall. Tutors are provided for student-athletes who request assistance, and user friendly computers are also available. First-year student-athletes and student-athletes with a GPA lower than Texas Tech University athletic department specifications are required to participate in study hall. Special help is available for those student-athletes who need emotional support in dealing with the pressures of academics and athletics. The big screen TV is hooked up to a satellite so the athletes can watch a wide variety of programs. The athletes can watch TV and visit with friends from other sports at the athletic dining hall facility.

The athletic dining hall at Texas Tech University is used for other functions as well. The athletic dining hall caters to special athletic functions and banquets, which in the long-run saves the athletic department money because they do not have to rent space and labor for the functions. The athletic dining hall is also a place for chapel before a game. Coaches and players who wish to participate in chapel assemble in the athletic dining hall lounge for worship. Along with chapel, Fellowship of Christian Athletes meets every week in the athletic dining hall lounge. The athletic dining hall at Texas Tech University caters to the well-being of student-athletes through many sources that include nutritional, educational, emotional and spiritual.

Conclusion

It seems ironic that at a time when NCAA Division I university media guides are using their dormitories and training tables as a recruiting tool, there is a major move to eliminate these facilities. When this occurs these multi-million dollar facilities will have to be converted for regular student use. There is the question of increased integration with non-athlete students when these students live and eat in the same facilities as the student-athletes. There will likely be a period of adjustment to their new arrangement for both the student-athlete and the non-athlete student. The typical athletic housing and dining facilities appear to be nicer and more modern than other student housing and dining facilities on university campuses. Naturally it will cost more for the student to live and eat in the same facilities as the student-athlete. With the integration of student-athletes and other students into the same facilities, this may create a profit center for the athletic housing and dining because students, instead of the athletic departments, will be paying to live and eat in the facilities. It will be interesting to see what actually happens in the near future with the phasing out of athletic housing and dining facilities and the type of impact this will this have on the well-being of student-athletes.

CHAPTER III

METHODOLOGY

Development of the Questionnaire

The method for data collection for this study was a questionnaire (Appendix A) which was divided into seven sections. The instrument answered the four research questions that guided this study. It also provided valuable information to the athletic department at Texas Tech University.

The first section of the questionnaire asked student-athletes questions about the recruiting process. This section focused on whether the presence of an athletic dining hall was an important issue to the student-athlete when recruited to attend a university. Information generated was also beneficial to the athletic department to see if recruiting material about the athletic dining hall was being examined by the prospective student-athlete.

The second section included questions about the nutrition information needs of student-athletes. Questions determined how student-athletes perceived nutrition information they received in an athletic dining hall and how it impacted their athletic performance. From this section, the athletic dining hall director can measure the student-athletes' perception of nutrient intake consumption (i.e., caloric, carbohydrate, protein, and fat) for both in-season and off-season to see if a well-balanced meal is being provided.

The third section of the questionnaire measured the student-athletes' perception of food quality in the athletic dining hall and its perceived impact on their athletic performance. This section was also beneficial to the athletic department because it addressed student-athletes' perceptions of the quality, variety, portion sizes, temperature and taste of food served in the athletic dining hall.

The fourth section of the questionnaire was based on operational concerns of the athletic dining hall, which was used to provide feedback to the athletic department to see if the athletic dining hall was convenient in location and suited to time schedules of student-athletes.

The fifth section of the questionnaire measured the third research question of the study by examining the relationships between student-athletes and: (a) coaches and athletic staff; (b) other student-athletes; and (c) non-athlete student to see if these relationships are impacted due to student-athletes dining in an athletic dining hall.

Section six of the questionnaire examined student-athletes' perceptions of the related services the athletic dining hall provides to student-athletes. The athletic dining hall is not only a place for eating, but also provides a place for study hall, computer use and TV viewing. This section provided the athletic department feedback from student-athletes about the effectiveness and quality of the location of these services.

The seventh and last section of the questionnaire detailed demographics of student-athletes who eat in the athletic dining hall.

For the purpose of this study, sections on the recruiting process, relationships, nutrition information needs of student-athletes, food in the athletic dining hall, and demographics were utilized.

Sample Selection

The goal of this study was to include the total population of student-athletes who ate in the athletic dining hall during the Spring 1993 semester at Texas Tech University. The census of student-athletes dining in the athletic dining hall is 147 scholarship athletes and 11 non-scholarship athletes.

Pilot Study

Four individuals who were familiar with the athletic dining hall completely answered the questionnaire to determine the time needed to answer the questionnaire. The average time was ten minutes. These individuals also provided valuable feedback for revisions that needed to be made before conducting the pilot study with the student athletes. To test the questionnaire, a pilot study was conducted. The sample was drawn from one study hall session in the athletic dining hall. The three study hall sessions were numbered one to three on a piece of paper and placed into a hat and shuffled. The study hall session drawn was number one, so that session was used as part of the sample. A total of six student-athletes participated in the pilot study. The rest of the pilot sample was selected in a one-day session by picking every fifth student-athlete who came to eat the lunch meal, which generated 22 student-athletes. The total sample for the pilot study was 28 (6+22) student-athletes.

Each student-athlete who participated in the pilot study received a questionnaire and a pencil to answer the questionnaire. When finished, a box was provided for the return of the completed questionnaire to assure anonymity. Each questionnaire was coded numerically, and the information was placed on a computer disk. As a result of the pilot study, all questions in the questionnaire were utilized. Since no changes were made to the questionnaire after the pilot study, these completed questionnaires were used in the study.

Data Collection

The study was conducted by distributing questionnaires along with pencils to student-athletes before they went through the serving line. They could answer the questionnaire before, during or after eating their meal. A box was provided for completed questionnaires.

The study was conducted over a three-day period in May 1993 during the lunch meal. The lunch meal was chosen because the majority of student-athletes eat in the athletic dining hall during this time. The student-athletes who eat the evening meal at the athletic dining hall are usually the ones who also eat the lunch meal. Breakfast is not served at the athletic dining hall. This information was provided by the athletic dining hall director and athletic dining hall staff. During the three days of data collection, a total of 98 questionnaires were distributed, and 90 were returned. This provided a total sample of 126 questionnaires (including the pilot study), with 8 not returned. There were 3 questionnaires discarded because they were not 90% complete, resulting in a total of 115 useable questionnaires. Although some of the questionnaires were not completely answered, the available information was still utilized in the data analysis.

Data Analysis

After collection of the data, the questionnaires were coded and the information was typed on a disk. The Statistical Package for the Social Sciences (SPSS, 1993) was utilized to determine frequencies and relationships for descriptive analysis. The statistical test used to measure research questions number 1,3 and 4 was cross-tabulations, which compared group frequencies. Cross-tabulation is much like the chi-square test in that it compares group frequencies. A chi-square test was not used because some groups had 0 frequencies and percentages less than 20.

The category for question 1 was the sport played by the student-athlete. The category for questions 3 and 4 was classification of the student-athlete. The statistical method for research questions number 2 and part A and part B of question number 4 was a Pearson product moment correlation, which measured for relationships between the categories.

CHAPTER IV

RESULTS AND DISCUSSION

This study examined the perceived impact of the athletic dining hall on the well-being of student-athletes at Texas Tech University. The sample consisted of 158 student-athletes who ate in the athletic dining hall during the spring 1993 semester. One hundred and eighteen student-athletes participated in the study, with 115 questionnaires at least 90% completed.

The findings of this study were analyzed in the following manner. Demographics were used to describe the 115 student-athlete sample, and these variables were used to answer research questions 1, 3 and 4. The demographics used for research question one was sport played (basketball, baseball, football, golf, tennis, track, and volleyball). Demographics for research question three and four was classification (freshman, sophomore, junior, senior/graduate). Table 1 displays the scales of questions used in each section of the questionnaire for this study.

Profile of Student-Athletes

The subjects of this study consisted of 147 scholarship athletes and 11 non-scholarship athletes student-athletes who eat in the athletic dining hall at Texas Tech University. A total of 126 questionnaires were handed out

Table 1. Scales of Questions Used in Each Section of the Questionnaire for this Study.

Section	Questions
Recruiting	1-9
Relationships	
coaches/athletic staff	59-60, 64
other student-athletes	61-63
non-athlete students	65-68
Food	40-47
Nutrition Information	12-20
Athletic Performance	13
Pregame Meal	51-54

during the three-day lunch period in May 1993. Eight of the questionnaires were not returned and three were discarded from the study due to incomplete responses on the questionnaire. At least 90 percent of the questionnaire was required to be completed for analysis. This study included a total of 115 usable questionnaires for the study (105 scholarship and 10 non-scholarship student-athletes). Figure 1 summarizes the numbers and percentages of surveyed student-athletes by sport.

A complete frequency and percentage profile of the student-athletes can be seen in Table 2. Of the 115 student-athletes, 76% were male and 24% were female. Eighty-four percent of the student-athletes were between the ages of 19 and 22. Of the 7 sport programs at Texas Tech University that offer athletic scholarships, football had the highest percent of completed questionnaires with a total of 58%. The percentage for football and basketball is different in Table 2 from Figure 1 because, when typing the frequencies into Figure 1, the computer automatically calculated the percentages without knowing that some student-athletes play more than one sport. When asked about classification, 30% of the student-athletes were freshman while, only 1% were graduate students. Thirty-three percent of the student-athletes had lettered at least one year in their sport. Only 4% have eaten in the athletic dining hall for 5 years, while 34% have been eating in the athletic

ATHLETES AT TEXAS TECH

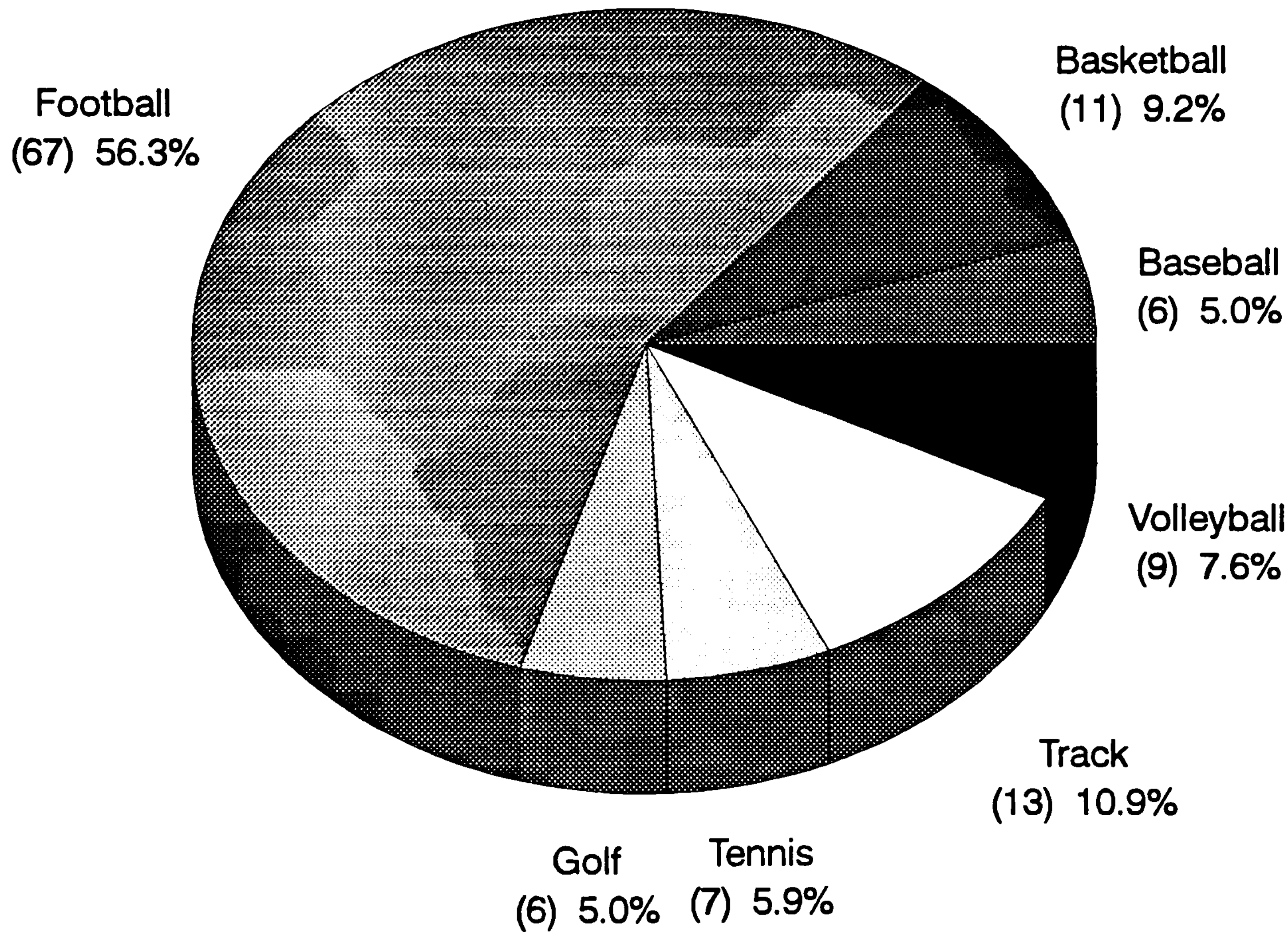

Figure 1. Numbers and percentages of surveyed student-athletes by sport.

Table 2. Profile of Student-Athletes Completing the Questionnaire.

	Frequency	Percentage
Gender		
Male	87	76%
Female	28	24%
Age		
17	0	00%
18	7	06%
19	34	30%
20	13	11%
21	25	22%
22	25	22%
23	11	09%
24+	0	00%
Sport*		
Baseball	6	05%
Basketball	11	10%
Football	67	58%
Golf	6	05%
Tennis	7	06%
Track	13	11%
Volleyball	9	08%
Classification		
Freshman	34	30%
Sophomore	21	18%
Junior	29	25%
Senior	21	18%
Fifth-Year Senior	9	08%
Graduate	1	01%
Years Lettered		
0	24	21%
1	38	33%
2	21	18%
3	23	20%
4	9	08%

Table 2. Continued.

	Frequency	Percentage
Years Eating in Athletic Dining Hall		
1	39	34%
2	28	24%
3	26	23%
4	16	14%
5	5	04%
6	1	01%
Residency		
On-campus	56	49%
Off-campus	59	51%
With Whom Eat Most Frequently		
Teammates	93	81%
Players from other sports (opposite gender)	7	06%
Players from other sports (same gender)	2	02%
Coaches	2	02%
No special group	11	09%
Preferred Place to Eat (Campus-resident)**		
Athletic dining hall	101	88%
Other campus dining	12	10%
Off campus dining	1	01%
Preferred Place to Eat (Off-campus resident)**		
Athletic dining hall	73	64%
Other campus dining	1	01%
Off campus dining	14	12%
Home (self prepared meals)	26	23%
Financial Aid		
Scholarship athlete	105	91%
Non-scholarship athlete	10	09%

N = 115

* Some athletes may play more than 1 sport.

** One person did not answer question.

dining hall for only 1 year. On-campus and off-campus residents were almost evenly matched with 49% of student-athletes living on-campus. Student-athletes eat most frequently with teammates (81%). When given a choice between the athletic dining hall, other campus dining, and off-campus dining (or home), 88% and 64% chose the athletic dining hall for on-campus residents and off-campus residents respectively.

Findings, Results and Discussion

Research Question 1: Recruiting

The questionnaire incorporated a Likert-type scale format. Responses to all questions in each section could be added together to give a possible high score and a possible low score. For research question 1, there were 9 questions on recruiting answered by the student-athletes. This research question asked if the presence of an athletic dining hall was an important issue to student-athletes when recruited to attend a university. The athletic dining hall can be categorized according to the following: a perfect score for the nine items would be 36 (4 is Strongly Agree); and the lowest possible score would be 9 (1 is Strongly Disagree). The possible range of scores for this section of questions was 9 to 36 (0-9 was Strongly Disagree, 10-18 was Disagree, 19-27 was Agree, and 28-36 was Strongly Agree).

This scale was used in conjunction with the 7 sports Texas Tech offers athletic scholarships to student-athletes.

A cross-tabulation was conducted to provide all frequencies, row, column and total percentages for each sport in relation to the recruiting process. After conducting the cross-tabulation, there were 5 missing observations, which left a total of 110 observations.

No matter what sport the student-athlete played, the athletic dining hall was an important issue for student-athletes when recruited to attend a university. Baseball players perceived the athletic dining hall as an important recruiting tool. Five had scores in the 19-27 range which would express agreement with the presence of an athletic dining hall as an important issue when recruited to attend a university. Figure 2 examines the athletic dining hall as an important issue when recruited to attend a university.

Basketball players also perceived the athletic dining hall as important. All 11 basketball players who answered the questionnaire were in the range of 19-27, which like baseball players, would express agreement with the presence of an athletic dining hall as an important issue when recruited to attend a university. Figure 3 displays the results.

Football players, which made up 57.3% of the sample were almost equally divided between the Disagree range of 10-18 and Strongly Agree range of 28-36 categories with

ISSUE DURING RECRUITING

Baseball Players

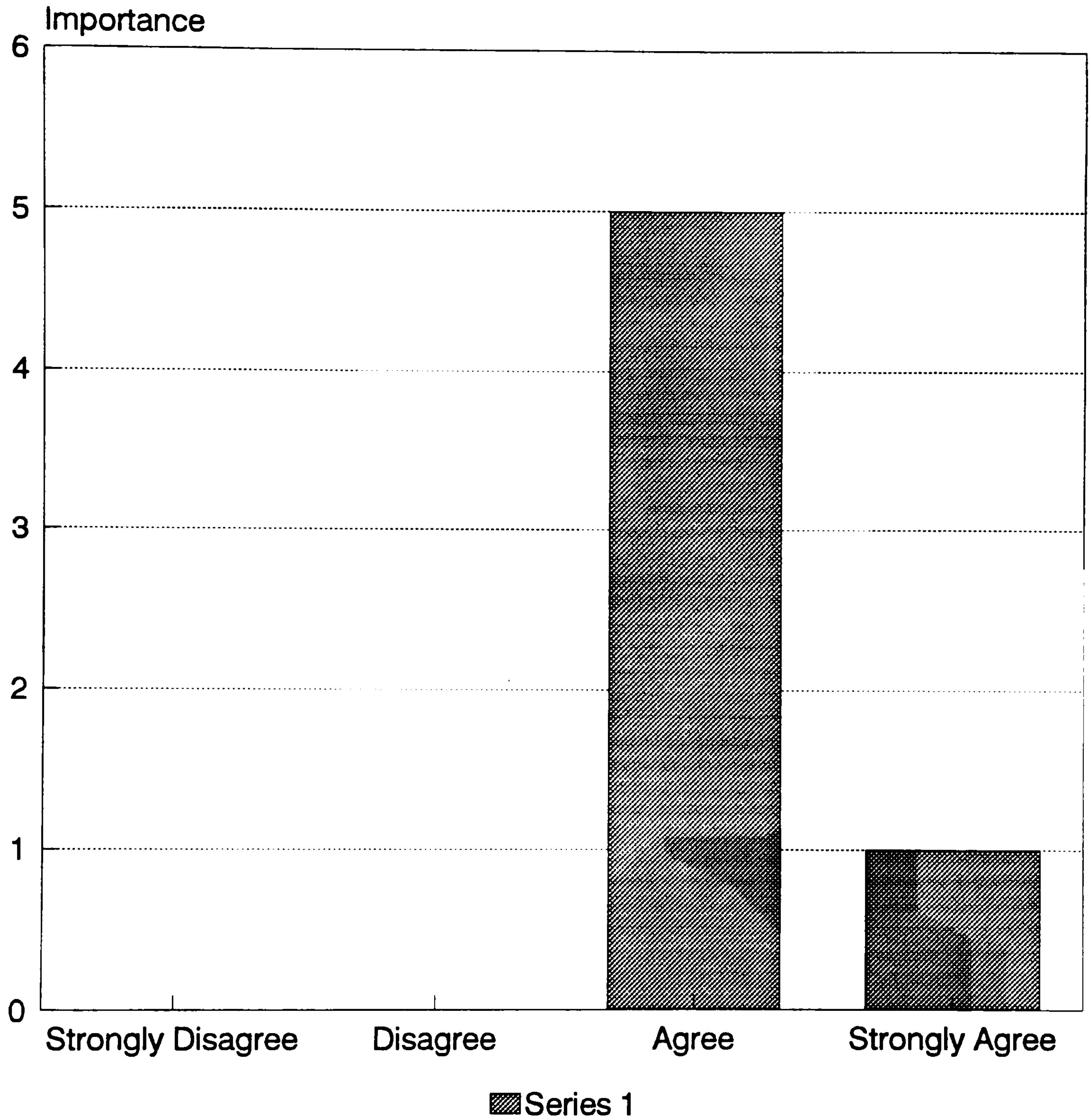

Figure 2. Athletic dining hall as an important issue when recruited to attend a university--baseball players.

ISSUE DURING RECRUITING

Basketball Players

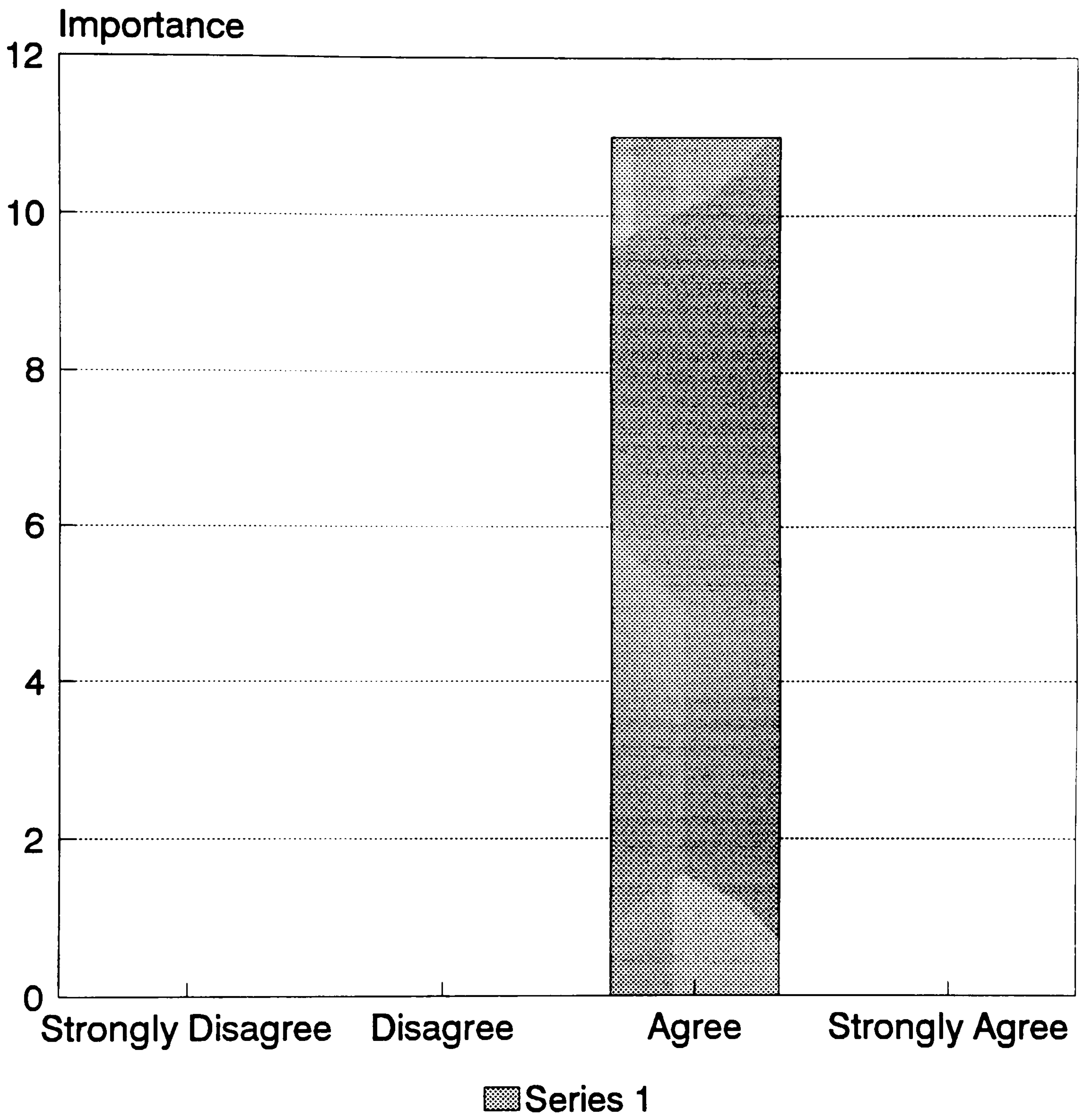

Figure 3. Athletic dining hall as animportant issue when recruited to attend a university--basketball players.

frequencies of 7 and 9, respectively. Of the 63 football players who answered the questionnaire, 47 perceived the athletic dining hall as important in the recruiting process. With a larger populated sport like football, it would not be unusual to have more diverse responses. The results of football players' responses can be seen in Figure 4.

Golfers, which made up 4.5% of the sample, also perceived the dining hall as important. One hundred percent of golfers answered in the Agree range which would express agreement that the athletic dining hall is an important issue when recruited to attend a university. Figure 5 examines these results.

Of the seven tennis players who answered the questionnaire, everyone perceived the athletic dining hall to be an important issue when recruited to attend a university. All seven tennis players answered in the Agree range. Figure 6 summarizes the results.

Only one track athlete did not perceive the athletic dining hall as important. The other 11 track athletes answered in the Agree category, 19-27 range, which would express agreement with the presence of an athletic dining hall as an important issue when recruited to attend a university. Results can be seen in Figure 7.

Lastly, the volleyball players all perceived the athletic dining hall as an important issue when recruited to

ISSUE DURING RECRUITING

Football Players

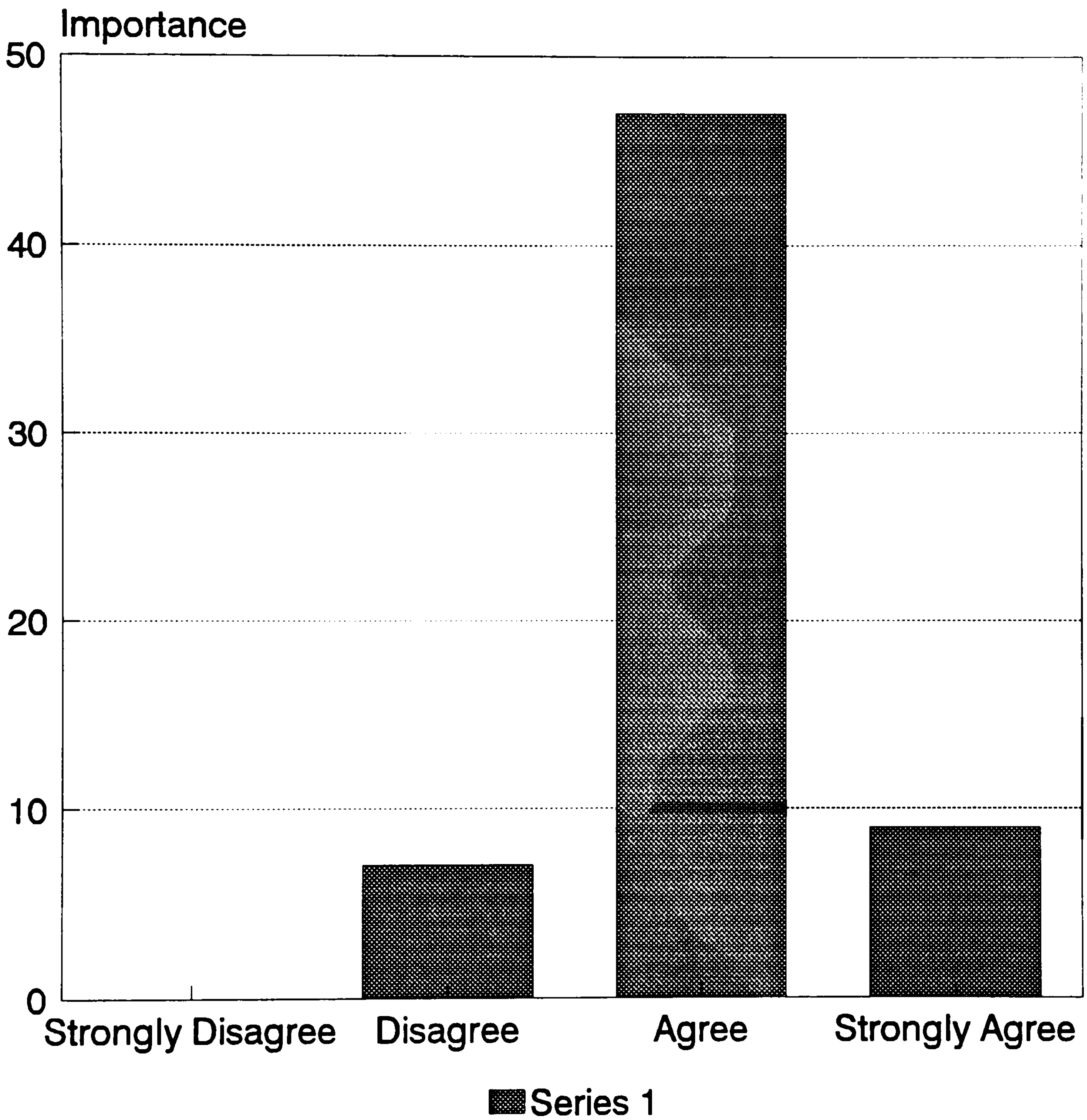

Figure 4. Athletic dining hall as an important issue when recruited to attend a university--football players.

ISSUE DURING RECRUITING

Golfers

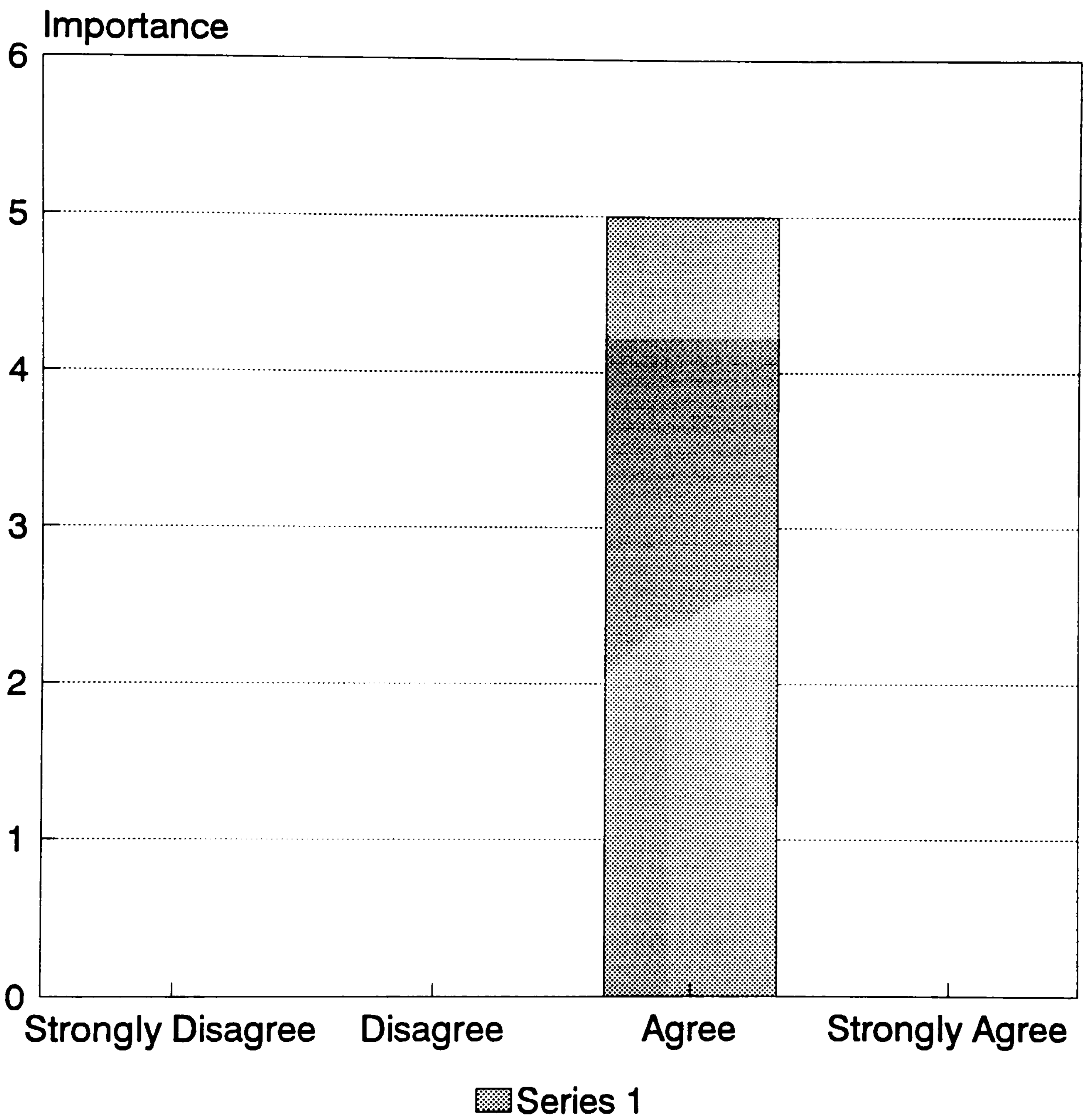

Figure 5. Athletic dining hall as an important issue when recruited to attend a university--golfers.

ISSUE DURING RECRUITING

Tennis Players

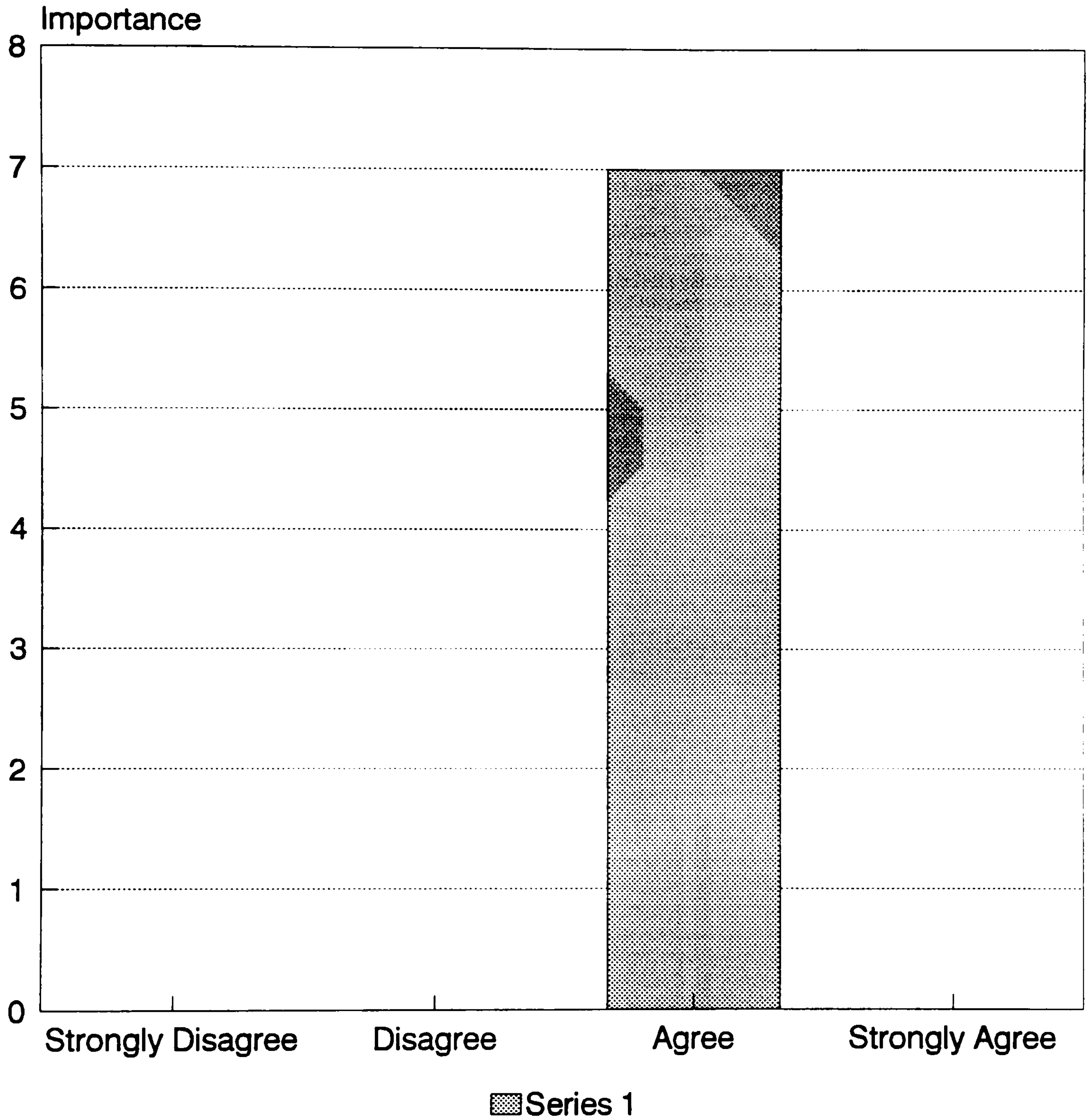

Figure 6. Athletic dining hall as an important issue when recruited to attend a university--tennis players.

ISSUE DURING RECRUITING

Track Athletes

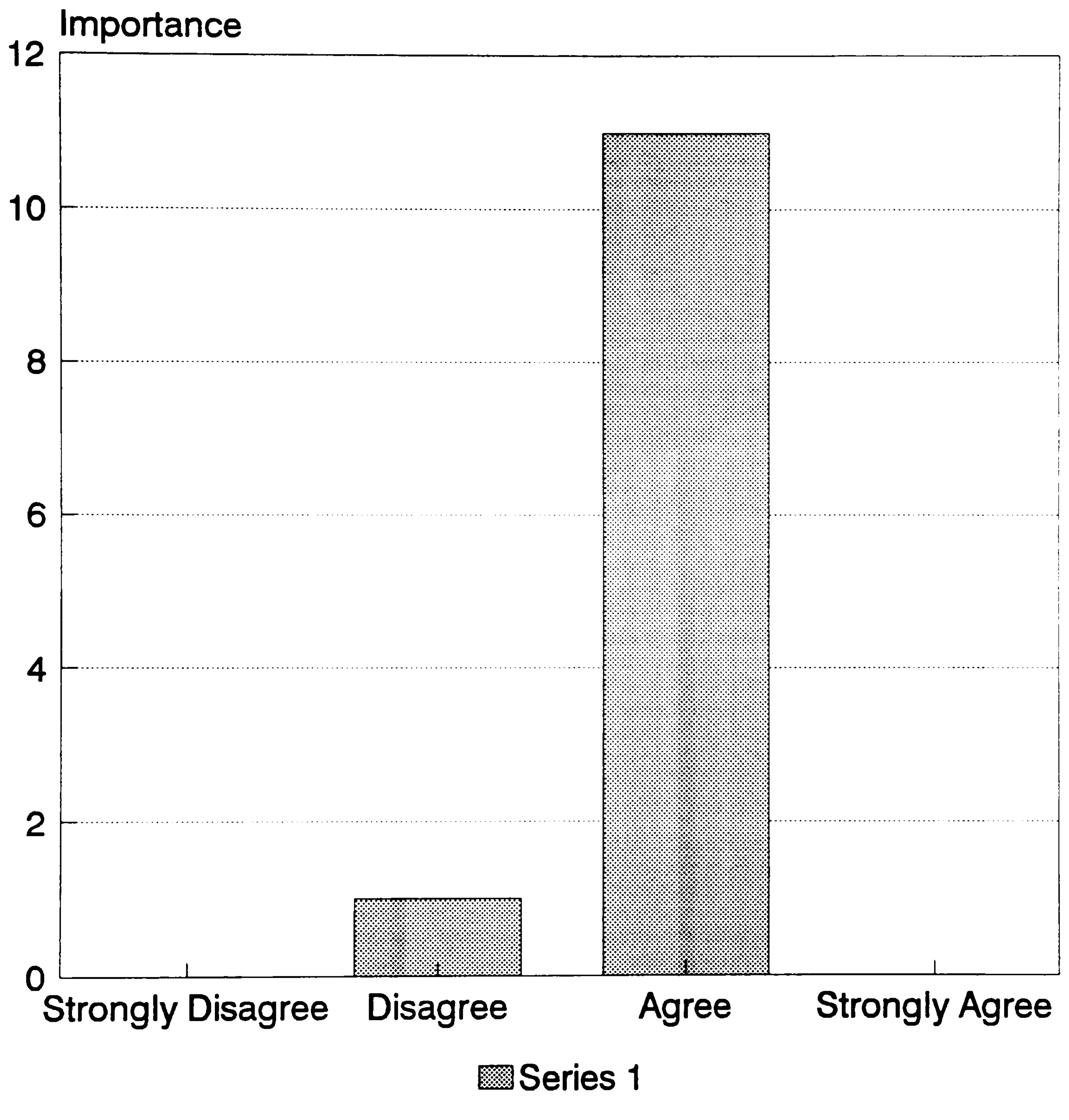

Figure 7. Athletic dining hall as an important issue when recruited to attend a university--track athletes.

attend a university. All nine student-athletes were in the Agree range. Figure 8 examines the results.

For all the athletes, no one was in the Strongly Disagree range (0-9), eight were in the Disagree range (10-18), 92 were in the Agree range (19-27), and 10 student-athletes were in the Strongly Agree range (28-36). This means that 92.1% of all student-athletes who answered at least 90% of the questionnaire perceived the athletic dining hall as an important issue when recruited to attend a university. These results are examined in Figure 9.

In question 1, the presence of an athletic dining hall was an important issue to student-athletes when recruited to attend a university. This could be, because during the recruiting process, student-athletes have been made more aware of the athletic dining hall and what it has to offer through phone calls, letters, or visits to campuses. Many parents have an important influence on their child's decision to attend a particular university. It is to the university's advantage to address all important aspects the university has to offer to the student-athlete in order to convince the student-athlete and his/her parents which university he/she should attend. The availability of excellent dining services would be reassuring.

Nutrition can be an important concern to athletes and their parents. Many athletic dining halls recognize this and they publicize the fact that they are providing highly

ISSUE DURING RECRUITING

Volleyball Players

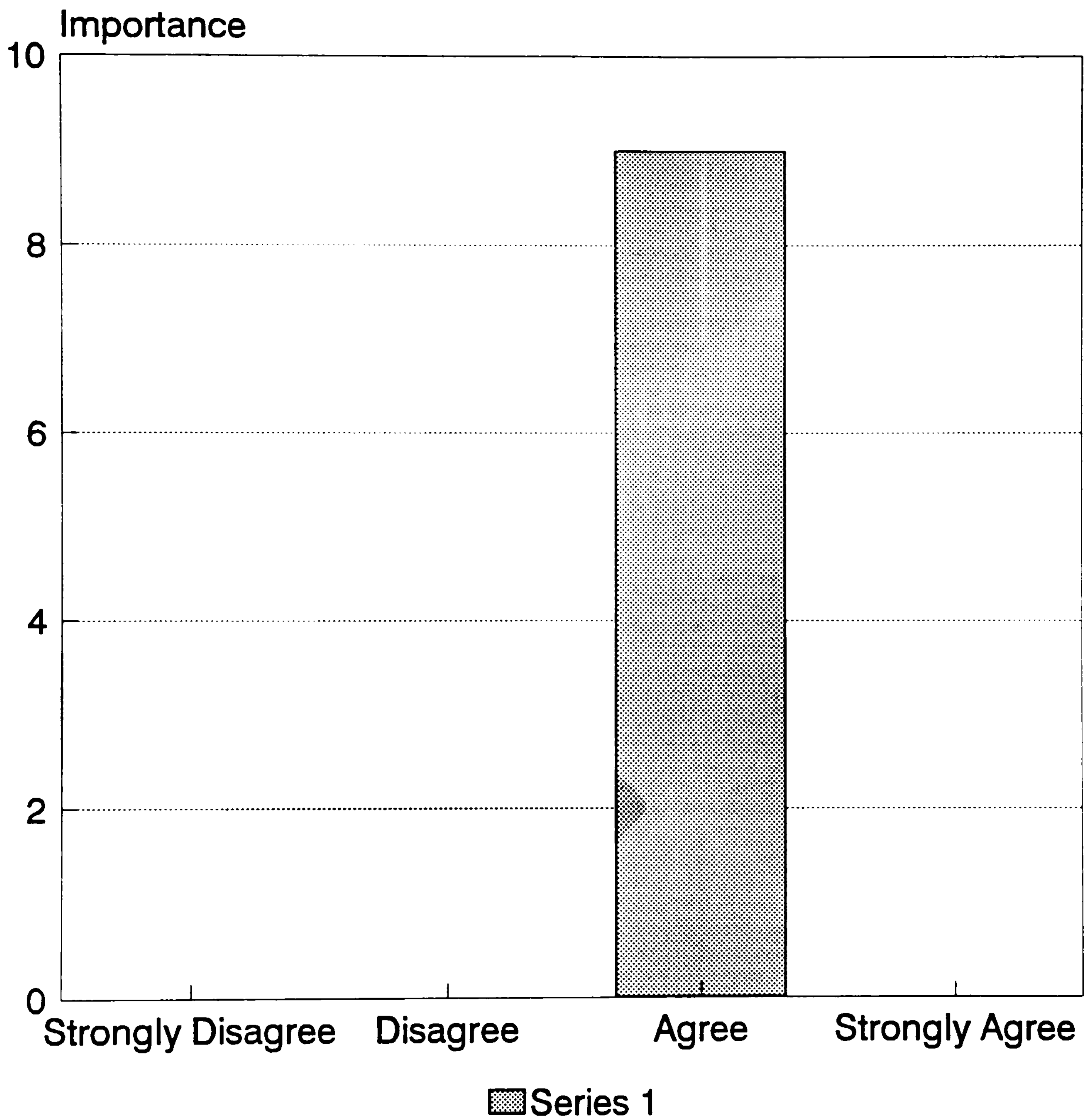

Figure 8. Athletic dining hall as an important issue when recruited to attend a university--volleyball players.

ISSUE DURING RECRUITING

Total student athletes

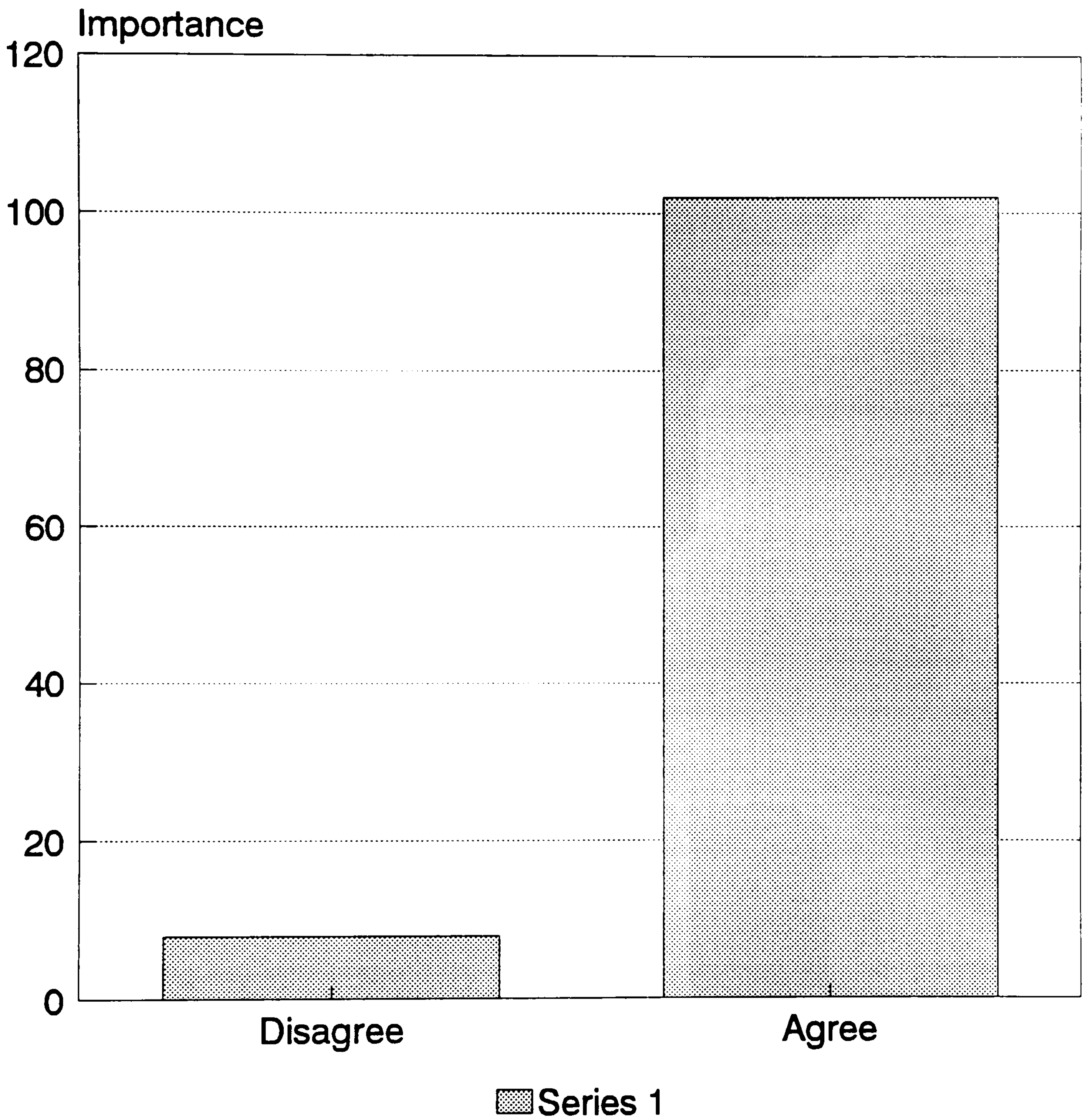

Figure 9. Athletic dining hall as an important issue when recruited to attend a university--all athletes.

nutritious and well-balanced meals for the student-athletes. Also, for many student-athletes, the types of foods served may be of most importance. The perception of a "home-cooked" meal may influence student-athlete's decision in choosing which universities have the best dining hall, especially since the majority of student-athletes' meals will be provided by the athletic dining hall. The food and nutrition services provided by the athletic dining hall are an asset a university has to offer, so the awareness of the athletic dining hall to prospective student-athletes and their parents may be of great benefit to the university.

Research Question 2: Relationships

Question 2 examined the relationship between the student-athlete and coaches/athletic staff, other student-athletes, and non-athlete students to see if these relationships were impacted by student-athletes dining in the athletic dining hall. Since the recruiting process questions dealt with the athletic dining hall, this variable was used in conjunction with the variables of coaches/athletic staff, other student-athletes, and non-athlete students to answer this question. Since this question dealt with relationships, a Pearson product moment correlation was conducted. Before the correlation was measured a reliability test was conducted to see if the scale of the recruiting process was reliable, especially since this was a new instrument. The scale had a reliability estimate of .7294.

The Pearson correlation test found a weak relationship at the .05 level and the .01 level (2-tailed) of probability for the variables between athletes and coaches/athletic staff (.1746), other student-athletes (.1708), and non-athlete students (.1120). This indicates there is a small impact of student-athletes dining in the athletic dining hall and their relationship between coaches/athletic staff, other student-athletes, and non-athlete students. Although, the impact does not appear to be strong enough to make a difference in their relationships.

Since the relationship was weak between the student-athlete and coaches/athletic staff, other student-athletes, and non-athlete students, no assumptions can be made about these relationships. Some athletes may have a positive or negative relationship with either coaches/athletic staff, other student-athletes, or non-athlete students by dining in the athletic dining hall, but because of the weak correlation, it is not possible to assume that all or any student-athletes have a positive or negative relationship. From this study, it is not possible to state that there is a problem of segregation of student-athletes from non-athlete students due to lack of strength in the correlation.

Research Question 3: Perception of Food

Question 3 examined how student-athletes perceived the food they eat in the athletic dining hall. Here, student-athletes were categorized by classification including Freshman, Sophomore, Junior, and Senior/Graduate students. Seniors, fifth-year Seniors and Graduates were combined to place more individuals into this category for analysis purposes.

All questions dealing with food were scaled the same as the Recruiting Process, with a total of eight questions in the Food scale. The Food scale was measured by the Likert-type values of Poor, Fair, Good, and Excellent. Since there were eight questions for this scale, the range was from 8 to 32. The categories were: Poor = 0-8, Fair = 9-16, Good = 17-24, and Excellent = 25-32. A cross-tabulation was conducted to measure this question. When conducting a cross-tabulation with variable Classification and variable Food, there was 1 missing observation, which left 114 total observations.

Freshman student-athletes perceived the food in the athletic dining hall as Good. Of the 34 Freshman student-athletes who answered the questionnaire, half of them perceive the food as Good and 44.1% the food as Excellent. Only two, or 5.9%, perceived the food as Fair. Figure 10 provides a summary of the results.

PERCEPTION OF FOOD

Freshman

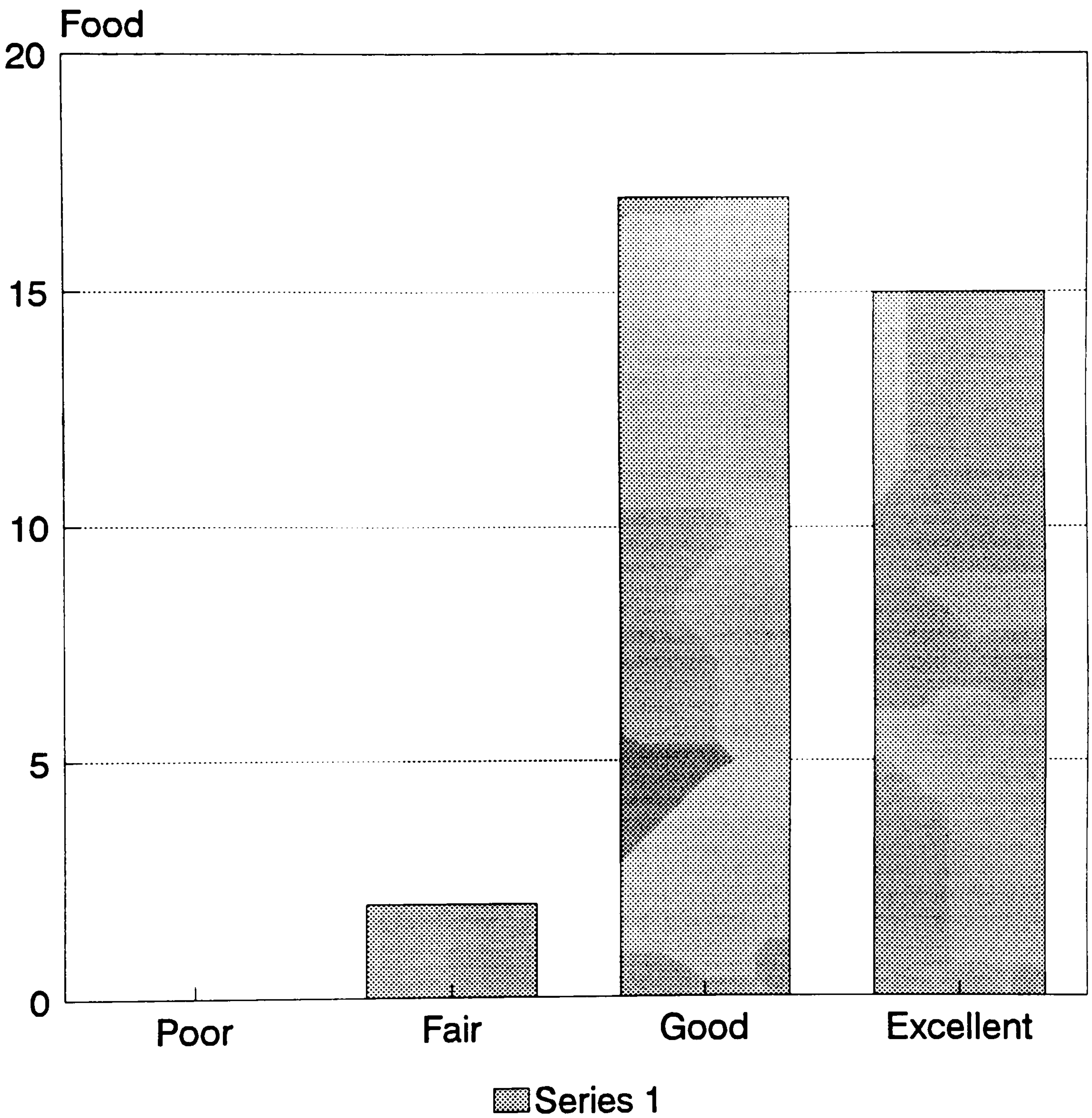

Figure 10. Perception of food in the athletic dining hall--Freshman.

Sophomore student-athletes perceived the food in the athletic dining hall as Excellent. Like Freshmen, two perceived the food as Fair, while 57.1% of Sophomores perceive the food as Excellent. The other 33.3% perceived the food as Good. Results can be examined in Figure 11.

Junior student-athletes perceived the food in the athletic dining hall as Good. Fifty-five percent answered in the range of 17-24 which is in the Good category. In the Excellent category, 41.4% of the Junior student-athletes responded in this range. Figure 12 examines the results.

The Seniors/Graduates, like the Sophomores, perceived the food in the athletic dining hall to be Excellent. Sixteen of the 30 Seniors/Graduates answered in the Excellent range of 25-32. No one in this category perceived the food as Poor or Fair. Figure 13 provides a summary of the results.

Overall, 55 of the student-athletes perceived the food in the athletic dining hall as Excellent and 54 perceived the food as Good. Only five student-athletes perceived the food as Fair and nobody perceived the food as Poor. The student-athletes who eat in the athletic dining liked the food they eat. The results can be seen in Figure 14.

The student-athletes' overall perceptions of food at the athletic dining hall was at least good, and in some cases, excellent. Freshmen's and juniors' perceptions of the food was good, while sophomores' and seniors/graduates'

PERCEPTION OF FOOD

Sophomores

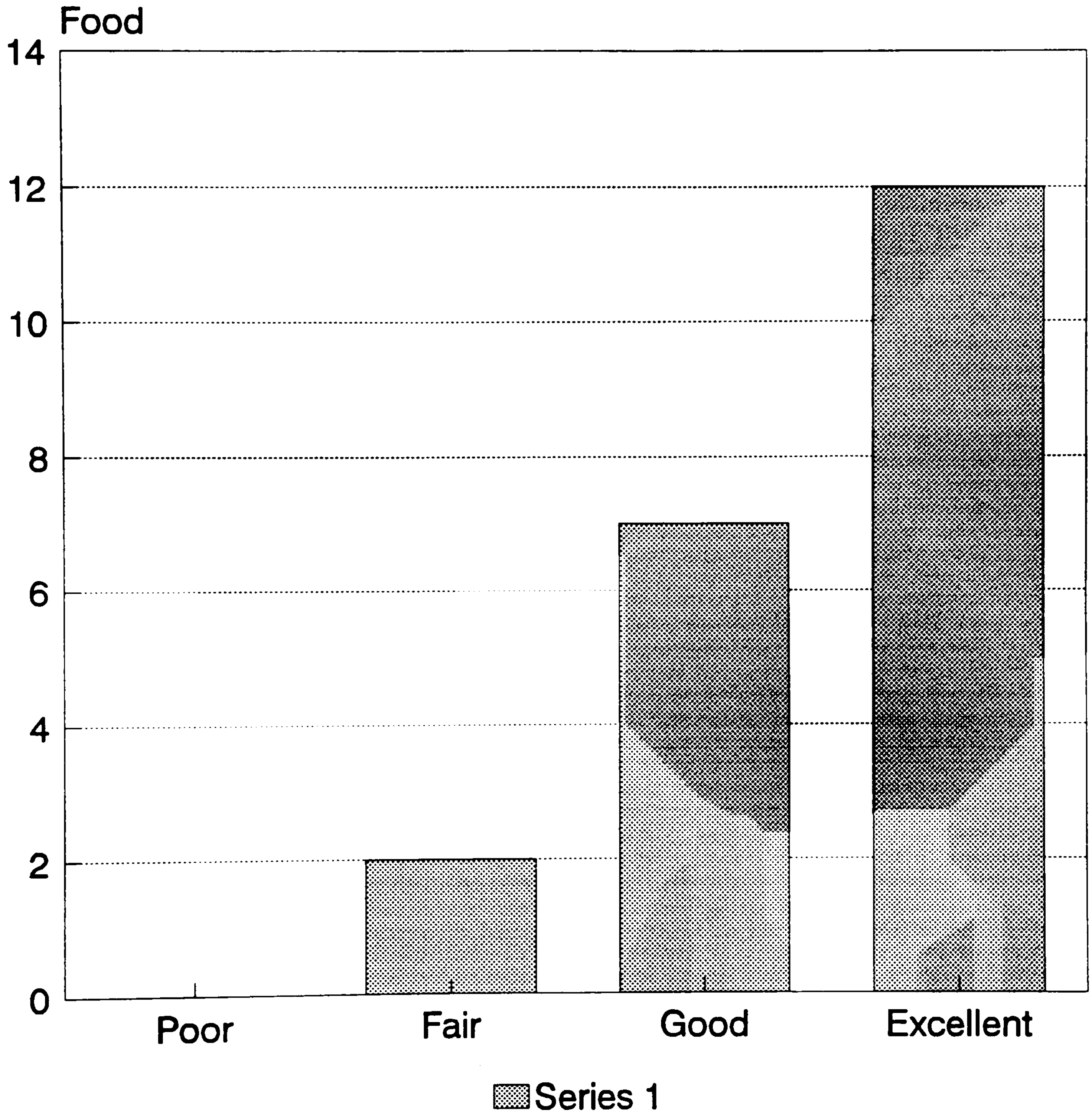

Figure 11. Perception of food in the athletic dining hall--Sophomores.

PERCEPTION OF FOOD

Juniors

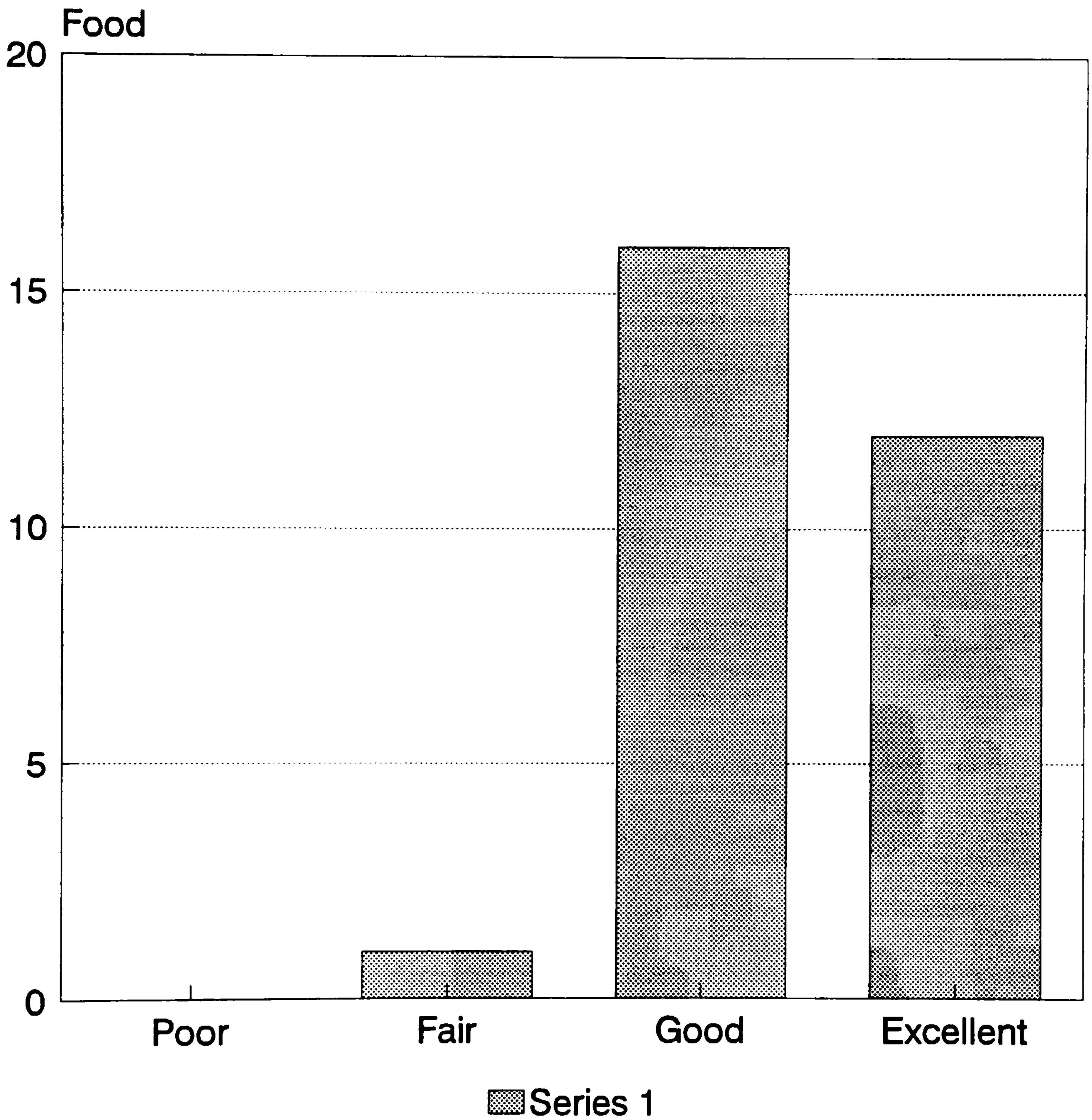

Figure 12. Perception of food in the athletic dining hall--Juniors.

PERCEPTION OF FOOD

Seniors/Graduates

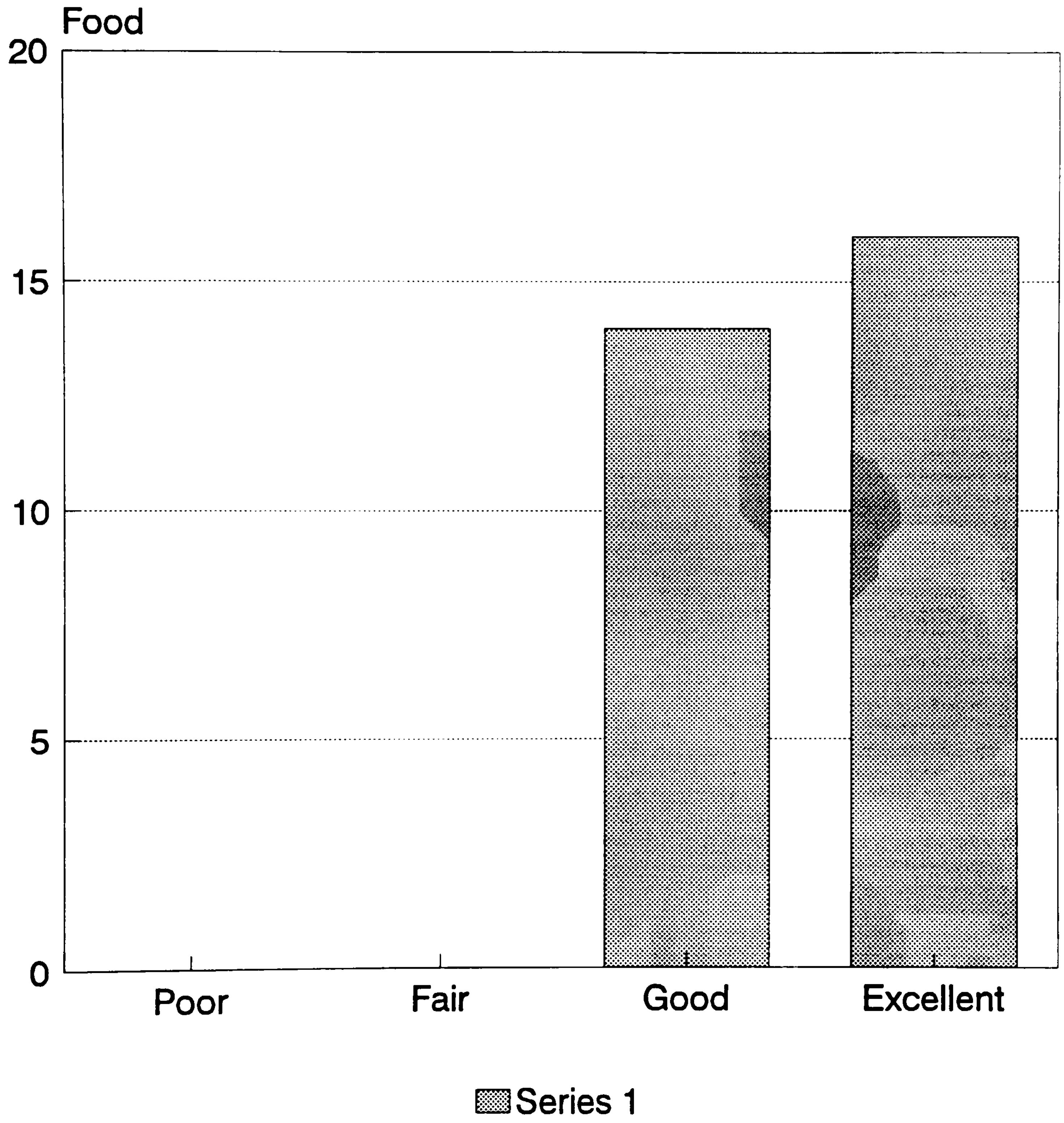

Figure 13. Perception of food in the athletic dining hall--Seniors/Graduates.

PERCEPTION OF FOOD

Total Student Athletes

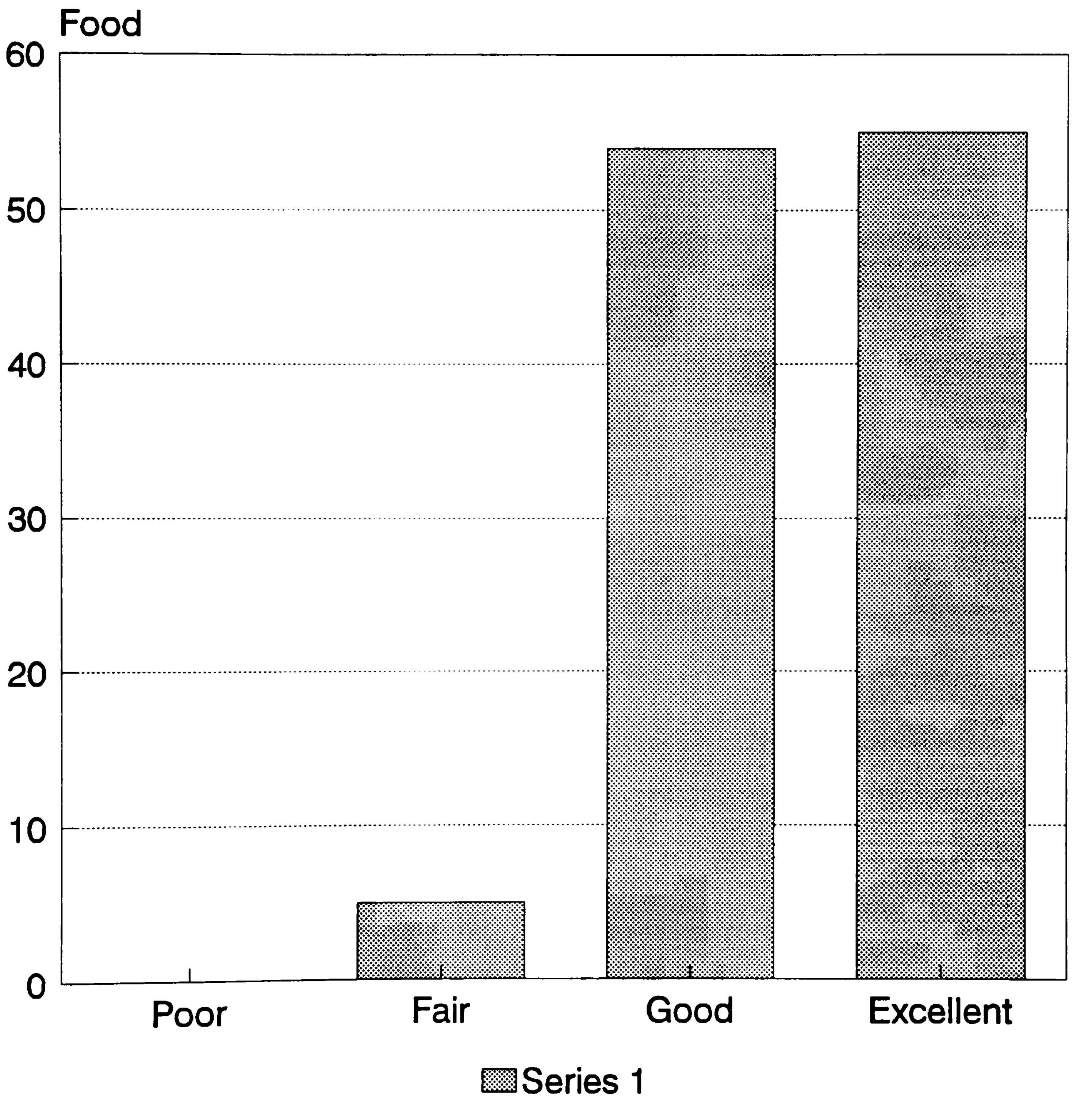

Figure 14. Perception of food in the athletic dining hall--All Athletes.

perceptions of the food was excellent. The food in the athletic dining hall has changed in the past few years with the hiring of the new dining hall director. Freshmen eating in the athletic dining hall for the first year have not had the opportunity to eat in the dining hall when there were limited entrees and varieties of food and nutrition offered to the student-athletes. The food may be better now than in the past. These athletes may not realize this and may think the food has always been of this quality. Also, the freshman student-athletes may be accustomed to eating a "home-cooked" meal while they were living at home. When they came to the athletic dining hall, the food may have only been considered good to many of the student-athletes. Others may have found the meals excellent. Another important aspect here is that freshmen athletes must live in the dorms their first year in college, so they have to eat at least two meals a day in the athletic dining hall. At first, the meals may seem good or excellent, but after eating two meals a day in the athletic dining for a year, the meals may become routine and the perception of food quality may decline.

On the other hand, most sophomores begin to live off campus at this time, so they begin to eat fewer meals at the athletic dining hall. The more they eat at home, the more they may realize how good the meals are at the athletic dining hall. Others may find the athletic dining hall meals to be less appealing since they have no control over what is on the menu at the athletic dining hall, while at home they can prepare whatever they want.

The juniors and freshmen have similar perceptions of the athletic dining hall food. This could be a convenience factor. Some student-athletes may find it difficult to leave campus during the day and then return to the dining hall during meal times to eat. Because of this, they may not eat as many meals in the dining hall during the year, so their perception of the food may be excellent or good depending on the days they happen to eat in the dining hall.

The perceptions for seniors/graduates may appear to be the same as juniors, but these athletes have been eating in the athletic dining hall before the services were improved. They may appreciate the greater variety and attention to quality since the change of dining hall directors. This may be why 16 of the senior/graduates perceived the food as excellent.

Research Question 4: Perception of Nutrition Information

Question 4 examined how student-athletes perceived the nutrition information they received in the athletic dining hall. Student-athletes were categorized by classification. The process of scaling the Nutrition information section was the same as the Recruiting and Food sections. Nutrition information questions were scaled together in the Nutrition section of the questionnaire. The categories of this section were "Not Important," "Somewhat Important," "Important," and "Very Important." There were a total of nine questions used in this section, which gave a range from 9 to 36. The categories were: Not Important = 0-9, Somewhat Important = 10-18, Important = 19-27, and Very Important = 28-36.

Freshman student-athletes perceived the nutrition information they received from the athletic dining as important. Fifteen had scores in the 19-27 range and 14 had scores in the 28-36 range; this expressed that nutrition information from the athletic dining hall is important to them. Figure 15 provides an examination of the results.

Sophomore student-athletes varied from Not Important to Very Important, although the majority of Sophomores (14) answered in the 19-27 range. Only five answered in the Very Important range and one answered in both the Not Important and Somewhat Important range. Sophomores perceived the nutrition information they received from the athletic dining hall as important. Results can be seen in Figure 16.

Juniors perceived nutrition information as very important. Sixteen answered in the 28-36 range (Very Important) and 11 answered in the 19-27 range (Important). Like Sophomores, Juniors answered one in both the Not Important and Somewhat Important ranges. Figure 17 summarizes the results.

PERCEPTION OF NUTRITION

Freshman

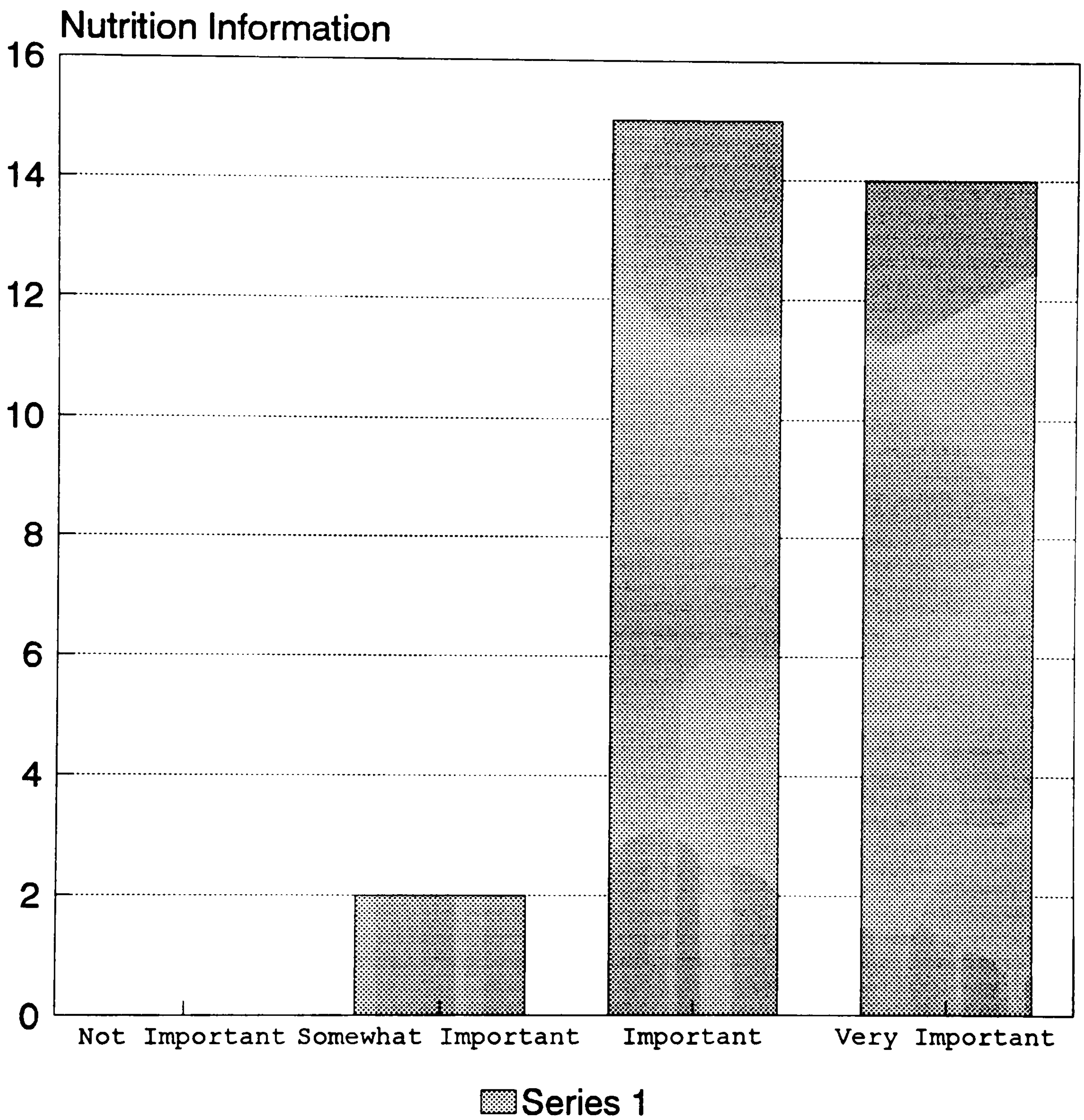

Figure 15. Perception of nutrition information from the athletic dining hall--Freshman.

PERCEPTION OF NUTRITION

Sophomores

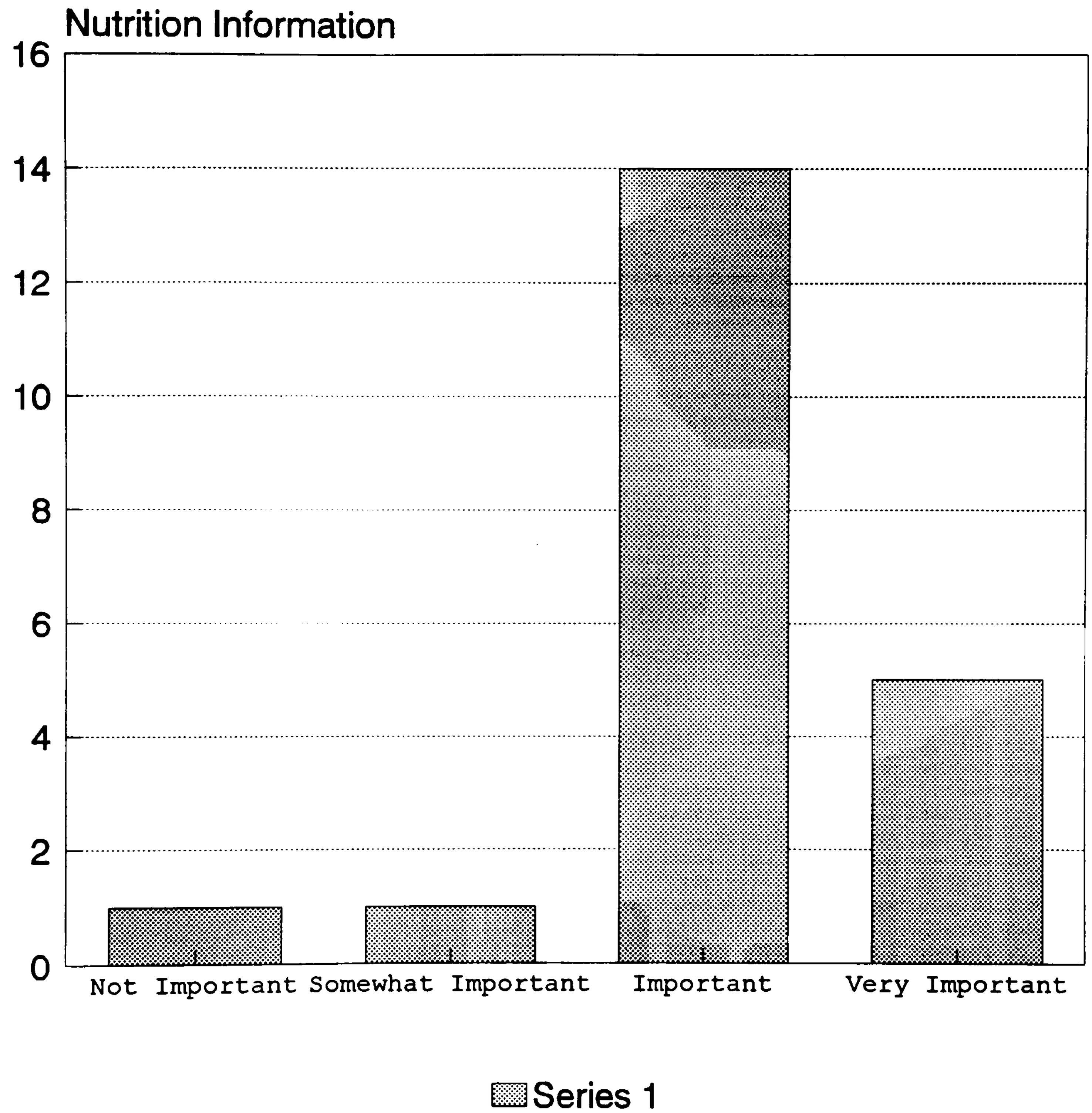

Figure 16. Perception of nutrition information provided by the athletic dining hall--Sophomores.

PERCEPTION OF NUTRITION

Juniors

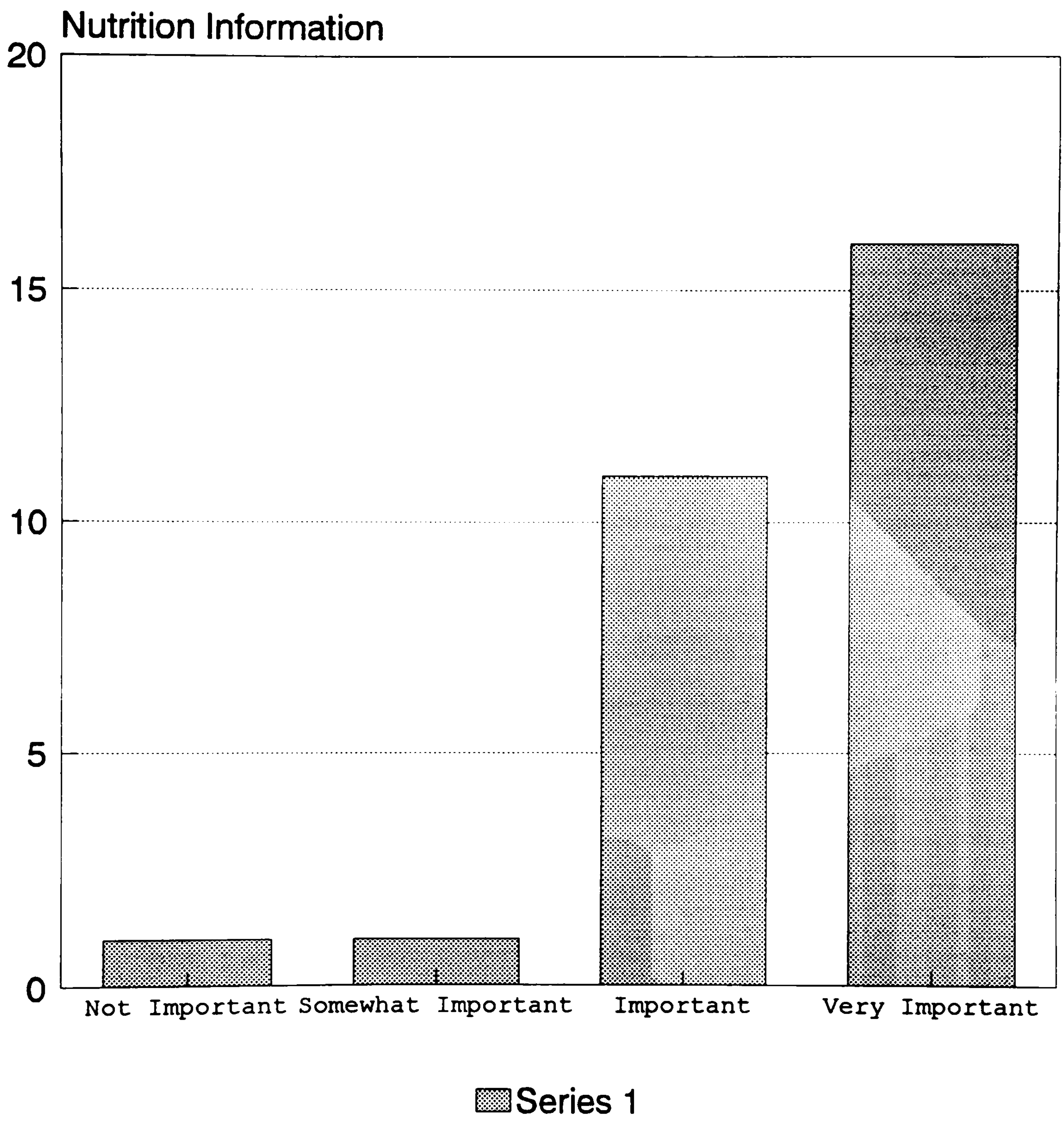

Figure 17. Perception of nutrition information provided by the athletic dining hall--Juniors.

Seniors/Graduates unanimously perceived nutrition information from the athletic dining hall as Very Important. Of the 31 student-athletes in this classification, 71% had scores in the 28-36 range, while only 25.8% had scores in the 19-27 range. A total of 96.8%, or 30, Seniors/Graduates perceived the nutrition information from the athletic dining hall as important. A summary of the results can be seen in Figure 18.

Of the 112 observations, a total of 105, or 93.8%, student-athletes perceived the nutrition information they received from the athletic dining hall as important. Of these 105 student-athletes, 57 perceived the nutrition information as Very Important. Only 6.3% of the student-athletes perceive nutrition information from the athletic dining hall as not important. Figure 19 examines the results.

The perception of nutrition information received at the athletic dining hall is considered very important in most cases, but is also considered important to student-athletes. There were only seven student-athletes who did not consider nutrition information important.

Freshman student-athletes perceived nutrition to be almost equally important with very important. This could be due to the increased knowledge of nutrition and its relationship to performance in the past few years among parents, coaches and athletes. There seems to be a tighter

PERCEPTION OF NUTRITION

Seniors/Graduates

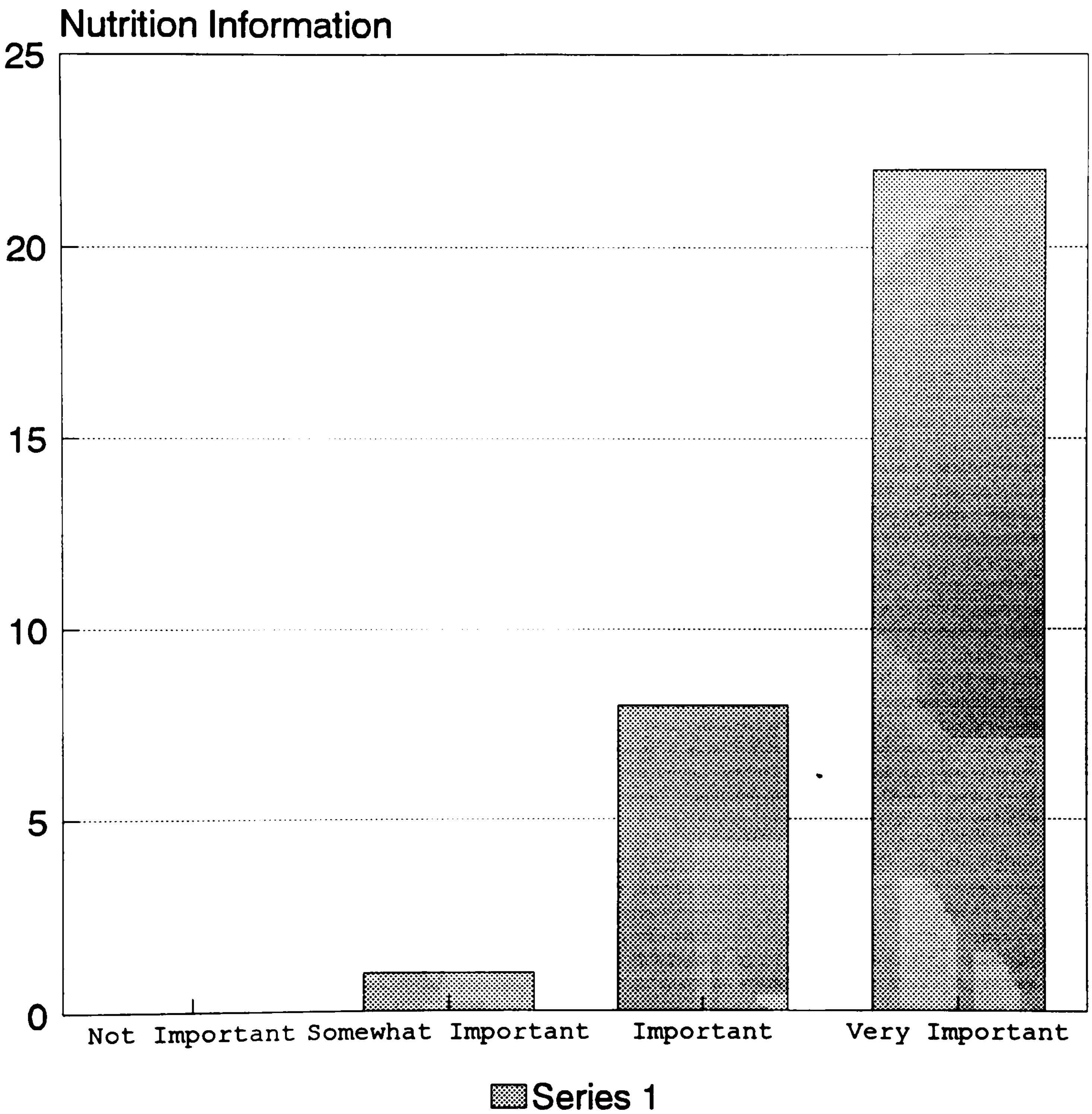

Figure 18. Perception of nutrition information provided by the athletic dining hall--Seniors/Graduates.

PERCEPTION OF NUTRITION

Total Student Athletes

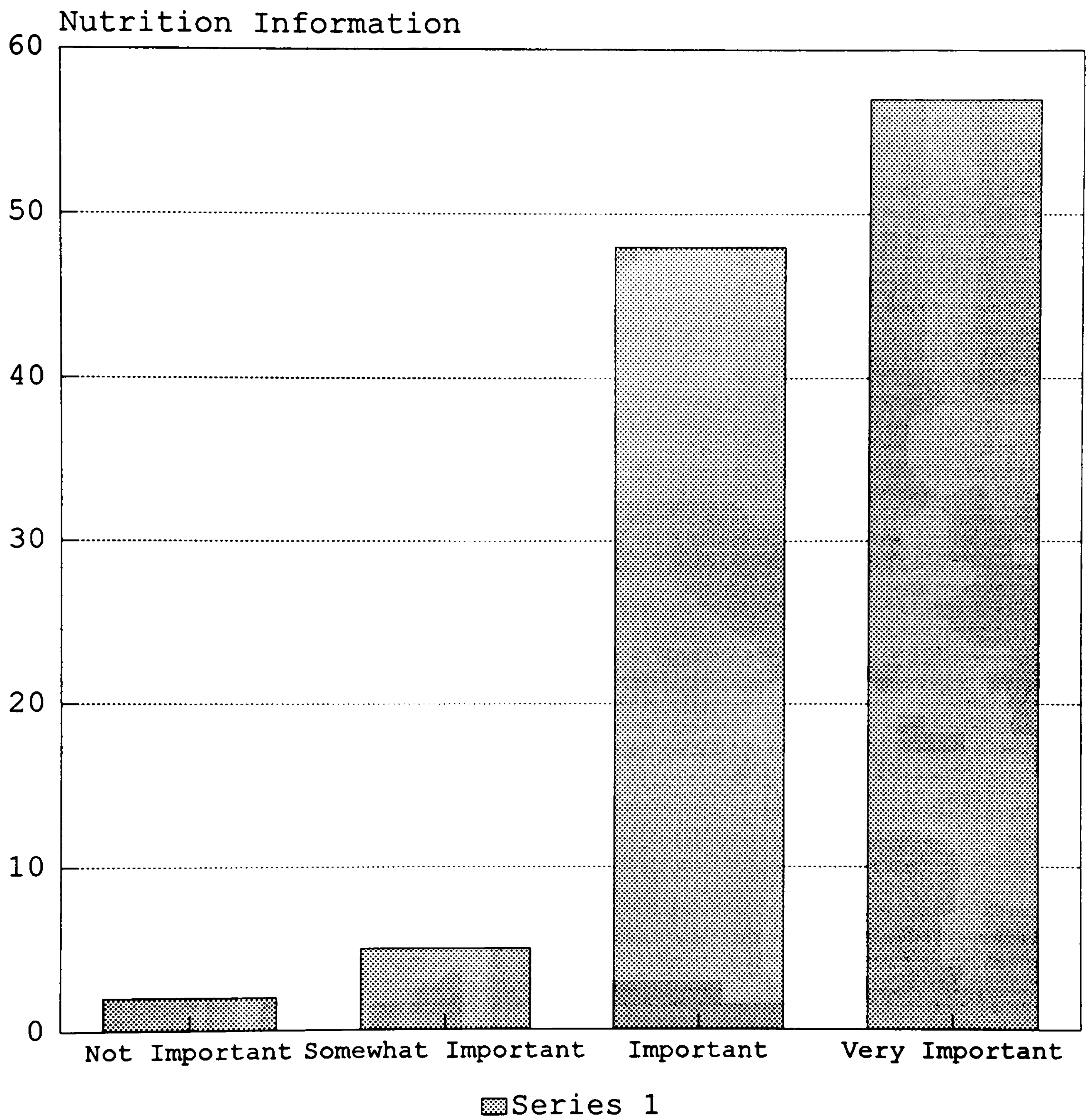

Figure 19. Perception of nutrition information provided by the athletic dining hall--All Athletes.

control over the types of foods athletes are eating. Many freshman athletes may attend a university with the focus of playing their first year, so may they train extra hard and eat better foods. This may also be the reason for their interest in highly nutritious foods.

Sophomores in this study had a different perception of nutrition information they receive. They still perceived nutrition as important, but sophomores perceived nutrition information as very important, 21.4% less than freshmen. This could be because many student-athletes realize they will not play in their sport for at least another year, so they may get discouraged and not concern themselves with nutrition as much.

Juniors appear to be more concerned with nutrition information than sophomores. This may be because they are beginning to play more than when they were freshmen and sophomores. Their coaches may be stressing the importance of nutrition more because they are playing more frequently than in the past couple of years. Seniors/graduates unanimously perceive nutrition as very important. This may be for the same reason as for juniors.

Research Question 4 Part A and B: Impact of Nutrition and Nutrition Information about the Pregame Game on Athletic Performance

Question 4 was divided into 2 subcategories. These categories addressed how the nutrition information of the pregame meal and nutrition impacted the student-athletes' athletic performance. A Pearson correlation coefficient was used to measure these variables. A strong relationship was found in both the pregame meal (.4272) and the nutrition (.7036) of student-athletes in relation to athletic performance at both the .01 and .05 levels (2-tailed). According to this correlation measurement, as nutrition information about the pregame meal increased for student-athletes, athletic performance increased. Also, with the presence of nutrition information, athletic performance increased. These findings are based on all student-athletes regardless of sport played.

The perceptions of nutrition and the nutrition information about the pregame meal on athletic performance, according to student-athletes, is a positive relationship. Student-athletes perceived that proper nutrition increases athletic performance. They also perceived that the pregame meal increases athletic performance, not only physically but also psychologically. The perception of nutrition and its relationship to athletic performance continues to be widespread among athletes. The strong correlation found between nutrition information and athletic performance may be typical for the student-athlete. However, the strong correlation between the nutrition information about the pregame meal and psychological performance may be surprising to some. In the past, the typical pregame meal consisted of steak and potatoes, but now it is moving towards chicken and pastas, or lighter meals. Psychologically, some athletes may need the steak and potatoes for increased athletic performance, while others may be educated to eat pastas and other forms of carbohydrates to increase athletic performance. The choice of food consumption before exercise should be made by the athlete based upon past experience as to what minimizes hunger yet prevents the sensation of stomach fullness (Coyle, 1991). So, the pregame meal may have more of an effect on the psychological part of athletic performance than the physical part.

Limitations of the Study

This study was conducted during the spring, 1993 semester at Texas Tech University, an NCAA Division I university, using student-athletes who dine in the athletic dining hall on campus. Generalizations or conclusions about these results are limited to student-athletes at this university. This makes generalizations or conclusions about any other students or student-athletes at this university or other universities difficult or impossible. Also, the sample of this study was not random. Further research can be conducted on the athletic dining halls at universities throughout the United States.

CHAPTER V

CONCLUSIONS

The well-being of student-athletes is important, especially when pressures are more strenuous for student-athletes to graduate from college and to continue in the professional rankings of their sport. Throughout an athlete's college career, there are many time demands placed on them that may hinder their academic and athletic progress. Consequently proposals are constantly being made and amended to aid the student-athlete in succeeding in the academic and athletic arenas. One such proposal is the elimination of athletic dining halls to integrate student-athletes into the campus body.

The recruiting process and student relationships may change, but according to this study, student-athletes will still be concerned with the food and nutrition they receive from the dining facility in which they eat their meals.

This study showed that there is a weak relationship between student-athletes and coaches/athletic staff, other student-athletes, and non-athlete students. With the integration of student-athletes into the student body by having student-athletes eat in other campus dining, there may be a chance for loss of informal communication between the student-athlete and coaches/athletic staff at the dining table. It may be possible that student-athletes may lose their close-knit camaraderie with other student-athletes by eating with non-athlete students. Due to time demands, many times eating in the athletic dining hall is the only chance the student-athletes have time to spend with each other outside of sports. It may be possible that student-athletes may become better integrated into the student body, and improve their well-being. Due to the lack of significance from this study, nothing can be stated about the relationships among these groups if athletic dining halls are eliminated.

Another major concern is the food and nutrition service provided to student-athletes through an athletic dining hall. Both upperclassmen and lowerclassmen perceived the food and nutrition information received from the athletic dining hall as important. The study showed that nutrition information positively effected the athletic performance of student-athletes. The nutrition information about the pregame meal also had a positive effect on the performance of the student-athlete, not only physically but also psychologically. As Wheeler noted, some athletes have a psychological need for certain foods, like steak and eggs, and these foods should be included in the pregame meal until the athletes can be fully educated about the benefits of carbohydrates (1989). It is not clear that student-athletes will still be provided with high quality food and nutrition services from other dining facilities if athletic dining halls are eliminated. The perception of food and nutrition information by student-athletes is important to both the student-athlete and the dining facility. First of all, if student-athletes' perceptions are poor, then fewer student-athletes may eat in the dining facility. This may have an adverse effect on the student-athlete by potential improper nutrition. This may also have an adverse effect on the dining facility because money from student-athletes eating in the facility may be lost. The major concern of this paper is the impact of the collegiate athletic dining hall on the well-being of student-athletes. If athletic dining halls are eliminated from the university and college campuses, how will this impact the well-being of student-athletes?

Recommendations for Further Research

Follow-up studies may be conducted in other universities across the United States to determine if similar results will be obtained. Through this research demographic information was obtained, but only a small portion was used. Further research should be conducted using the remaining information obtained from this study.

It would be interesting to know what coaches' perceptions are of the recruiting process related to the athletic dining hall. Also, what are the coaches/athletic staff's perceptions of the food and nutrition student athletes receive from the athletic dining hall? A study to determine if student-athletes actually receive accurate nutrition information from the athletic dining hall or athletic staff would also be valued information. Athletic dining halls affecting the satisfaction of student-athletes is an important concern to their well-being.

Like Texas Tech University, many other athletic dining halls have other facilities located near or in the athletic dining hall that provide support to the student-athletes such as study halls, computer rooms and TV rooms. Are these facilities effective in improving the well-being of the student-athlete? Another study should determine how the elimination of athletic dining halls has affected the student-athlete, student body, and the university as a whole. A financial analysis of athletic dining halls should be conducted to determine if food costs are too high compared to other campus dining facilities.

These are just a few suggestions to increase the information about athletic dining halls, especially since limited research has been conducted. With the constant changing of rules and regulations in the NCAA, it is important to know how such changes, like the elimination of athletic dining halls, will affect the well-being of student-athletes.

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APPENDIX

QUESTIONNAIRE

IMPACT OF ATHLETIC DINING HALL ON THE WELL BEING OF STUDENT ATHLETES

A THESIS FOR MASTERS OF SCIENCE IN

Restaurant, Hotel & Institutional Management

QUESTIONNAIRE

by

KING HODSON

ATHLETIC DINING HALL QUESTIONNAIRE

The following questions are designed to gather information on the importance of the athletic dining hall. Please circle the response that most accurately represents your feeling. Your responses will be kept CONFIDENTIAL.

Circle the answer that best describes your opinion.
Use the following scale for your responses:

1=Strongly Disagree **2=Disagree** **3=Agree** **4=Strongly Agree**

RECRUITING PROCESS	**SD**	**D**	**A**	**SA**
When I was recruited by:				
1. this university, the athletic staff used the presence of an athletic dining hall to influence my decision to attend this university.	1	2	3	4
2. other universities, the athletic staff used the presence of an athletic dining hall to influence my decision to attend the university.	1	2	3	4
3. this university, the quality of food provided by the athletic dining hall was discussed.	1	2	3	4
4. this university, the quality of nutrition provided by the athletic dining hall was discussed.	1	2	3	4
5. other universities, the quality of food provided by the athletic dining hall was discussed.	1	2	3	4
6. other universities, the quality of nutrition provided by the athletic dining hall was discussed.	1	2	3	4
7. this university or other universities, I inquired about the nutrition I would receive from the athletic dining hall.	1	2	3	4
8. The athletic dining hall was a major influence in my decision to attend this university.	1	2	3	4
9. This university should have an athletic dining hall.	1	2	3	4

Circle the answer that best describes your opinion.
Use the following scale for your responses:

1=Not Important **2=Somewhat Important** **3=Important** **4=Very Important**

10.	How important is the athletic dining hall to the success of the athletic program?	1	2	3	4
11.	How important is the athletic dining hall to this university?	1	2	3	4

NUTRITION NEEDS OF STUDENT ATHLETES

1=Not Important **2=Somewhat Important** **3=Important** **4=Very Important**

12.	How important is nutrition in your personal daily life?	1	2	3	4
13.	How important is nutrition to your athletic performance?	1	2	3	4

How important are the following to you:

14.	Caloric intake	1	2	3	4
15.	Protein intake	1	2	3	4
16.	Carbohydrate intake	1	2	3	4
17.	Fat intake	1	2	3	4
18.	receiving adequate nutrition from the athletic dining hall at this university?	1	2	3	4
19.	receiving personal nutrition counseling at the athletic dining hall?	1	2	3	4
20.	receiving athletic nutrition counseling at the athletic dining hall?	1	2	3	4

21. Who would you contact about receiving nutrition counseling?

a. Coach
b. Dining Hall Director
c. Self
d. Teammate/Friend
e. Trainer
f. Other________________________.

Please circle the answer that best describes your opinion.
Use the following scale for your responses:

1=Strongly Disagree **2=Disagree** **3=Agree** **4=Strongly Agree**

When eating at the athletic dining hall at this university, I consume excessive amounts of:

	IN SEASON				OFF SEASON			
	SD	**D**	**A**	**SA**	**SD**	**D**	**A**	**SA**
22. Calories	1	2	3	4	1	2	3	4
23. Protein	1	2	3	4	1	2	3	4
24. Carbohydrates	1	2	3	4	1	2	3	4
25. Fat	1	2	3	4	1	2	3	4

If the answer to any of these is AGREE / STRONGLY AGREE, why do you think

so?____

____

When eating at the athletic dining hall at this university, I consume inadequate amounts of:

	IN SEASON				OFF SEASON			
	SD	**D**	**A**	**SA**	**SD**	**D**	**A**	**SA**
26. Calories	1	2	3	4	1	2	3	4
27. Protein	1	2	3	4	1	2	3	4
28. Carbohydrates	1	2	3	4	1	2	3	4
29. Fat	1	2	3	4	1	2	3	4

If the answer to any of these is AGREE / STRONGLY AGREE, why do you think

so?____

____

30. When eating at the athletic dining hall, I mentally think about nutrient intake (ex: caloric, carbohydrate, protein, and fat):

	IN SEASON				OFF SEASON			
	SD	**D**	**A**	**SA**	**SD**	**D**	**A**	**SA**
Once a day	1	2	3	4	1	2	3	4
Once a week	1	2	3	4	1	2	3	4
Once a month	1	2	3	4	1	2	3	4
Once a year	1	2	3	4	1	2	3	4
Never	1	2	3	4	1	2	3	4

31. Have you asked for special menu items to fit your nutritional needs? YES NO

If YES, what were they?____

____

Were these needs met? YES NO

FOOD IN THE ATHLETIC DINING HALL

Please circle the answer that best describes your opinion.
Use the following scale for your responses:

1=Poor 2=Fair 3=Good 4=Excellent

How would you rate the following items at the athletic dining hall:

	POOR	FAIR	GOOD	EXCELLENT
32. Quality of food	1	2	3	4
33. Variety of food	1	2	3	4
34. Taste of food	1	2	3	4
35. Temperature of food	1	2	3	4
36. Portion sizes of food	1	2	3	4
37. Variety of beverages	1	2	3	4
38. Atmosphere of dining hall	1	2	3	4
39. Uniform quality of food	1	2	3	4

How would you rate the following items at other dining facilities at this university:

	POOR	FAIR	GOOD	EXCELLENT
40. Quality of food	1	2	3	4
41. Variety of food	1	2	3	4
42. Taste of food	1	2	3	4
43. Temperature of food	1	2	3	4
44. Portion sizes of food	1	2	3	4
45. Variety of beverages	1	2	3	4
46. Atmosphere of dining hall	1	2	3	4
47. Uniform quality of food	1	2	3	4

Use the following scale for your responses:

1=Not Important 2=Somewhat Important 3=Important 4=Very Important

48. How important is portion size to you?	1	2	3	4
49. How important is a relaxed dining atmosphere to you?	1	2	3	4
50. How important is a perceived "home cooked" meal from the athletic dining hall to you?	1	2	3	4

1=Not Important	2=Somewhat Important	3=Important	4=Very Important

How important is the pre-game meal to your:

51. athletic performance?	1	2	3	4
52. psychological needs for athletic performance?	1	2	3	4
53. motivation for athletic performance?	1	2	3	4
54. enthusiasm for athletic performance?	1	2	3	4

OPERATIONAL CONCERNS

Please circle the answer that best describes your opinion.
Use the following scale for your responses:

1=Strongly Disagree	2=Disagree	3=Agree	4=Strongly Agree

	SD	D	A	SA
55. The athletic dining hall hours are suited to my class times.	1	2	3	4
56. The athletic dining hall hours are suited to my practice times.	1	2	3	4

If there are time conflicts between athletic dining hall hours and classes/practice, by what means does the athletic dining hall provide food for you?______________________________

____

	SD	D	A	SA
57. The athletic dining hall is in a convenient location for me.	1	2	3	4

RELATIONSHIPS

Circle the answer that best describes your opinion.
Use the following scale for your responses:

1=Strongly Disagree	2=Disagree	3=Agree	4=Strongly Agree

	SD	D	A	SA
58. I feel comfortable at the athletic dining hall.	1	2	3	4
59. I feel that I can sit down and enjoy a meal with the coaches at the athletic dining hall.	1	2	3	4

Eating in the athletic dining improves my relationship with the following:

		SD	D	A	SA
60.	Coaches	1	2	3	4
61.	Teammates	1	2	3	4
62.	Players from other sports (opposite gender)	1	2	3	4
63.	Players from other sports (same gender)	1	2	3	4
64.	Staff	1	2	3	4
65.	Non-athletes feel athletes are segregated from them because athletes have an athletic dining hall.	1	2	3	4
66.	I feel segregated from non-athletes who are not allowed to eat in the athletic dining hall.	1	2	3	4
67.	The possible perception of segregation of athletes from non-athletes, due to eating in the athletic dining hall, concerns me.	1	2	3	4
68.	When I am required to eat at other campus dining facilities, I interact with non-athletes.	1	2	3	4

69. When eating at other campus dining facilities, non-athletes' reaction to my presence in the dining facility is that:

	SD	D	A	SA
a. I do not notice.	1	2	3	4
b. They seem to stare at me.	1	2	3	4
c. They appear happy with my presence.	1	2	3	4
d. They appear unhappy with my presence.	1	2	3	4
e. My presence does not phase them.	1	2	3	4

70. When speaking with non-athletes about the athletic dining hall, my reaction when they tell me that athletes are treated special by getting to eat "free" or "better" meals at the athletic dining hall is it:

	SD	D	A	SA
a. does not matter to me.	1	2	3	4
b. matters somewhat to me.	1	2	3	4
c. bothers me.	1	2	3	4
d. bothers me greatly and I tell them what I think about their comment.	1	2	3	4

		SD	D	A	SA
71.	I have a sense of pride about the athletic dining hall.	1	2	3	4

RELATED SERVICES	SD	D	A	SA
72. The athletic dining hall is a good place for relaxation.	1	2	3	4
73. The TV room is a good place for relaxation.	1	2	3	4
74. The athletic dining hall is a good place to study.	1	2	3	4

Please circle the answer that best describes your opinion.
Use the following scale for your responses:

1=Not Effective 2=Somewhat Effective 3=Effective 4=Very Effective

How effective is the location of the athletic dining hall to the following:

	NE	SE	E	VE
75. study hall	1	2	3	4
76. computer labs	1	2	3	4
77. academic offices	1	2	3	4
78. tutors	1	2	3	4
79. dorms	1	2	3	4
80. TV room	1	2	3	4

PERSONAL AND SCHOOL INFORMATION

Please circle the answer that describes you.

81. Gender
    a. Male b. Female

82. What is your age?

    17 18 19 20 21 22 23 24+

83. What sport do you play at this university?
    a. Baseball
    b. Basketball
    c. Football
    d. Golf
    e. Tennis
    f. Track
    g. Volleyball

84. What is your classification?
    a. Freshman
    b. Sophomore
    c. Junior
    d. Senior
    e. Fifth year senior
    f. Graduate

Please circle the answer that best describes you.

85. How many years have you lettered in your sport?

    0   1   2   3   4

86. How many years (including this semester) have you been eating in the athletic dining hall at this university?

    1   2   3   4   5   6

87. Where do you currently live?
    a. On campus
    b. Off campus

88. When eating at the athletic dining hall, with whom do you eat most frequently?
    a. Teammates
    b. Players from other sports (opposite gender)
    c. Players from other sports (same gender)
    d. Coaches
    e. No special group

89. If you had the choice (as a campus resident), in which facility would you rather eat your meals?
    a. Athletic dining hall
    b. Other campus dining
    c. Off campus dining

    WHY?____

    ____

90. If you had the choice (as a non-campus resident), in which facility would you rather eat your meals?
    a. Athletic dining hall
    b. Other campus dining
    c. Off campus dining
    d. Home (self prepared meals)

    WHY?____

    ____

91. Are you currently a:
    a. Scholarship athlete?
    b. Non-scholarship athlete?

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