

FACULTY PERCEPTIONS OF STUDENT-ATHLETE DEVIANCE:  
A SEC AND BIG TEN COMPARISON

By

ASHLEY PRICE KUHN

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To Kennedy and Payton

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By

Ashley Price Kuhn

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Faculty are a primary source of learning in college, and they directly impact the success of students. Student-athletes are a special subpopulation of students on campus that interact with faculty. This study uses labeling theory as a theoretical backdrop to understand faculty perceptions of student-athletes. The study looks at the label as the dependent variable, to determine what attributes influence the deviant label of student-athletes by faculty. Faculty at four NCAA Division I institutions located in the South and Midwest regions of the country were surveyed to examine their views of student-athlete academic and criminal behavior. Faculty were randomly assigned to answer questions about either men's football, men's baseball, or women's basketball.

I found that faculty have low perceptions of student-athlete deviance overall. However, there were some group differences. The most negative perceptions of deviance among men's football student-athletes and the least negative perceptions about women's basketball student-athletes. In addition, the more familiarity or closeness faculty have with student-athletes the less likely they are to have negative perceptions. Implications for theory and practice are discussed.

## CHAPTER 1 INTRODUCTION

Student-athletes are a special subpopulation of students on campus because they represent the university as a whole in activities that bring the university a lot of attention. They are often associated with the image or brand of the university due to athletic success and visibility to the public through the media (Sternberg, 2016). That is, student-athletes are often well known on and off campus. Their team success can bring a lot of money and financial donations to the university from alumni and boosters (Letawsky et al., 2003). Additionally, universities with winning teams can have higher numbers and caliber of undergraduate applicants (Chung, 2013; Toma & Cross, 1998).

Student-athletes can represent the university in both positive and negative ways. Student-athletes have the opportunity to have a positive impact as a representative of the university community. Through the large amount of media attention, they bring with athletic success, student-athletes can also be highlighted for success in the classroom and involvement in the community. Additionally, student-athletes bring diversity to the campus community, which may increase the educational experiences for all students on campus (Hirko, 2009).

However, student-athletes also have the opportunity to make the university look very bad. They may do this through academic deviance or normative deviance. An example of academic deviance is cheating on an exam or getting credit for work that is not their own. An example of normative deviance is underage drinking or drug use. Regular students could partake in these same activities, but the image/brand of the university is not at the same level of risk as it is for a student-athlete partaking in these deviant activities and getting caught, because of the limelight that generally surrounds

this high-profile groups (Sternberg, 2016). Specifically, the frequency of these behaviors for student-athletes may not be that different if compared to the student population as a whole. However, these behaviors, when performed by athletes as opposed to non-athletes, are more newsworthy because of their status as student-athletes. Negative incidents may influence attitudes towards athletes, both among the public and among people on campus, including other students and faculty.

The general public's perceptions of student-athletes and intercollegiate athletics is often controversial (Eitzen, 2012). Some believe these students add to the atmosphere and pride of the university (Putler & Wolfe, 1999). Some see it as an opportunity for athletes to receive funding and an education they may not otherwise have the opportunity to receive (Toma, 1999). However, opponents of intercollegiate athletics may believe athletic programs value winning at any cost (Putler & Wolfe, 1999). For example, many people fear the integrity and intellectual environment of institutions are severely affected by the commercialization of National Collegiate Athletic Association (NCAA) Division I athletic programs (Watt & Moore, 2001). Student-athletes may be recruited to play college sports and receive an undergraduate education regardless of their academic ability, background, or motivation. If so, these factors may increase the perception among the general public that student-athletes do not belong and lead to beliefs that they are more likely to be deviant.

However, the general public is not the only group that may have negative perceptions of student-athletes. Faculty are one group of individuals who are part of the campus community who may also have negative attitudes and beliefs about student-athletes. Faculty attitudes matter because they are a critical part of the undergraduate

student experience, including that of student-athletes. Faculty are a primary source of learning in college, and they directly impact the success of students. Research shows that faculty attitudes and perceptions of students can have an effect on students' engagement in the classroom, motivation for learning, and self-concept (Arbaugh, 2001; Umbach & Wawrzynski, 2005; Urdan & Schoenfelder, 2006). That is, faculty can affect behavior and outcomes of students. Studies in the education literature also show that children rise to the expectation of their teachers (Rubie-Davies, 2006, van den Bergh et al., 2010). Studies show that student-athletes can be acutely aware that faculty might be biased against them due to their ascribed student-athlete status, resulting in what Steele (1997) refers to as a "stereotype threat", where student-athletes can feel negative views by others and conform to it. Therefore, if student-athletes know faculty have negative stereotypes about them, in settings where their identity as an athlete is heightened, they may be more vulnerable to conforming to the stereotype.

Faculty and instructors also have a stake in the image or brand of the university, as employees who work hard to advance the institution through research, grants, and instruction. That is, faculty may care a lot about how the university is perceived, because it impacts their own careers. If they believe that student-athletes are somehow different than other students and that they reflect on the university, and if these opinions are negative, instructors may be more inclined to dismiss them as serious students and possibly treat them differently.

Although the public's perceptions of student-athletes have been examined by academics, faculty perceptions of student-athlete deviance has not. This is true, even though there have been some recent cases where faculty have spoken out about

student-athletes' deviant behavior. For example, in 2006 a group of faculty responded to allegations of sexual violence by Duke lacrosse members putting out an ad in the student newspaper calling it a "social disaster" even though the Lacrosse team members were later found innocent (Copeland, 2006; Johnson, 2008). This event shows that these faculty paid attention and made judgments regarding the student-athletes' alleged actions. Given the possible consequences of negative faculty opinions on student-athletes, it is important to investigate what factors contribute to perceptions of student-athlete deviance.

This study will use labeling theory as a theoretical backdrop to understand faculty perceptions of student-athletes. The study will look at the label as the dependent variable, to determine what attributes influence the deviant label of student-athletes by faculty. Faculty at four NCAA Division I institutions located in the South and Midwest regions of the country are surveyed to examine their views of student-athlete academic and criminal behavior. Additionally, characteristics of the institution, athletic department, and individual faculty will be assessed to establish their impact on the label. The following general research questions will be examined: What, if any, individual status attributes of faculty increase their perceptions of student athlete academic and normative deviance? What university status attributes may increase faculty perceptions of student-athlete academic and normative deviance? More specific research questions are addressed in the methods section.

## CHAPTER 2 LITERATURE REVIEW

Student-athletes are a distinct student population on college campuses, especially at those with “big-time sports” programs (Eitzen, 2012). They are often isolated from regular student groups because of practice and competition schedules (Watt & Moore, 2001). More specifically, their classes are arranged around athletic priorities, like practice and workouts. Additionally, several athletes may group (e.g., sit) together in classes away from non-athlete students making them stand out as a distinct group (Sparent, 1988). Student-athletes may also stand out functionally, psychologically, and physically from non-athletes (Nishimoto, 1997). Each of these characteristics makes it very easy for student-athletes to be noticeable on campus, in the classroom, and the community.

### **Perceptions of Student-Athletes Generally**

There are two main negative perceptions of student-athletes that are discussed in the academic literature; these perceptions reflect both academic and normative deviance. The oldest stereotype of student athletes is that of the “dumb jock,” which reflects some level of academic deviance (Coakley, 1990). More recent perceptions of student-athletes involve normative deviance, with beliefs that they are violent towards women and are substance users (Humphrey & Kahn, 2000; Gage, 2008; LaBrie, Gossbard, & Hummer, 2009; McCray, 2014; Page & Roland, 2004). Although these stereotypes to date have only been studied and found among the general public—not faculty in particular--they may also be perceptions that faculty hold.

## **Dumb Jock**

The “dumb jock” stereotype is that student-athletes are not as academically competent or motivated as other students. The “dumb jock” stereotype has been around since the beginning of sports in 500 BC, where the Greeks believed athletes were useless because they neglected their intellectual development and had dull minds (Coakley, 1990). Today, this stereotype persists with several media reports of universities lowering academic standards for student-athletes, lower student-athlete graduation rates compared to the rest of the student body, and high profile academic fraud cases (Eitzen, 2012).

For example, one prestigious university and sports program that has recently received a lot of media attention for academic fraud is the University of North Carolina at Chapel Hill (UNC). The NCAA and Federal Bureau of Investigations (FBI) are investigating UNC’s African and Afro-American Studies Department for having phantom courses that distributed inflated grades to students (Tracy, 2014). These classes had a significant number of men’s football and basketball student-athletes enrolled, with reports that academic advisors encouraged their athletes to take the classes knowing minimal work would be required. Additionally, a former learning specialist for UNC’s athletic department released a report showing that 8% to 10% of men’s football and basketball players between 2004 and 2012 read below a third-grade level (Wilson, 2014). In her report, she links the academic scandal of phantom courses to the under preparedness of student-athletes at UNC. Although this whistleblower report has raised Family Educational Rights and Privacy Act (FERPA) concerns regarding the identifiable information of subjects, it reinforces the stereotype in the public of “dumb jocks” committing deviant behavior (i.e., taking phantom classes and cheating) (Beard, 2014).

## **Violence towards Women**

Another perception of student-athletes explored in the academic literature is sexual violence towards women. This topic has been looked at extensively with the prevalence of sexual assaults among all-male groups (i.e., student-athletes and fraternity members), but findings have been mixed (McCray, 2014). One of the first studies to examine this relationship between sexual assault and student-athletes at Division I institutions used official records (Crosset, Benedict, & McDonald, 1995). In their sample of 20 institutions, Crosset et al. (1995) found that athletes constitute about 3.3% of the total male student population, but were involved in 19% of sexual assaults reported to university judicial affairs. However, of those sexual assault cases officially reported to the campus police for a criminal investigation, there were no significant differences in the percentage of athlete and non-athlete offenders. This study has some limitations because of the underreporting of sexual assaults generally and especially on college campuses. There may be other variables involved here that are not taken into account because of underreporting or other issues. It is problematic to blame a particular group of students for an issue that has multiple layers.

Other studies examining college athletes and sexual violence show that student-athletes on particular teams or those involved in other high risk behaviors are more likely to be involved in sexually aggressive behaviors. For example, Gage (2008) found student-athletes on high profile sport teams, such as football, self-reported higher levels of sexual aggression and sexual activity than non-athletes and student-athletes on lower profile teams, such as tennis and track. Also, Humphrey and Kahn (2000) found that student athletes who engaged in other high-risk activities (e.g., party atmosphere) were significantly more likely to have attitudes supporting sexual aggression and

hostility towards women. The findings of Gage (2008) and Humphrey and Kahn (2000) may explain the inconsistent results of previous studies. That is, characteristics of particular student athletes and teams may explain the relationship between athletics and sexual violence rather than simply student-athlete status alone. In other words, there are likely contextual factors that affect the relationship between student-athlete status and deviance.

While there are only a few studies of student-athlete violence toward women in the academic literature, there have been a number of scandals involving student-athletes using violence against women, which may contribute to deviant labels by the public. One of the most publicized was the 2006 Duke University Lacrosse team incident, where an African American female stripper falsely accused three white male Duke Lacrosse athletes of raping and kidnapping her. The case created a swarm of media attention for issues dealing with racism, sexism, and politicization of the judicial system (Johnson, 2008). The prosecutor for the case, Michael Nifong, admitted to withholding evidence from the defense, misleading the court, and intensifying media reports to the public about the case, for which he was later disbarred (Liptak, 2007). Even though there was not misconduct involved, the case connected student-athletes to sexual violence and was broadcast across the nation regularly (Cohan, 2016).

Although the student-athletes in the Duke Lacrosse situation were eventually cleared after being falsely accused, there are some sexual assault incidents that make the news where athletes may get off easily, possibly leading to perceptions that athletes are treated differently. For example, recently, a class action suit was filed against the University of Tennessee (UT), where several female sexual assault victims claim the

university used a biased adjudication process and created a hostile sexual environment, which involved primarily student-athlete defendants (Wadhwani, 2016a). The women have come together to expose a larger Title IX gender discrimination issue at UT. There has been a lot of media attention surrounding this case because of the student-athletes named in the lawsuit, including six football players. The head football coach and athletic director were also named in the suit as key witnesses for their knowledge about the cases and culture of sexual assault with the football team (Wadhwani, 2016b)

Student-athlete actions towards women is such a concern that the NCAA has partnered with the White House to launch the “It’s On Us” campaign, with the goal of creating an environment where sexual violence is unacceptable and victims are supported (NCAA, 2014a). Additionally, the NCAA released a handbook for athletic departments called “*Addressing Sexual Assault and Interpersonal Violence*,” designed to guide athletic departments in changing the culture regarding sexual assault among student-athletes. The handbook provides best practices for the role of athletic departments in cases involving student-athletes. Both the “It’s On Us” campaign and handbook for athletic departments demonstrate the perception that student-athlete involvement with sexual assault is real, is recognized by the larger organization governing college athletics, and needs to be addressed (NCAA, 2014b).

### **Substance Use**

Another deviant behavior of student-athletes that has been explored in the academic literature is increased substance use. This research has focused on the prevalence of substance use among student-athletes. A majority of studies show that student-athletes use illicit drugs about as often as or less often than non-athletes, but not necessarily more often (Wechsler et al., 1997; Page & Roland, 2004; Yusko et al.,

2008). Also, the risk factors associated with substance use are the same for both athletes and non-athlete students (Buckman et al., 2011). Studies examining perceptions of substance use and student-athletes have only used samples of student-athletes to assess the prevalence among their athlete peers (Page & Roland, 2004; LaBrie et al., 2009). Like other peer perceptions studies, athletes reported higher prevalence of use by their peers than by themselves (Page & Roland, 2004; LaBrie et al., 2009).

It is possible that student-athletes' use of illegal substances may be highlighted in local and national media outlets, when a similar student who was not involved in athletics would be ignored by the media. Student-athletes are randomly tested for illegal substances by their athletic departments and the NCAA (NCAA, 2014c). Institutional athletic departments have policies regarding consequences, and these vary based on the substance and number of positive tests. However, most consequences result in game suspensions. Testing positive on an NCAA drug test for any substance immediately results in suspension (NCAA, 2014c). These events are newsworthy because student-athletes are high-profile in large athletic programs and also represent the university (Sternberg, 2016). In addition, it may be obvious if a high profile athlete is not suiting up for a game, and so the absence must generally be explained. If deviance by athletes is shown in the media, it may create a perception in the public that student-athletes engage in more substance use and abuse than non-athlete students, even though a majority of academic research does not support this conclusion.

To summarize, the literature shows that perceptions of student-athletes as dumb jocks, more likely to commit violence towards women, and substance users reflect both

academic and normative deviance. These perceptions are prevalent among the general public, but need to also be considered for faculty, who have more potential impact on the daily lives of student-athletes.

### **Faculty Perceptions of Student-Athletes**

Faculty members are part of the public, but their perceptions and attitudes about students are perhaps even more important than the ideas of the population at large. Professors have a direct impact on the lives of students, including the student-athletes they encounter through their classes, and their perceptions and attitudes toward student-athletes (good or bad) may influence how they treat them. For example, a faculty member who “worships” a university’s football team may be inclined to give a football player more breaks on grades or attendance than he might if the student were not on the team. In contrast, a professor who believes that student-athletes are not good students, are criminals, or get too many perks they do not deserve may be harsher toward athletes in their classes than toward students more generally. Yet, we do not know for sure, because research on faculty perceptions of student-athletes specifically is very limited.

A majority of the research that exists focuses on faculty satisfaction with control and administration of athletic programs (Cockley & Roswell, 1994; Engstrom, Sedlack, & McEwen, 1995). These studies indicate that faculty at Division I institutions, also known as “big time” sports programs, are less satisfied with the control and administration of athletic programs compared to faculty at Division II or III institutions. Some of these studies ask faculty questions about student-athletes being academically prepared enough for college, but these questions are not the main focus of the study (Engstrom et al., 1995; Baucom & Lantz, 2001). To the author’s knowledge, there are

no studies regarding faculty perceptions of student-athlete normative deviance (i.e., crime, substance, use or violence towards women).

What we do know about faculty perceptions from the academic research is that faculty hold more prejudicial attitudes towards both male revenue and non-revenue athletes compared to other students and female athletes (Engstrom et al., 1995). Engstrom et al. (1995) sampled faculty at a large public university with a Division I NCAA athletic department using the adapted Situational Attitude Scale (SAS). This scale is used to measure prejudice and differential attitudes towards certain groups (i.e., different gender, racial/ethnic groups, and student groups). The scale in Engstrom et al.'s (1995) study was revised to measure faculty attitudes towards student-athletes (revenue and non-revenue producing male sports) and non-athlete students. The researchers found that faculty members had higher levels of disapproval for student-athletes that receive full scholarships and are admitted with low SAT scores. The respondents also expressed more surprise and concern about cheating in situations where student-athletes earned A's in a class compared to the same achievement by a normal student. These findings may support that faculty label student-athletes as "dumb jocks." However, it does not tell us whether faculty believe student-athletes engage in academic deviance (i.e., cheating) to pass or obtain A's in their classes.

There is also research indicating that student-athletes experience the "dumb jock" label from faculty, coaches, and student peers (Engstrom & Sedlacek, 1991; Feltz et al., 2013; Stone, Harrison, & Mottley, 2012; Wininger & White, 2008), meaning these groups all viewed student-athletes negatively in regards to their ability and effort towards academics. Also, Yopyk and Prentice (2005) found when priming student-

athlete respondents with their athletic identity (i.e., called them athletes when they took the questionnaire), compared to their student identity (i.e., calling them students) or no identity (i.e., not indicating an identity), they had lower self-regard and performed most poorly on a math examination. This is concerning because “dumb jock” labels may lead to self-fulfilling prophecies with low academic achievement and academic integrity issues, which is referred to as stereotype threat in the literature (Feltz et al., 2013; Steele, 1997). In the context of this study, this means that if results show that faculty characterize student-athletes as participating in deviant behaviors and create a negative label or stereotype of them, the implications may be that these student-athletes may in turn be at risk for confirming this characteristic or worse.

Although there is some scholarly knowledge about faculty perceptions of student-athlete academic performance, which may relate to academic deviance, there is no research on faculty perceptions of student-athletes’ normative deviance, which include behaviors that are socially unacceptable and usually illegal (i.e., sexual assault, drug use, etc.). However, there are public examples of faculty expressing concern about student-athletes allegedly engaging in these types of behaviors. For example, during the 2006 Duke University Lacrosse Team scandal mentioned above, a group of faculty, referred to as the “Group of 88,” responded to the case with an advertisement in the student newspaper entitled “What does a social disaster sound like?” (“What does a social disaster”, 2006; Copeland, 2006; Johnson, 2008). The ad compiled quotes from an African and African-American Studies (AAAS) forum about frustration with the case and university as a whole. The ad stated: “The students know that the disaster didn’t begin on March 13th and won’t end with what the police say or the court decides”

("What does a social disaster", 2006, p. 2). This quote illustrates these faculty member's perceptions that problems with athletes were an ongoing issue at that university.

Additionally, the concluding remarks of the ad were: "We're turning up the volume in a moment when some of the most vulnerable among us are being asked to quiet down while we wait" ("What does a social disaster", 2006, p. 2). The faculty response to the lacrosse team shows that at least some faculty members pay attention and make judgments regarding actions of student-athletes. This particular response from faculty is concerning because the lacrosse players were later cleared of all charges (Wilson, 2007). That is, faculty perceptions of student athletes do not always correspond to the reality of athlete behavior. Yet, because there is no published research on faculty attitudes about criminal and other deviant behaviors (beyond academic issues) by student-athletes, it is important to conduct more studies to better understand how faculty view students who also are involved in athletic programs. This study is designed to further our knowledge of faculty perceptions of student-athletes and expand the field by examining faculty perceptions of both academic and normative deviance among university athletes. Specifically, this study aims to identify what factors at the institutional and individual level are associated with faculty members giving student-athletes a deviant label.

## Theoretical Background

### Deviance and Deviant Labels

The most common definition of deviance is a violation of the standards of behavior, or norms, in a social group (Cohen, 1959). Faculty and students, more specifically student-athletes, are all part of a widespread social group of the university. The norms and expectations of appropriate and deviant behavior are defined by the

university social group, but mostly by those with status and power (i.e., faculty) (Becker, 1963). Therefore, in a university setting, there are well established rules regarding academics to protect the integrity of the institution. Students who engage in certain types of behavior that compromise the integrity would violate the social norms and be seen as deviants.

Behaviors, beliefs, and characteristics of persons can all be labeled deviant. However, committing deviant behavior is not the same as being labeled a deviant. Individuals are labeled deviant because of their behavior or how they look (Clinard & Meier, 2011). Certain conditions may lead others to label individuals deviant through coding schemes. These coding schemes may include violations of appearance norms, like a physical handicap, having tattoos, or being obese (Hawkins & Tiedeman, 1975; Durkin & Houghton, 2000). The same coding schemes may also be used for student-athletes, where they may be judged as deviant for what they do and/or the group to which they belong.

The idea of student-athletes as deviants, for simply being a member of their social group, resonates with Skolnick's (1993) "symbolic assailants" in policing (p. 44). According to Skolnick (1993), the police have quick ways to identify potential criminals efficiently to prevent dangerous situations. Police develop coding schemes using peoples' gestures, language, and attire. More often than not, young black males are profiled using these coding schemes (Skolnick, 2007). Although Skolnick's work is in the police context, it can extend to people's judgements more generally. Like police do with people on the street, faculty may develop coding schemes for students they believe are

deviants, where student-athletes may be more likely to be viewed with suspicion for violating norms compared to other students.

Faculty may use representations of crime that are conveyed in our culture to create their own “symbolic assailant.” For example, in our culture, the concept of a criminal is disproportionately portrayed as a young, black male (Drummond, 1990; Barlow, 1998; Russell, 2002). This typification of crime is compounded for athletes because the stereotype of a talented athlete is also a young, black male (Sailes, 1998). Additionally, student-athletes who are easily identified as athletes may be perceived as more deviant compared to those who are not. For example, an athlete in a revenue generating sport with a lot of media attention and fan support (i.e., men’s football) compared to non-revenue generating sport with little media attention and fan support (i.e., women’s basketball).

### **Theoretical Highlights**

This study is situated in part in Labeling Theory, which focuses on the informal and formal application of deviant labels by society on certain members (Cullen & Agnew, 2003). Unlike other criminological theories, labeling theory proposes that the focus be on those who create and react to the label of offenders, rather than the behavior of the offender him/herself (Tannenbaum, 1938; Becker, 1963; Lemert, 1972). According to Becker (1963) “deviance is not a quality of the act the person commits, but rather a consequence of the application by others of rules and sanctions to the ‘offender’” (p. 8-9).

There are two main hypotheses that come out of the labeling perspective, which include the deviance amplification hypothesis and differential enforcement hypothesis (Paternoster & Iovanni, 1989; Triplett, 1993). The deviance amplification hypothesis

claims that labeling an individual deviant will increase his/her probability of criminal behavior. This is also known as the “secondary deviance hypothesis.” Therefore, the label is the independent variable having an impact on future criminal behavior, which is the dependent variable. This is the most popular hypothesis explored using the labeling framework because it has the most implications for the criminal justice system (Paternoster & Iovanni, 1989). The differential enforcement/status characteristics hypothesis explains why certain people are labeled deviants and others are not. In this case, the label is the dependent variable. The differential enforcement/status characteristics hypothesis will be the approach used for this present study, because I am interested in how student-athletes are perceived by faculty.

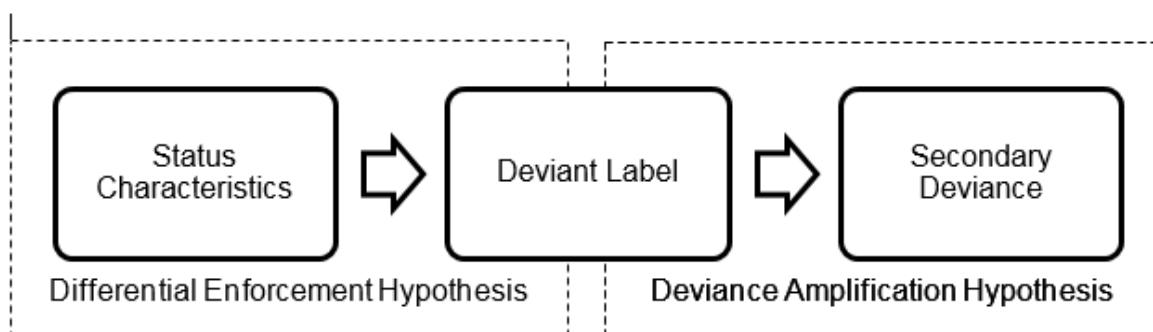
According to Paternoster and Iovanni (1989) the theoretical origins of labeling theory come from symbolic interactionism and conflict theory. The deviance amplification hypothesis or secondary deviance hypothesis is drawn from symbolic interactionism and the sociological idea of the looking glass self, where the experience of being labeled by agencies of social control may result in an alteration of one's self-concept. Alternatively, the differential enforcement or status characteristics hypothesis comes from the conflict tradition. Conflict theory traditionally explains how political or economic powers create deviant labels or statuses concerning certain behaviors or actions. Therefore, these delinquency statuses are based on extra-legal attributes of groups not in political or economic control.

Labeling theory as originally presented by Tannenbaum (1938), Becker (1963), and Lemert (1972) and was one of the most popular perspectives in the 1960s and 1970s. Over the years, labeling theory has been criticized for being vague, ambiguous,

and failing to provide empirically testable propositions (Wellford, 1975, 1993; Gove, 1980; Paternoster & Iovanni, 1989). Today, labeling is rarely considered a theory of criminal and deviant behavior; instead, it is considered a perspective that is meant to offer only sensitizing concepts (Cullen & Agnew, 2003). In the present study, I will use concepts from the labeling perspective to examine faculty perceptions of student-athletes.

### **Labeling Perspective Applied to the Present Study**

This study will look at the label as the dependent variable rather than the label as an independent variable. Therefore, this study will use the differential enforcement/status characteristics hypothesis. Research that has been conducted in this area comes out of the conflict tradition, where the powerlessness of particular groups (minorities, poor, etc.) increases the group's chances of gaining a deviant label and being punished than those from more powerful groups (Paternoster & Iovanni, 1989). In the present study, faculty are the group in power and student-athletes are the group not in power. Actual deviant behavior by student-athletes is of secondary importance from this perspective. According to labeling theorists, variables like individual and community characteristics, social distance, and visibility predict the formation of the deviant label.



## Figure 2-1. Perspectives in labeling

Although most labeling theorists do not believe that status attributes are the only factors that attribute to a label, they do believe they are influential and have some effect on labeling outcomes (Bernstein, Kelly, & Doyle, 1977). Tittle (1980) argues that social characteristics should be the most important factor in determining the outcomes of deviant labels, more important than the actual rule breaking. A majority of research that examines the impact of social attributes is within the formal setting of the criminal justice system because many believe that criminal justice decisions (i.e., decision to arrest, sentencing outcomes, etc.) are labels (Bernstein et al., 1977). For example, several studies have found that offenders who are male, black, and young are sentenced more harshly than offenders who are female, non-black, and older (Steffensmeier, Ullmer, & Kramer, 1998; Mitchell, 2005).

The labeling perspective, and the differential enforcement/status characteristics hypothesis, in particular, will help inform the analysis of the attributes of faculty members or their institutions that influence professors to label all or some student-athletes as deviant. Therefore, in the present study, I am interested in what faculty and university factors are related to faculty holding negative labels of student-athletes. Although this study only focuses on one aspect of the labeling perspective, it is important to understand the status attributes of people (in this case faculty) who are or are not labeling student-athletes as deviants. Once there is a better understanding of how the label is formed, this research could be expanded to explore the deviance amplification hypothesis or stereotype threat.

## **Unique Contributions of the Current Study**

This study contributes to the understanding of faculty perceptions of student-athlete deviance by expanding on prior literature in at least three important ways. First, this is one of the first quantitative studies to examine status attributes of faculty both individually and by institution that influence professors' perceptions of student-athlete deviance specifically. Second, this study is the first to examine faculty perceptions of student-athletes' deviance in two forms, which includes both academic and normative deviance. Third, this study expands the labeling perspective by looking at an informal social control networks (faculty) formation of deviant labels for student-athletes. More specifically, the differential enforcement hypothesis of labeling perspective is used as a framework to explore whether there is a development of a deviant label for student-athletes by faculty.

## **Research Questions**

Given that there is limited prior research on faculty perceptions of student-athletes' deviance and labeling perspective, this study is exploratory. Therefore, the following research questions are examined:

### **Research Questions Regarding Academic Deviance Label of Student-Athletes**

1. What, if any, individual status attributes of faculty (i.e., age, race, gender, academic discipline, academic rank, tenure status, administrative status, sports fandom, and contact with student-athletes) relate to an increased likelihood that faculty will view student-athletes as more academically deviant?
2. Are there university status attributes (i.e., university, region, faculty population, and student population) related to an increased likelihood that faculty will view student-athletes as more academically deviant?
3. Are there individual status attributes of student-athletes (i.e., gender, race, and sport) related to an increased likelihood that faculty will view student-athletes as more academically deviant?

4. Are certain athletic status attributes related to the university (i.e., NCAA conference, student athlete population, Director's cup standing, number of varsity teams, total athletic revenue, and major NCAA infractions) related to an increased likelihood that faculty will view student-athletes as more academically deviant?

### **Research Questions Regarding Normative Deviance Label of Student-Athletes**

5. What, if any, individual status attributes of faculty (i.e., age, race, gender, academic discipline, academic rank, tenure status, administrative status, sports fandom, and contact with student-athletes) related to an increased likelihood that faculty will view student-athletes as more normatively deviant?
6. Are there university status attributes (i.e., university, region, faculty population, and student population) related to an increased likelihood that faculty will view student-athletes as more normatively deviant?
7. Are there individual status attributes of student-athletes (i.e., gender, race, and sport) related to an increased likelihood that faculty will view student-athletes as more normatively deviant?
8. Are certain athletic status attributes related to the university (i.e., NCAA conference, student athlete population, Director's cup standing, number of varsity teams, total athletic revenue, and major NCAA infractions) related to an increased likelihood that faculty will view student-athletes as more normatively deviant?

### **Research Hypotheses**

Although this study is exploratory, I have some hypotheses based on the idea of intergroup contact in social psychology. The intergroup contact hypothesis is the more contact different groups of people have with each other the less prejudice and better social relations there will be between the groups (Allport, 1954). According to Allport (1954) there are four conditions that are ideal for contact to occur between groups: equal status, intergroup cooperation, common goals, and support by social and institutional authorities. Faculty and student-athlete contact involves cooperation, a common goal of education, and support of positive contact by social and institutional authorities. However, faculty and student-athletes contact situation does not have equal

status, because there is a hierarchical relationship between instructors and students.

According to research, the three conditions that are met in this situation are all strongly associated with reducing prejudice (Pettigrew & Tropp, 2006). As applied to this study, I believe any opportunity faculty and student-athletes have to create more contact will lessen the perception of student-athlete deviance. Therefore, this study has the following hypotheses:

- Older faculty will have lower perceptions of student-athlete academic deviance. This is based on the idea that they have had more time to interact with student-athletes throughout their careers. Additionally, older faculty will have more opportunity to become fans of their university sports program.
- Faculty affiliated with Science, Technology, Engineering, and Math (STEM) disciplines will have increased perceptions of student-athlete deviance compared to faculty in other disciplines. This hypothesis is based on research regarding academic clustering of student-athletes, which shows student-athletes are more likely to be overrepresented in non-STEM majors (Fountain & Finley, 2009).
- Faculty with more interaction with student-athletes decreases perceptions of deviance.
- Faculty involved in service to athletics will have lower perceptions of student-athlete deviance than faculty not involved in service to athletics.
- Faculty with higher levels of fandom will have lower perceptions of student-athlete deviance.
- Faculty that attended more university sporting events will have lower perceptions of student-athlete deviance

I have two hypotheses based on the sporting group for which faculty were asked questions. These hypotheses are based on perceptions or stereotypes related to deviance by the general public, which may also extend to faculty.

- Faculty will perceive men's football student-athletes more negatively than men's baseball and women's basketball. Men's football is a revenue producing sport that receives a lot of fan support and media attention. The stereotypes of men's football players as "dumb jocks", involved in sexual assault cases, and substance users has been reinforced by media stories of high profile athletes being involved with these types of situations (Kluger, 2014; Wadhwani, 2016). This can lead to

misconceptions or stereotypes by faculty that men's football players are more involved in deviance generally. Additionally, faculty may use representations of crime that are conveyed in our culture to create their own "symbolic assailant" (Skolnick, 1993). The concept of a criminal in our culture is disproportionately portrayed as a young, black male (Drummond, 1990; Barlow, 1998; Russell, 2002). This typification of crime is compounded for football student-athletes because the stereotype of a talented athlete is also a young, black male (Sailes, 1998).

- Faculty will perceive women's basketball student-athletes more positively than men's football and baseball. Women's basketball is a non-revenue producing sport that receives the least fan support and media attention of the three groups (Adams & Tuggle, 2004). More importantly, it is a female sport. An undisputed fact in criminology is that males commit more crime than females (Lauritsen, Heimer, & Lynch, 2009). Additionally, the public perceives most crime to be committed by black males, not females (Drummond, 1990; Barlow, 1998; Russell, 2002). Therefore, I believe faculty would have similar perceptions as the general public, where a female sporting group would engage in less deviance than a male sporting group.

## CHAPTER 3 METHODOLOGY

### **Research Design**

Faculty at four universities were sampled for this project. The universities were selected from two regions of the country, the Midwest and South. This section will describe the how I selected two universities from each of these regions.

The sampling frame of universities is based on their ranking in the 2017 U.S. News top 25 public schools for national universities (U.S. News, 2016). Table 3-1 shows each of the top 25 universities rank, region, NCAA Division I status, Football Bowl Subdivision participation, NCAA athletic conference, and undergraduate and faculty populations. These criteria help to narrow down the four universities ultimately selected for administration of faculty surveys.

Selection criteria:

- US News Top 25 Public Universities Ranking
- University in the Midwest or South Regions of the country
- NCAA Division I status
- Football Bowl Subdivision (FBS) status
- NCAA conference in the Big 10 or SEC
- Comparable undergraduate and faculty populations

From the list of top 25 public universities, two institutions were automatically removed from the sampling frame because they have special status that would skew results (U.S. News, 2016). The University of North Carolina- Chapel Hill and Pennsylvania State University were removed due to highly publicized NCAA violations and legal problems surrounding their institutions' athletic departments. After removing

those two schools from the sampling frame, institutions were first split by region, focusing on the Midwest and South regions<sup>1</sup>.

Second, only those universities with NCAA Division I athletic programs that participate in the Football Bowl Subdivision (FBS) were considered. This is because FBS Division I athletic departments have larger student-athlete populations and more publicized athletic events, increasing the probability of faculty interaction and awareness of student-athletes on campus and in their classrooms (Lawrence et al., 2007).

Third, only those universities in the Big Ten and Southeastern Conference (SEC) were selected. The only conference remaining in the Midwest region is the Big Ten. The South region still contains both the Atlantic Coast Conference (ACC) and SEC. However, a majority of the institutions in the sampling frame from the North region are included in the ACC conference, limiting the number of institutions from the South. Therefore, institutions in the SEC were selected to compare in the South region.

Fourth, institutions with the largest undergraduate student populations in each of the regions (South and Midwest) are selected from the institutions that remained in the sampling frame based on the above criteria. This information comes from the Integrated Postsecondary Education Data System (IPEDS) of 2014 fall enrollment data of total degree seeking undergraduate students (National Center for Educational Statistics, 2015). This leaves the final four universities to include: University of Illinois (IL),

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<sup>1</sup> The South region was selected for convenience to the researcher and gaining IRB approval. The Midwest region is selected as a comparison group because the undergraduate student populations are most similar in size compared to the institutions in the North and West. Additionally, very few institutions in the West region are NCAA Division I athletic programs that participate in the Football Bowl Subdivision (FBS). The ACC is the only conference in the North region with more than one institution to compare. However, the ACC is spread throughout the entire east coast ranging from Florida to New York. There could be some bias with including these schools due to the spread across different regions of the country.

University of Florida (UF), Ohio State University (OSU), and University of Georgia (UGA).

These universities are also comparable on a number of other factors, making it reasonable to compare faculty perceptions of student-athletes. These factors include US News Ranking, campus setting, undergraduate student populations, graduation rates, faculty populations, student-athlete populations, Directors Cup standing, number of varsity teams, athletic revenue, and NCAA infractions in the last 10 years. See Table 3-2 for a more detailed comparison among the final four institutions selected.

Institutional data come from the Integrated Postsecondary Education Data System (IPEDS) reporting system, which includes campus setting, undergraduate student population, graduation rates, and faculty population (National Center for Educational Statistics, 2015). UF and UGA are located in midsized cities, UI is located in a small city, and OSU is located in a large city. The undergraduate student populations are 32,959 (UI), 32,829 (UF), 44,741 (OSU), and 26,882 (UGA). Table 3-2 also includes a breakdown of the undergraduate student populations by race and gender. The graduation rates are 84% (UI), 88% (UF), 84% (OSU), and 85% (UGA). Finally, the instructional faculty populations are 2,224 (UI), 2,472 (UF), 3,587 (OSU), and 1,908 (UGA).

The data for athletics participation come from the Department of Education Equity in Athletics Data Analysis Tool for the reporting period of July 2014-June 2015 (U.S. Department of Education, 2015). Each institution is required to report athletic participation, staffing, revenue, and expenses for men and women's teams to ensure equality for Title IX. The student-athlete populations are 456 (UI), 512 (UF), 1050

(OSU), and 552 (UGA). Table 3-2 also includes a breakdown of the student-athlete populations by gender. The total athletic revenue of each of the institutions is \$74,469,976 (UI), \$130,772,424 (UF), \$170,903,135 (OSU), and \$116,151,279 (UGA).

The Directors' Cup standings are based on the 2014-15 report for Division I athletics. It is sponsored by the National Association of Collegiate Directors of Athletics (NACDA) and Learfield Sports (Learfield Sports, 2015). Each institution is awarded points for their athletic teams' success. Therefore, institutions with the highest rankings in the Directors' cup standings reflect the best overall athletic programs. The four institutions included in this study are ranked highly in these standings, with UF ranked 4<sup>th</sup>, OSU 7<sup>th</sup>, UGA 14th, and UI 31<sup>st</sup>, but are in a variety of spots on the ranking list.

NCAA infractions were obtained from the NCAA legislative services database, which I searched for major infractions during the last 10 years (NCAA, 2015a). UF has had one major violation in 2015 for impermissible recruiting by its football team, which resulted in a 30-day suspension of the assistant coach responsible for the action (NCAA, 2015b). UI had one violation in 2005 for improper benefits in their football program, which resulted in a one-year probation sanction by the NCAA (NCAA, 2005). UGA has also had one violation in the past 10 years. In this case, the head swimming and diving coach arranged impermissible benefits by organizing an independent study with a professor to keep the student-athlete eligible (NCAA, 2014d). The penalty for the violation was a fine, nine competition suspension, and one year recruiting suspension for the head coach.

OSU had two major infractions in the last 10 years in 2006 and 2011. The first (in 2006) was due to several violations related to the men's basketball team, including

improper recruiting, extra benefits, academic fraud, unethical conduct, and failure to monitor students (NCAA, 2006). The penalty associated with this infraction was three years' NCAA probation, vacation of wins, reimbursement of revenue associated with championships, and a recruiting ban of an assistant coach. The most recent infraction (in 2011) was for preferential treatment and extra benefits for work that was not performed by a football student-athlete (NCAA, 2011). The penalties associated with this infraction were three years' probation, reduction in football scholarships, post-season bans, and vacation of wins.

### **Sample Procedure and Recruitment**

#### **Target Population**

The target population of the study is faculty members at four large Division I institutions in the South and Midwest (UI, UF, OSU, and UGA). Therefore, this study's results cannot be generalized to smaller NCAA Division I, II, or III institutions, because faculty experience with athletic programs and students-athletes may be very different.

#### **Sampling Frame**

The sampling frame includes a list of all faculty listed on department directory websites at the four institutions selected (UI, UF, OSU, and UGA). The sampling frame involved in this study includes faculty members at four NCAA Division I institutions ( $N = 7,680$ ). More specifically, 1,649 faculty from UF, 1,712 from UGA, 2,314 from OSU, and 2,005 from UI. Only faculty listed on university departments' websites with an available email address were contacted to participate in the study. Additionally, faculty listed as emeritus/retired or adjunct were not included in the sampling frame.

## **Recruitment and Data Collection Procedures**

Recruitment of participants follows the guidelines of Dillman, Smyth, and Christian (2009) for Internet surveys. See Table 3-3 for a timeline of recruitment emails.

After receiving Institutional Review Board Approval (Appendix B for IRB Protocol), faculty participants were sent a series of emails as discussed below. I chose to send the email near the beginning of the Fall semester, because I expected it would be more likely that faculty would be available (compared to the summer months, for example). On Wednesday, September 14<sup>th</sup>, 2016 at 11:00 AM, I sent an introduction recruitment email to the sampling frame of faculty at the four institutions ( $N = 7,680$ ). This email introduced the researcher, informed faculty members about the study, and indicated that participation is voluntary and anonymous. This email also let them know that the link to the survey will be provided in an additional email one week later. See Appendix A for the Introduction Email Template.

After sending the introduction recruitment email, I received 61 emails from faculty indicating that they did not want to participate in the study either because they believed they were not relevant for the study or they were not interested. Reasons faculty declined to participate that fall under the not relevant theme are: retired, on sabbatical, not a faculty member, not teaching, teaching at a satellite/remote campus, just hired at the institution, or no longer at the institution. Reasons faculty listed under the not interested theme were: too busy, do not like/take surveys, no opinion, and that they don't interact with student-athletes. Several faculty indicated that time was an issue for them; for example, some said, "I am overloaded with deadlines and work and cannot participate," "I'm writing a book right now and unable to do anything extra," and "I am retired and too busy with other matters to think about student-athletes." Some faculty

even indicated that they do not like surveys in general, with one saying “I’m allergic to surveys.” See Table 3-4 for more details regarding faculty reasons for declining to participate themes and frequencies. Those 61 faculty were removed from the email listing and did not receive the survey link email.

One week after the Introduction Email, the researcher sent a Survey Link Email to faculty at the four institutions ( $N = 7,619$ ). This email reminded the faculty about the study and provided the link to an anonymous online survey through [www.qualitrics.com](http://www.qualitrics.com). See Appendix A for the Survey Link Email Template.

After sending the Survey Link email, the researcher received 79 emails from faculty providing additional feedback about the survey, indicating they completed the survey ( $n = 38$ ) or declining to participate ( $n = 41$ ). The researcher also received one message via LinkedIn saying “just finished the survey.” This method of communication stands out because the researcher’s LinkedIn account was not listed anywhere in the recruitment emails. Therefore, it shows the faculty member had to look it up at some point before or after taking the survey.

Several themes emerged from faculty responses to not participate after receiving the Survey Link email (Table 3-4 for specific details). The themes for declining to participate include: not relevant, not interested, fear, and being a source of potential bias. Again, several said they did not interact with student-athletes enough to participate. One noteworthy response was “Student athletes have a very poor record of performance in my courses, and I am not willing to speak freely on the subject for fear of reprisal.” Both faculty that did not want to participate and who indicated completion of

the survey were removed from the email list and did not receive the Follow Up email reminding them to complete the survey.

Two weeks after the Survey Link Email was sent, a Follow Up Email was sent to all faculty reminding them to take the survey if they had not ( $N = 7,540$ ). According to Dillman et al. (2009), follow up emails are common practice to help increase response rates. If participants had taken the survey, they were asked to ignore the message. This message's content varied from previous messages, but still provided a link to the survey for their convenience. See Appendix A for the Follow-Up Email Template. The survey closed one week following the Follow Up Email.

The researcher received 37 email responses from faculty after the Follow-Up Email was sent. Similar to the response after the Survey Link Email, faculty responses indicated they completed the survey ( $n = 8$ ) or declined to participate ( $n = 29$ ). See Table 3.4 for reasons they did not want to participate.

In both the second email providing the survey link and follow up emails participants were provided a link to an anonymous Qualtrics survey. Upon opening the email, participants were brought to an informed consent screen that they read and signed electronically (Appendix C). If they consented to the survey, Qualtrics directed the respondents to the survey questionnaire to complete.

### **Survey Design**

The internet survey was administered through the internet host, Qualtrics. The questions were divided in 13 blocks or pages. Questions mostly consisted of closed-ended questions with ordered response categories in a matrix format. However, some blocks had open-ended questions to provide respondents opportunities to explain more. The average time to complete the survey was 7.97 minutes (median time).

The first block of the survey asked respondents demographic questions, which included their age, sex, and race/ethnicity (Appendix D, questions 1-3). The second and third blocks asked questions regarding faculty status attributes. Specifically, the second block included questions regarding the university with which respondents were affiliated, academic rank, tenure status, whether they held an administrative position, their academic discipline, the undergraduate majors their department served, and their time at their current institution (Appendix D, questions 4-10). The university measure asked respondents “what university are you affiliated with?”. Answer options included: UF, UGA, UI, and OSU. Respondents were asked about their university affiliation because one anonymous link was sent to all faculty in the sampling frame (Appendix D, question 4). The academic rank measure asked each faculty respondent to indicate their rank: lecturer, assistant professor, associate professor, full professor, or other (Appendix D, question 5). Respondents that selected “other” were also asked to specify their rank with an open-ended response. The tenure status measure asked faculty respondents if they were tenured, not yet tenured, or not in tenure track (Appendix D, question 6). The administrative position measure asked faculty to indicate whether or not they held an administrative position. If they did, they were asked to indicate the type of administrative position (department/program head, assistant dean, associate dean, and other) (Appendix D, question 7). The academic discipline measure asked faculty whether they were in architecture, arts and humanities, physical sciences, physical sciences and mathematics, social and behavioral sciences, or other (Appendix D, question 8). These disciplines were selected as answer options based on the disciplines listed in Digital

Commons (2015). Time at current institution was measured by asking faculty how many years they had been at their current institution (Appendix D, question 10).

The third block included questions regarding participation in service involving athletics and service in an institutional governance role with responsibilities for athletics (Appendix D, questions 11 and 13). Respondents could either answer yes or no. Each of these questions had skip patterns associated with them. If respondents selected no, they were brought to the next block of questions. If they selected yes, they were brought to an open ended question where they were asked to specify their involvement (Appendix D, question 12 and 14).

The fourth block asked respondents about their fandom and attendance at events for their university sports programs (Appendix D, questions 15-17). Respondents were displayed questions based on their university affiliation. For example, faculty from UF were asked questions about being “Gator” fans and faculty at OSU were asked about being “Buckeye” fans. The sport fan measure consisted of three items developed by Wann (2002) to measure fandom. These items included: I consider myself to be a (Gator/Buckeye/Bulldog/Illini) fan, my friends see me as a (Gator/Buckeye/Bulldog/Illini) fan, I believe that following (Gator/Buckeye/Bulldog/Illini) sports is the most enjoyable form of entertainment (Appendix D, question set 15). Response options included: strongly disagree (1), disagree (2), somewhat disagree (3), neither agree or disagree (4), somewhat agree (5), agree (6), and strongly agree (7). Faculty were also asked how often they attended (Gator/Buckeye/Bulldog/Illini) football, baseball, or women’s basketball sporting events in the 2015-2016 academic year (Appendix D, question set 16). Respondents were asked about each of these sport groups. Only three sports were

chosen to keep the survey length reasonable<sup>2</sup>. Answer options included: never (1), rarely (2), sometimes (3), often (4), and very often (5). Additionally, faculty were asked an open-ended question about whether there were any other (Gator/Buckeye/Bulldog/Illini) sporting events that they went to in the 2015-2016 academic year and to explain (Appendix D, question 17).

The fifth block asked respondents about their interaction with student-athletes on their campus during the 2015-2016 academic year (Appendix D, question 18 and 19). First, respondents were asked a group of close-ended questions with ordered response categories that were adapted from the Knight Commission Survey (Lawrence et al., 2007) (Appendix D, question set 18). The items included: student-athletes are in your courses, student-athletes communicate with you by email or in person, and student-athletes interact with you during your class sessions. Response options included: never (1), rarely (2), sometimes (3), often (4), and very often (5). Additionally, respondents were provided an open-ended question where they could explain any other interaction they had with student-athletes on their campus during the 2015-2016 academic year (Appendix D, question 19)

The sixth and seventh blocks asked respondents their perceptions of the percentage of student-athletes on their campus overall and by gender, race, and sport (Appendix D, questions 20-23). Faculty were asked “in the current academic year,

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<sup>2</sup> Men's football was selected because it is associated with revenue production and large fan support at all four universities. Men's baseball was chosen as a non-revenue producing male sport because each of the four universities have a team. Both men's football and baseball have large rosters, so faculty may have more interaction with student-athletes on those teams compared to other men's teams at each of the universities (i.e., golf or tennis). The third sport selected was women's basketball to have a female comparison group. Additionally, women's basketball is different because they don't have as large of a fan base, as many scholarships, or as much media attention as men's football or baseball.

please give your best guess based on your experience” of the percentage of student-athletes who are: male/female, different racial categories, and participate in men’s football, baseball, and women’s basketball on campus. Participants were given dragging sliders from 0 to 100% so they could indicate the percentage of their liking.

Respondents were also provided a “don’t know” answer option.

The eighth block asked respondents their perception of the percentage of student-athletes that graduate from certain teams (men’s football, men’s baseball, and women’s basketball) (Appendix D, question 24). Respondents were randomly assigned one of three teams by Qualtrics to determine if faculty hold different attitudes about student-athletes based on the sport they play. Again, only three sports were chosen to keep the survey length reasonable. Additionally, I wanted to prevent an ordering effect of presenting questions regarding more than one sport at a time. Qualtrics random assignment of sport groups to respondents is beneficial to eliminate any systematic bias<sup>3</sup>.

The ninth block asked respondents their knowledge about NCAA violations at their university (Appendix D, questions 25-26). Respondents that selected yes, were skipped to an open-ended question where they were asked to describe what they know. Respondents that selected no, were skipped to the next block of questions. The tenth block asked respondents if they were a varsity student athlete in college (Appendix D, questions 27-28). Again, if the respondent selected yes, they were asked to specify. If they selected no, they were skipped to the next block of questions.

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<sup>3</sup> Qualtrics equally distributed sport groups to participants through random assignment. 33.1% (n = 326) of respondents were assigned MFB, 33.3% (n = 328) MBA, and 33.7% (n = 332) WBB.

The eleventh block of questions asked respondents a group of close-ended questions with ordered response categories about general perceptions of student-athletes (Appendix D, question 29). These four items were adapted from Lawrence (2009). These were not sport coded; respondents were asked to indicate how strongly they agree with four statements about all student-athletes on their campus. Response options include: not at all (1), slightly (2), moderately (3), and very much (4). Additionally, respondents were asked an open-ended question where they could provide any other comments they had about student-athletes on their campus (Appendix D, question 30).

The thirteenth block of questions asked about academic deviance for the specific sport group randomly assigned by Qualtrics earlier in the survey (either MFB, MBA, or WBB) at the eighth block, where they were asked about specific sport graduation rates (Appendix D, question 24). Therefore, a participant that was assigned men's football questions at the eighth block will only answer questions about men's football throughout the rest of the survey. Again, respondents were only asked academic and deviance questions about one sport group to keep the length of the survey short and prevent any ordering effect. The academic deviance items were close-ended with ordered response categories in a matrix format (Appendix D, question set 31). The items were adapted from Lin and Wen (2007). Participants were asked how many times in the last year either the particular sport (men's football, baseball, or women's basketball) student-athletes on their campus engaged in a variety of academic deviance behaviors. These academic deviance items included copying from other students, passing answers to other students during a test, using prohibited notes, obtaining test questions illegally,

using unauthorized electronic equipment on a test or assignment, copying others' assignments, working on assignments with others when asked for individual work, getting extra help on an assignment from a tutor, providing a paper or assignment for another student, giving forbidden help to others on their assignments, doing less of their share of work in a group project, copying materials without citing them, and falsifying athletic travel letters to postpone exams or assignments. Response options include: never (1), rarely (2), sometimes (3), often (4), all of the time (5).

Finally, the fourteenth block asked about normative deviance for the specific sport group randomly assigned by Qualtrics earlier in the survey (either MFB, MBA, or WBB) at the eighth block, where they were asked about specific sport graduation rates (Appendix D, question 24). The student-athlete normative deviance scale was adapted based on several criminological studies and the deviance scale in the National Youth Survey (Agnew, 1991; Osgood, McMorris, & Potenza, 2002) (Appendix D, question set 32). Participants were asked how many times in the last year their randomly assigned sport group on their campus engaged in a range of deviant behaviors. These normative deviance items included: purposely damaging or destroying property belonging to others, stealing something worth more than \$50, throwing objects at cars or people, stealing things worth \$50 or less, stealing money or other things from their friends, neighbors, or roommates, breaking into a building or vehicle to steal something or just look around, being involved in a group fight, hitting (or threatening to hit) other people, having (or trying to have) sexual relations with someone against their will, drinking alcohol, drinking more than 5 alcoholic drinks at once, selling/using marijuana or hashish ("pot", "grass", "hash"), selling/using harsh drugs such as heroin, cocaine, and

LSD, lying about their age to gain entrance or to purchase something, having sexual relations with someone other than their significant other, being loud, rowdy, or unruly in a public place (disorderly conduct), buying or providing liquor for a minor, avoiding paying for such things as movies, clothing, and food, and being drunk in a public place. Response options include: never (1), rarely (2), sometimes (3), often (4), and all of the time (5). After participants answered these questions, they were thanked for completing the survey.

### **Sample Characteristics**

#### **Sample Size**

The total sample size for the study is 1,100 responses. There were 266 respondents from OSU (29.9%), 212 from UF (23.8%), 223 from UGA (25.1%), and 189 from UI (21.2%).

An a priori power analysis was performed for sample size estimation using G\*Power 3.1 software. A small effect size was used (ES = .02 for regression f-test) because this is an exploratory study and there are no similar studies to date (Cohen, 1988). With an alpha = 0.05 and power = 0.80, the projected sample size needed for each institution with this effect size is approximately N = 311. This sample size is needed at each institution because the researcher is examining the effect of variables by each university and region. Therefore, the ideal total sample would be 1244 (311 x 4 institutions) or a general response rate of 16.2% of the sampling frame. I did not achieve this goal for the response rate, which is explained in the section below.

## **Response Rate**

The general response rate of the survey was 14.3% (total of 1,100 responses divided by the sampling frame of 7,680). The response rate by university was 11.5% for OSU, 12.9% for UF, 13% for UGA, and 9.4% for UI.<sup>4</sup>

Additionally, the researcher calculated the response rate using the American Association for Public Opinion (AAPOR) Research Response Rate Calculator, which is a stronger measure of survey quality when response rates are low (AAPOR, 2016). This measure uses a formula that standardizes response and non-response rates for a variety of survey types, in particular for internet surveys of specifically named persons.

The AAPOR's Research Response Rate Calculator determined the response, cooperation, refusal, and contact rates for the survey (AAPOR, 2016). These rates are calculated using formulas based on four categories of outcomes (Table 3-5).

There are two values for response rate. Response Rate 1 (RR1) or the minimum response rate is 11.7% (Table 3-6). This is the most conservative estimate of response rate for the sample because it does not take into account partially completed surveys.

RR1 is the number of completed surveys (I) divided by the number of total surveys (both partial (P) and complete (I)) plus the number of refusals (R) plus the cases of unknown eligibility (UH and UO) (nothing returned or undeliverable) (AAPOR, 2016). See Equation 3-1 below.

$$RR1 = \frac{I}{(I+P)+(R)+(UH+UO)} \quad (3-1)$$

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<sup>4</sup> Respondents were not forced to respond to any question in the survey, including the university they belonged to. Therefore, there was some item non-response on that measure, which is why the university response rates are lower than the general response rate.

Response Rate 2 (RR2) is 14.3%. This is a less conservative estimate of response rate because it includes partially completed surveys as respondents. RR2 includes partially completed surveys (P) as respondents in the numerator of its formula (AAPOR, 2016). See Equation 3-2 below.

$$RR2 = \frac{I+P}{(I+P)+(R)+(UH+UO)} \quad (3-2)$$

The cooperation rate is the proportion of all faculty surveyed of all eligible faculty contacted (AAPOR, 2016). Cooperation Rate 1 (COOP1) or the minimum cooperation rate is 72.5%. COOP1 is the number of completed surveys (I) divided by the number of surveys (both partial (P) and complete (I)) plus the number of refusals (R) plus other (O). This is different from refusal rate because it does not include unknown eligibility, meaning faculty who never clicked the survey link and took the survey and faculty who never received the survey link because their emails bounced. See Equation 3-3 below.

$$COOP1 = \frac{I}{(I+P)+(R)+(O)} \quad (3-3)$$

Cooperation Rate 2 (COOP2) is 88.9%, which includes partially (P) completed surveys in its formula. See Equation 3-4 below.

$$COOP2 = \frac{I+P}{(I+P)+(R)+(O)} \quad (3-4)$$

The refusal rate is the proportion of faculty who refused to participate in the survey (AAPOR, 2016). Refusal Rate 1 (REF1) is 1.8%. RR1 is calculated with the number of refusals (R) divided by the number of surveys (both partial (P) and complete

(I)) plus the cases of unknown eligibility (UH and UO). Therefore, this is the refusal rate for the entire sampling frame. See Equation 3-5 below.

$$\text{REF1} = \frac{R}{(I+P)+(R)+(UH+UO)} \quad (3-5)$$

Refusal Rate 3 (REF3) is 11.1%. This calculation does not include the cases of unknown eligibility (UH and UO), meaning faculty who never clicked the survey link and those that bounced back as undeliverable. Therefore, this is the refusal rate among respondents with which I had some contact, either by them clicking the survey link or emailing me directly. See Equation 3-6 below.

$$\text{REF3} = \frac{R}{(I+P)+(R)} \quad (3-6)$$

Finally, the contact rate is the proportion of all faculty that was reached by the survey (AAPOR, 2016). This calculation takes into account the entire sampling frame. More faculty may have been reached by the survey link email, but it is impossible to know without respondents actually clicking the survey link or responding back to me via email. The Contact Rate 1 (CON1) is 16.1%. See Equation 3-7 below.

$$\text{CON1} = \frac{(I+P)+R+O}{(I+P)+R+O+(UH+UO)} \quad (3-7)$$

### **Respondents versus Sampling Frame**

In order to examine whether individuals with certain characteristics responded to the survey more frequently than others or non-response bias, I compared respondents in the sample to the sampling frame. I am not able to compare non-respondents to respondents because the survey was anonymous and I am not able to tell who did not participate from those who did. However, it is important to determine if these differences exist to include the variables related to nonresponse as controls in the outcome models.

The characteristics known about faculty from both the sample and sampling frame are university, academic rank, and discipline<sup>5</sup>.

The sampling frame and sample data were significantly different on all three of these characteristics (Table 3-7). Fewer faculty from Ohio State University and University of Illinois, institutions in the Midwest region and Big Ten conference, participated in the study compared to those in the sampling frame data ( $X^2 = 12.13$ ,  $p < .01$ ). Additionally, more faculty from University of Florida and University of Georgia, institutions in the south and Southeastern Conference, participated in the study compared to the sampling frame data. A possible explanation for the difference is because faculty from the south and southeastern conference felt more connected to the researcher because I am affiliated with University of Florida, a southern university.

The sampling frame data were also significantly different from the sample data for the academic rank characteristics ( $X^2 = 134.91$ ,  $p < .001$ ). There were fewer lecturer, assistant professor, associate professor, and full professor faculty that participated in the survey than in the sampling frame data. There were more faculty in the “other” category in the sample data than in the sampling frame data. Although the overall chi square is significant, the percentages were within a point or two difference. A possible explanation for the larger other category is that different titles that faculty have may not have been listed on the department websites from which the sampling frame was drawn. Faculty were asked to specify their rank if they chose the “other” option on the

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<sup>5</sup> Unfortunately, I do not have demographic information (i.e., race or sex) of the sampling frame. This is because I created my sampling frame of faculty based on department directories that do not list that type of information. Therefore, this information would be based on my own identification of faculty's demographic information, which would likely be biased.

survey. Many of them indicated they were emeritus ( $n = 7$ ), clinical assistant or associate professors ( $n = 4$ ), or adjunct/visiting professor ( $n = 4$ ). There is no way to determine the actual reason for the discrepancy between the number of people in different ranks in the sampling frame and the final sample, because the survey was anonymous. One possibility is that their ranks/titles may not have been updated in the department directory on the date the sampling frame was constructed. However, it is also possible that people of different ranks differentially participated.

The sample also differed significantly overall from the sampling frame on academic discipline ( $\chi^2 = 170.98$ ,  $p < .001$ ). Fewer faculty in the academic disciplines of architecture, arts and humanities, business, engineering, and life sciences participated in the survey than in the sampling frame. More faculty in the academic disciplines of education, law, medicine and health sciences, physical sciences and mathematics, social and behavioral sciences, and other participated in the survey than were in the sampling frame data. A possible explanation for this is that faculty in certain disciplines may be more willing to participate in survey research than others (i.e., social and behavioral sciences). Additionally, I revealed my department affiliation, which is in the social and behavioral sciences, so faculty in that same discipline may have felt more compelled to participate than other disciplines.

### **Early versus Late Respondents**

In order to examine whether the data from respondents represents the opinions of the sampling frame or population of faculty in general, I also compared early respondents to late respondents. There is research that supports that late respondents are similar to non-respondents in surveys (Miller & Smith, 1983). Therefore, subjects who participated in the survey after the Survey Link Email was sent were identified as

“early respondents” ( $n = 789$ ) and those who participated after the Follow-Up Email was sent were identified as “late respondents” ( $n = 311$ ). Early and late respondents were compared on key independent and dependent variables (Table 3-8).

There was only one variable that early and late respondents were significantly different on, which was race. More white faculty participated in the study early compared to non-white faculty ( $X^2 = 6.05$ ,  $p < .01$ ) (Table 3-8). These results, where there was only one significant difference between early and late respondents, statistically conclude that non-respondents may be similar to late respondents, which increases the external validity and generalizability of the study (Radhakrishna & Doamekpor, 2008; Miller & Smith, 1983).

## Measures

### Independent Variables

The independent variables used in this study can be grouped into four broad constructs: faculty status attributes, university status attributes, student-athlete attributes, and university athletic status attributes.

**Faculty status attributes.** Faculty status attributes include respondent age, sex, race, academic rank, tenure status, administrative position, academic discipline, time at current institution, service involving athletics, sports fandom, and contact with student-athletes. The age variable is a scale measure based on the number the respondent indicated as their age. However, two respondents’ age responses were coded as missing because they entered 0 and 16 years old for their age, which do not appear to be plausible ages for faculty. The sex variable was dummy coded (male = 1, female = 0). The race variable was also dummy coded (white = 1, non-white = 0). I chose to put all the non-white race/ethnicities together because there were so few in each of the

categories. Academic rank is measured in several dummy variables based on the answer option categories from the instrument (lecturer, assistant professor, associate professor, full professor, and other). The tenure status, administrative position, and service for athletics variables were made into dummy variables (tenure = 1, non-tenure = 0; administrator = 1, non-administrator = 0; athletic service = 1, no athletic service = 0). The academic discipline measure was also made into a series of dummies based on the answer option categories (architecture, arts and humanities, business, education, engineering, law, life sciences, medicine and health sciences, physical sciences and mathematics, social and behavioral sciences, and other). Years at institution is a scale variable created by using the number faculty provided for the years they had been at their current institution.

The sports fan variable was created after running a Principal Component Analysis (PCA) using varimax rotation of the three fandom items. These items represented one component (one Eigenvalue greater than 1.0). This construct was used to create the index measure, where the three items were added up then divided by three. The fandom scale consists of 3 items, with components ranging from 0.94 to 0.84. Additionally, the scale had high internal consistency with a Cronbach's alpha of 0.89. See Table 3-9 for scale items and loadings. The scale ranges from 1 to 6, with higher scores indicating stronger fandom.

Additionally, the attendance at football, baseball, or women's basketball event variables were created by using the numeric response option selected from the Likert scale in the instrument. Answer options included: never (1), rarely (2), sometimes (3),

often (4), very often (5). Therefore, higher scores indicate more attendance at sporting events.

Finally, the student-athlete interaction variable was created after running a Principal Component Analysis (PCA) using varimax rotation. The items indicated that these three items represented one construct (one Eigenvalue greater than 1.0), with components ranging from 0.94 to 0.93. This construct was used to create the index measure, where the three items were added up then divided by three. Additionally, the scale had high internal consistency with a Cronbach's alpha of 0.93. See Table 3-10 for scale items and loadings. The scale ranges from 1 to 5, with higher scores indicating more interaction with student-athletes.

**University status attributes.** University status attributes include the university, region, size of undergraduate student population, and size of faculty population.

There are four dummy coded university-related variables (UF, UGA, UI, and OSU). The regions variable is dummy coded based on where the university is in the country respondents are affiliated with, which are the South and Midwest. UF and UGA are in the south (coded 0). OSU and UI are in the Midwest (coded 1). The sizes of the undergraduate student populations and faculty populations were drawn from the IPEDS reporting system for each individual university in (IPEDS, 2014) (Table 3-2).

**Perceptions of student-athlete attributes.** The variables for student-athlete attributes include *faculty perceptions* of the gender, race, and sport of student-athletes on their campus. Scale variables were created based on the numeric percentage faculty estimated of student-athlete characteristics. Therefore, there are 12 variables for faculty perceptions (percentage of male, female, black/African American, white/Caucasian,

Latino/Hispanic, Asian/pacific islander, other racial group, MFB, MBA, and WBB student-athletes).

**University Athletic Status Attributes.** Variables reflecting university athletic status attributes are based on official measures of student-athlete population, number of varsity teams, total athletic revenue, director's cup ranking, and number of NCAA infractions for each of the four included universities.

Student-athlete population data, number of varsity teams, and athletic revenue data come from the Department of Education Equity in Athletics Data Analysis Tool for the reporting period of July 2014-June 2015, which are the latest available data (Table 3-2). The Directors' Cup rankings were based on the 2014-15 report for Division I athletics, which is sponsored by the National Association of Collegiate Directors of Athletics (NACDA) and Learfield Sports (Learfield, 2015). Each institution is awarded points for their athletic teams' successes. Therefore, institutions with the highest rankings in the Directors' cup standings reflect the best overall athletic programs (Table 3-2). NCAA infractions are obtained from the NCAA legislative services database. I searched for major infractions in the last 10 years (Table 3-2).

### **Dependent Variables**

There are two dependent variables utilized in this study based on the research questions. These include faculty perceptions of student-athlete academic deviance (e.g., cheating) and student-athlete normative deviance (e.g., theft). Specifically, each faculty respondent was asked questions about only one sport- men's football, men's baseball, or women's basketball.

**Academic deviance.** I constructed the academic deviance scale using items from question set 31 in the instrument (Appendix D). Principal components analysis

(PCA) using varimax rotation was conducted to determine emergent constructs. PCA was run for the combined sport sample and for three sport subsamples, which was based on the individual sporting team for which each respondent answered perceptions of deviance questions<sup>6</sup>. Only components with eigenvalues above 1 were considered, using Kaiser (1960) criterion. Scales were determined using the .60/.40 rule, where loadings above .60 were kept and below .40 were not (Costello & Osborne, 2005). This is the most conservative criterion to ensure there is not extraneous error in the scales created. Additionally, cross loadings (items that have loadings of .40 or higher on more than one components or factors) were dropped from consideration on the scales (Costello & Osborne, 2005).

Table 3-11 shows how all the academic deviance items loaded using PCA for the combined and sport subsamples. Factors above .60 are highlighted and any item with a cross loading has a strikethrough. There are consistent loading patterns across the combined sample and sport subsamples. There were 5 items that loaded on Component 1 across all groups: passed answers to other students during a test, obtained the test questions illegally, used unauthorized electronic equipment on a test or assignment, provided a paper or assignment for another student, and falsified athletic travel letters to postpone exams or assignments. The WBB sport subsample also had one item (used prohibited notes) load on Component 1. There were 2 items that loaded on Component 2 across almost all groups: got extra help on an assignment from a tutor and did less of their share of work in a group project. Additionally, the MFB subsample

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<sup>6</sup> PCA was run for both the combined sample and individual sporting groups because faculty were randomly assigned one of three sports to answer a set of deviance questions about. This approach was to be sure the components and their variance did not differ across sports.

also had one item (worked on assignments with others when asked for individual work) load on Component 2.

Additional PCAs were run using each of the items that loaded on the two components individually to ensure they stick together and have strong scale reliability (Table 3-12 for scale loadings and Cronbach's alpha). That is, all 6 items that loaded on Component 1 were analyzed together and the 3 items that loaded on Component 2 were analyzed together. For each of these, the items loaded on one component with an Eigenvalue above 1 and had strong scale reliability. From this PCA, I created two academic deviance scales representing two areas of academic dishonesty: general cheating and relying on others for work.

The general cheating scale included six items from the combined sample, with factor loadings ranging from .75 (falsified athletic travel letters to postpone exams or assignments) to .91 (passed answers to other students during a test). More specifically, the general cheating items included: passed answers to other students during a test, used prohibited notes, obtained the test questions illegally, used unauthorized equipment on a test or assignment, provided a paper or assignment for another student, falsified athletic travel letters to postpone exams or assignments. The component loadings for the three sporting teams were also consistent with the combined sample<sup>7</sup>. The scale values range from 1 to 5, with higher scores indicating higher perceptions of general cheating.

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<sup>7</sup> The WBB subgroup had an additional item that loaded on Component 1 different from the other subgroups. I chose not to include this item in the scale for the main analysis. There are additional analyses in Appendix E, which focus on the individual subgroups. Additionally, the factor loadings did vary in strength between the sporting groups and combined sample. However, across all subgroups, the strongest factor item was "passed answers to others during a test"

The second academic deviance scale, relying on others for work, was made up of three items, with loadings ranging from .89 (did less of their share of work in a group project) to .83 (got extra help on an assignment from a tutor) for the combined sample. The three items for the relying on others for work scale include: got extra help on an assignment from a tutor, did less of their share of work in a group project, and worked on an assignment with others when asked for individual work. The component loadings for the three sporting teams were also consistent with the combined sample. The scale values range from 1 to 5, with higher scores indicating higher perceptions of relying on others.

**Normative deviance.** A principal component analysis (PCA) using varimax rotation was conducted to determine emergent constructs on the normative deviance items (Appendix D, question set 32). Again, I ran PCA for the combined sample and each individual sporting team. See Table 3-13 for how all the normative deviance items in the survey loaded using PCA. I considered only components with eigenvalues above 1, using Kaiser (1960) criterion. I created scales using the .60/.40 rule, where loadings above .60 were kept and below .40 were not (Costello & Osborne, 2005). Additionally, cross loadings were dropped from consideration on the scales.

Table 3.13 shows how each of the normative deviance items load using PCA for the combined and sport subsamples. Factors above .60 are highlighted and any item with a cross loading has a strikethrough. There are some consistent loading patterns across the combined sample and sport subsamples. There were 9 items that loaded on Component 1 similarly across several groups: purposefully damaged or destroyed property belonging to others, stolen something worth more than \$50, thrown objects at

cars or people, stolen things worth \$50 or less, sold marijuana or hashish, stolen money or other things from their friends, neighbors, or roommates, sold harsh drugs such as heroin, cocaine, and LSD, used harsh drugs such as heroin, cocaine, and LSD, and broken into a building or vehicle to steal something or just look around. There were 5 items that loaded similarly on Component 2 across all groups: drank alcohol, drank more than 5 alcohol drinks at once, had sexual relations with a person other than their significant other, bought or provided liquor for a minor, and been drunk in a public place.<sup>8</sup> Component 3 only emerged for the MFB subgroup with three items: sold marijuana or hashish, sold harsh drugs such as heroin, cocaine, and LSD, and used harsh drugs such as heroin, cocaine, and LSD.

It is reasonable for there to be differences between the three sporting groups and the items that are correlated because respondents are answering them thinking about the group they are randomly assigned. Because there are not clear cut constructs emerging similarly from each group, I will use the combined group loadings to create the scales of normative deviance. Therefore, I will present and use the scales developed based on the loadings for the combined group due to differences across the three groups, so that I can compare apples to apples. However, I will present the models for the scales developed on individual loadings for each sport in Appendix E for the interested reader. PCAs were run using the items that loaded on the two components individually for the combined group to ensure they stick together and have strong scale reliability (Table 3-13 for scale loadings and Cronbach's alpha). That is, for the results

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<sup>8</sup> There were some differences in the factor loadings for Component 2 between the sporting group and combined sample. For the main analyses, I will use the combined scale loadings, but I also ran additional analysis in Appendix E for each sporting group.

presented in the main text, all 9 items that loaded on Component 1 for the combined group were analyzed together and the 6 items that loaded on Component 2 for the combined group were analyzed together. For each of these, the items loaded on one component with an Eigenvalue above 1 and had strong scale reliability.

Based on this information, normative deviance items represented two areas of deviance: criminal deviance and deviance related to alcohol behaviors. I believe the items that loaded on Component 1 represent a criminal deviance construct. Each of the items represent behaviors that are more serious and would be categorized as a crime. The items that loaded on Component 2 represent behaviors related to the college party environment, high-risk activities, and drinking.<sup>9</sup>

The first normative deviance scale, criminal deviance, consists of 9 items, with loadings ranging from .82 (sold harsh drugs such as heroin, cocaine, and LSD) to .90 (stolen something worth more than \$50) for the combined sample (Table 3-14). Other items include: purposely damaging or destroying property belonging to others, throwing objects at cars or people, stealing things worth \$50 or less, selling marijuana or hashish, stealing money or things from friends, neighbors or roommates, using harsh drugs such as heroin, cocaine, and LSD, and breaking into a building or vehicle to steal something or just look around. The scale was created by adding each item up and dividing by the total number of items (9). The scale values range from 1 to 5, with higher scores indicating higher perceptions of criminal deviance.

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<sup>9</sup> There are items similar to this in scales from studies looking at drinking and high risk behavior in Greek organizations on college campuses (Larimer et al., 2004).

The second normative deviance scale, drinking-related deviance, consisted of 6 items, with loadings ranging from .72 (had sexual relations with a person other than their significant other) to .89 (been drunk in a public place) for the combined sample (refer to Table 3-13). Other items include: lying about their age to gain entrance or to purchase something, drinking alcohol, drinking more than 5 alcohol drinks at once, and buying or providing liquor for a minor. The scale was created by adding each item up and dividing by the total number of items (6). The scale values range from 1 to 5, with higher scores indicating higher perceptions of drinking-related deviance.

### **Analysis**

I first ran descriptive analyses to retrieve information regarding the distributions of each variable. The design of the study is a 4 x 3 factorial, where university has four levels (UI, UF, UGA, and UF) and student-athlete sport group has three levels (MFB, MBA, and WBB). Therefore, I examined the main effects of university and sport group and whether there is an interaction effect by running a two-way factorial ANOVA.

I then obtained bivariate correlations for each of the variables to determine direction and strength of relationships. Additionally, significant variables at the bivariate level were used to inform the multivariate regression models. Ordinary Least Squares (OLS) regression models are run for each of the research questions for the entire sample. A key assumption of traditional OLS regression models is the independence of observations, which is often a concern with nested data (Osborne, 2000; Johnson, 2010). In this case, faculty within university clusters may share unaccounted similarities, making the residual errors correlated. This could increase the risk of making a Type I error, which shows a significant difference when there is not one. To control for the variance due to the university across analyses, I used a model-based approach by

adding fixed effects of clusters in the regression models using dummy coding. That is, for the four universities, I included three university dummy coded variables into each of the regression models<sup>10</sup>.

After the research questions are considered for the entire sample, they are then re-run by university to determine whether there are other important predictor variables of academic and normative deviance by university. Bivariate correlations and traditional OLS regressions are run for each of the research questions. To determine statistically significant differences by university, I ran a regression coefficient comparison tests developed by Clogg, Petkova, and Haritou (1995).

Next, the research questions are examined by student-athlete sporting group (MFB, MBA, and WBB) to determine whether there are differences in faculty perceptions by sport. The Clogg et al. (1995) analysis is also used to determine significant differences exist between the coefficients.

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<sup>10</sup> Additionally, the intra-class correlation coefficient (ICC) determines the proportion of variance in the outcomes that can be attributed to clustering. ICCs for each dependent variable determined the clustering effect of university is small, meaning faculty at the four universities are heterogeneous within and similar between them. The variability in the academic deviance dependent variables that can be attributed to between-group differences was 2.2% for the general cheating scale and 1.7% for the relying on other scale. Additionally, the ICCs for the normative deviance scales was 0.0% for the criminal deviance scale and 1.2% for the drinking-related deviance scale.

Table 3-1. Demographics of Top 25 Public Universities

2017 US News Ranking <sup>11</sup>	University	Region	NCAA Division I	Football Bowl Subdivision	NCAA Conference	Fall 2014 Undergraduate Student Enrollment <sup>12</sup>	Fall 2014 Total Faculty <sup>13</sup>
1	University of California- Berkeley	West	Yes	Yes	Pac-12	27,126	1,672
2	University of California- Los Angeles	West	Yes	Yes	Pac-12	29,633	3,137
2	University of Virginia	South	Yes	Yes	ACC	16,483	2,370
4	University of Michigan- Ann Arbor	Midwest	Yes	Yes	Big Ten	28,395	6,068
5	University of North Carolina- Chapel Hill	South	Yes	Yes	ACC	18,350	3,318
6	College of William and Mary	South	No	Yes	Independent*	6,299	674
7	Georgia Institute of Technology	South	Yes	Yes	ACC	14,682	1,035
8	University of California- Santa Barbara	West	Yes	No	Big West	20,238	909
9	University of California- Irvine	West	Yes	No	Big West	24,489	1,664
10	University of California- Davis	West	No	No	Big West	27,565	2,148
					California		
10	University of California- San Diego	West	No	No	Collegiate	24,810	2,035
*10	University of Illinois- Urbana-Champaign	Midwest	Yes	Yes	Big Ten	32,959	2,317
10	University of Wisconsin- Madison	Midwest	Yes	Yes	Big Ten	30,694	3,324
14	Pennsylvania State University- University Park	North	Yes	Yes	Big Ten	40,541	3,351
*14	University of Florida	South	Yes	Yes	SEC	32,829	4,229
*16	Ohio State University- Columbus	Midwest	Yes	Yes	Big Ten	44,741	3,688
16	University of Washington	West	Yes	Yes	Pac-12	30,672	4,138
*18	University of Georgia	South	Yes	Yes	SEC	26,882	2,583
18	University of Texas- Austin	West	Yes	Yes	Big-12	39,523	2,745
20	Purdue University- West Lafayette	Midwest	Yes	Yes	Big Ten	30,237	1,889
20	University of Connecticut	North	Yes	Yes	American	18,395	2,007
20	University of Maryland- College Park	North	Yes	Yes	Big Ten	27,056	3,262
23	Clemson University	South	Yes	Yes	ACC	17,260	1,147
24	University of Pittsburg	North	Yes	Yes	ACC	18,757	4,035
25	Rutgers University- New Brunswick	North	Yes	Yes	Big Ten	34,544	3,822

<sup>11</sup> U.S. News (2016)

<sup>12</sup> National Center for Educational Statistics (2015)

<sup>13</sup> National Center for Educational Statistics (2015)

Table 3-2. Demographic of final four institutions

	University of Illinois	University of Florida	Ohio State University	University of Georgia
2016 US News Ranking <sup>14</sup>	10	14	16	18
AAU Member Institution	Yes	Yes	Yes	No
Region	Midwest	South	Midwest	South
Campus setting <sup>15</sup>	Small city	Midsize city	Large city	Midsize city
2014 Undergraduate Student Population <sup>16</sup>	32,959	32,829	44,741	26,882
Gender:				
% Male	0.56	0.45	0.52	0.43
% Female	0.44	0.55	0.48	0.57
Race:				
% Asian	0.14	0.07	0.06	0.08
% Black/African American	0.05	0.06	0.05	0.08
% Hispanic	0.07	0.16	0.04	0.05
% White	0.48	0.55	0.69	0.70
% Other	0.26	0.16	0.16	0.09
2014 Overall graduation rates <sup>17</sup>	0.84	0.88	0.84	0.85
2014 Faculty population <sup>18</sup>	2,317	4,229	3,688	2,583
2014 Instructional faculty population <sup>19</sup>	2,224	2,472	3,587	1,908
NCAA Conference	Big Ten	SEC	Big Ten	SEC
Student-Athlete Population <sup>20</sup>	456	512	1050	552
Gender:				
% Male	0.60	0.56	0.55	0.47
% Female	0.40	0.44	0.45	0.53

14 U.S. News (2016)

15 National Center for Educational Statistics (2015)

16 National Center for Educational Statistics (2015)

17 National Center for Educational Statistics (2015)

18 National Center for Educational Statistics (2015)

19 National Center for Educational Statistics (2015)

20 U.S. Department of Education (2015)

Table 3-2. Continued

	University of Illinois	University of Florida	Ohio State University	University of Georgia
2014-2015 Director's Cup Standing <sup>21</sup>	31	4	7	14
2015 AP College Football Rank	Not ranked	25	4	Not ranked
2015 number of varsity teams <sup>22</sup>	17	17	32	17
FY 2015 total athletic revenue <sup>23</sup>	\$74,469,976	\$130,772,424	\$170,903,135	\$116,151,279
Major NCAA infractions in last 10 years <sup>24</sup>	Yes (1)	Yes (1)	Yes (2)	Yes (1)

<sup>21</sup> Learfield Sports (2015)

<sup>22</sup> U.S. Department of Education (2015)

<sup>23</sup> U.S. Department of Education (2015)

<sup>24</sup> NCAA (2015)

Table 3-3. Timeline of recruitment emails

Initial email	9/14/2016
Survey link email	9/21/2016
Follow up email	10/5/2016
Survey closed	10/12/2016

Table 3-4. Faculty reasons for declining to participate themes

Theme	After intro email	After survey link email	After follow-up email	Total Frequency
Not relevant				
Retired	8	1	1	10
On sabbatical	2	0	1	3
Not faculty	1	0	0	1
Not teaching	2	0	0	2
Teach at satellite/remote campus	2	2	1	5
Just hired at institution	1	3	0	4
No longer at institution	3	0	0	3
Not interested				
Decline/unsubscribe (no reason)	13	10	15	38
Too busy	15	5	4	24
Do not like surveys	3	2	1	6
No opinion	4	3	0	7
Don't interact with student-athletes	7	11	6	24
Fear				
Reprisal	0	1	0	1
Potential bias				
Conflict of interest	0	1	0	1
Dissertation committee member	0	2	0	2
Total	61	41	29	131

Table 3-5. Outcome Rate Categories

Categories	Number
Category 1: Interview	
Complete (I)	898
Partial (P)	202
Category 2: Eligible, non-interview	
Refusal (i.e., responded to researcher declining participation)	131
Known respondent refusal (i.e., does not sign informed consent)	7
Total Refusal (R)	138
Category 3: Unknown eligibility, non-interview	
Nothing returned (UH)	6420
Undeliverable (i.e., bounced emails) (UO)	42
Total	7700

Table 3-6. Rate Estimates

Estimates	Percent
Response rate	
Response rate 1 (RR1)	11.7%
Response rate 2 (RR2)	14.3%
Cooperation rate	
Cooperation rate 1 (COOP1)	72.5%
Cooperation rate 2 (COOP2)	88.9%
Refusal rate	
Refusal rate 1 (REF1)	1.8%
Refusal rate 3 (REF3)	11.1%
Contact rate	
Contact rate 1 (CON1)	16.1%

Table 3-7. Sampling frame data versus sample data

	Sampling frame data (N = 7680)		Sample data (N = 1100)		$\chi^2$
	N	%	N	%	
<b>University</b>					
Ohio State University	2314	30.1	266	29.9	12.13**
University of Florida	1649	21.5	212	23.8	
University of Georgia	1712	22.3	223	25.1	
University of Illinois	2005	26.1	189	21.2	
<b>Academic Rank</b>					
Lecturer	923	12.0	122	11.7	134.91***
Assistant Professor	1570	20.4	206	19.8	
Associate Professor	2045	26.6	262	25.1	
Full Professor	3098	40.3	407	39.0	
Other	43	0.6	46	4.4	
<b>Discipline</b>					
Architecture	149	1.9	10	1	170.98***
Arts and Humanities	1719	22.4	171	16.5	
Business	537	7.0	57	5.5	
Education	524	6.8	81	7.8	
Engineering	1187	15.5	92	8.9	
Law	0	0	4	0.4	
Life Sciences	1047	13.6	124	12.0	
Medicine and Health Sciences	216	2.8	37	3.6	
Physical Sciences and Mathematics	740	9.6	108	10.4	
Social and Behavioral Sciences	999	13.0	100	19.3	
Other	562	7.3	152	14.7	

Table 3-8. Early versus late respondents

	Early		Late		$\chi^2$
	n	%	n	%	
Chi-square analysis for nominal and ordinal variables	(N = 789)		(N = 311)		
Sex					
Female	306	70.00%	131	30.00%	1.54
Male	447	73.50%	161	26.50%	
Race					
Non-white	87	63.50%	50	36.50%	6.05**
White	677	73.60%	243	26.40%	
University					
OSU	191	71.80%	75	28.20%	3.71
UF	159	75%	53	25%	
UGA	153	68.60%	70	31.40%	
UI	144	76.20%	45	23.80%	
Region					
South/SEC	312	71.70%	123	28.30%	0.41
Midwest/Big 10	335	73.63%	120	26.40%	
Academic Rank					
Lecturer	90	73.80%	32	26.20%	2.24
Assistant Professor	144	69.90%	62	30.10%	
Associate Professor	192	73.30%	70	26.70%	
Full Professor	305	74.90%	102	25.10%	
Other	30	65.20%	16	34.80%	
Tenure Status					
Non-tenure	260	69.70%	113	30.30%	2.94
Tenure	500	74.60%	170	25.40%	
Administrative position					
Non-administrator	581	72.60%	219	27.40%	0.12
Administrator	177	73.80%	63	26.30%	
Discipline					
Architecture	11	73.30%	4	26.70%	8.77
Arts and Humanities	135	69.60%	59	30.40%	
Business	48	78.70%	13	21.30%	
Education	58	70.70%	24	29.30%	
Engineering	75	80.60%	18	19.40%	
Law	4	100%	0	0%	
Life Sciences	92	68.10%	43	31.90%	
Medicine and Health Sciences	34	75.60%	11	24.40%	
Physical Sciences and Mathematics	79	71.20%	32	28.80%	
Social and Behavioral Sciences	158	74.50%	54	25.50%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 3-8. Continued

	Early		Late		$\chi^2$
	n	%	n	%	
Chi-square analysis for nominal and ordinal variables	(N = 789)		(N = 311)		
Other	61	72.60%	23	27.40%	
Service to athletics					
No	487	71.50%	194	28.50%	1.25
Yes	264	74.80%	89	25.20%	
Athletic governance					
No	727	73%	269	27%	0.03
Yes	28	71.80%	11	28.20%	
T-test for scale variables	n	x-bar (sd)	n	x-bar (sd)	t
Age	750	49.95 (11.74)	280	49.95 (11.98)	0.00
Years at institution	748	14.12 (10.47)	275	14.04 (10.49)	0.11
Negative perceptions of student-athletes	540	2.13 (0.67)	198	2.22 (0.65)	-1.65
Sport fandom	639	3.84 (1.61)	236	3.93 (1.57)	-0.72
Interaction with student-athletes	717	2.48 (1.14)	265	2.44 (1.11)	0.55
Attendance at MFB events	639	1.85 (1.29)	238	1.89 (1.20)	-0.42
Attendance at MBA events	632	1.36 (0.78)	238	1.31 (0.70)	0.91
Attendance at WBB events	634	1.25 (0.65)	238	1.28 (0.76)	-0.58
% estimate student-athletes	499	6.16 (6.89)	187	6.14 (5.25)	0.04
% estimate male student-athletes	467	42.93 (21.53)	162	41.17 (22.71)	0.89
% estimate female student-athletes	466	35.94 (18.43)	161	34.10 (18.72)	1.09
% estimate black student-athletes	408	34.87 (17.79)	155	34.30 (16.14)	0.35
% estimate white student-athletes	414	46.10 (20.35)	157	44.83 (17.74)	0.69
% estimate Hispanic student-athletes	372	9.26 (6.40)	143	8.69 (5.44)	0.95
% estimate Asian student-athletes	317	4.96 (3.94)	120	4.74 (4.01)	0.51
% estimate other race student-athletes	176	4.75 (4.33)	61	4.74 (3.72)	0.02
% estimate MFB student-athletes	429	18.40 (17.47)	157	20.68 (18.38)	-1.38
% estimate MBA student-athletes	425	8.71 (8.71)	156	10.39 (10.92)	-1.92
% estimate WBB student-athletes	423	7.30 (7.88)	155	8.57 (9.60)	-1.62
General cheating AD	343	1.95 (0.68)	125	1.90 (0.62)	0.70
Relying on others AD	360	2.73 (0.81)	128	2.87 (0.80)	-1.69
Criminal deviance	333	1.67 (0.55)	120	1.61 (0.47)	1.12
Drinking-related deviance	325	2.65 (0.80)	118	2.66 (0.70)	-0.07

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 3-9. Principal components analysis for fandom variable

Item	Loading
Item 1. I consider myself to be a (Gator/Buckeye/Bulldog/Illini) fan	0.92
Item 2. My friends see me as a (Gator/Buckeye/Bulldog/Illini) fan	0.94
Item 3. I believe that following (Gator/Buckeye/Bulldog/Illini) sports is the most enjoyable form of entertainment	0.84
Cronbach's alpha	0.89

Table 3-10. Principal component analysis for student-athlete interaction variable

Item	Loading
Item 1. Student-athletes are in your courses	0.94
Item 2. Student-athletes communicate with you by email or in person	0.93
Item 3. Student-athletes interact with you during class sessions	0.94
Cronbach's alpha	0.93

Table 3-11. Principal Components Analysis for all academic deviance items in instrument

Item	Factor loading								
	Combined		MFB		MBA		WBB		
	1	2	1	2	1	2	1	2	
Copied from other students	0.67	0.60	0.60	0.67	0.62	0.67	0.78	0.43	
Passed answers to other students during a test	0.85*	0.31	0.85*	0.28	0.86*	0.30	0.87*	0.30	
Used prohibited notes	0.76	0.48	0.73	0.48	0.72	0.54	0.82*	0.37	
Obtained the test questions illegally	0.79*	0.35	0.76*	0.37	0.76*	0.38	0.85*	0.25	
Used unauthorized electronic equipment on a test or assignment	0.80*	0.36	0.75*	0.38	0.80*	0.37	0.87*	0.25	
Copied others' assignments	0.57	0.70	0.52	0.74	0.58	0.69	0.61	0.67	
Worked on assignments with others when asked for individual work	0.48	0.77	0.39	0.82*	0.54	0.74	0.50	0.75	
Got extra help on an assignment from a tutor	0.01	0.86*	0.02	0.86	-0.02	0.87*	-0.01	0.82*	
Provided a paper or assignment for another student	0.81*	0.35	0.79*	0.32	0.83*	0.32	0.81*	0.40	
Gave forbidden help to others on their assignments	0.76	0.43	0.75	0.40	0.78	0.42	0.74	0.46	
Did less of their share of work in group project	0.39	0.75*	0.40	0.71*	0.33	0.75*	0.44	0.77	
Copied materials without citing them	0.47	0.69	0.55	0.62	0.37	0.73	0.48	0.74	
Falsified athletic travel letters to postpone exams or assignments	0.80*	0.05	0.81*	0.07	0.75*	0.01	0.80*	0.10	

Table 3-12. Principal Components Analysis for individual components of academic deviance

		Factor loading			
		Combined	MFB	MBA	WBB
<b>Component 1: General cheating</b>					
Item 1: Passed answers to other students during a test		0.91	0.90	0.91	0.92
Item 2: Used prohibited notes		0.90	0.89	0.88	0.91
Item 3: Obtained the test questions illegally		0.89	0.87	0.88	0.90
Item 4: Used unauthorized electronic equipment on a test or assignment		0.90	0.87	0.89	0.92
Item 5: Provided a paper or assignment for another student		0.87	0.84	0.88	0.90
Item 6: Falsified athletic travel letters to postpone exams or assignments		0.75	0.76	0.67	0.81
		$\alpha = .94$	$\alpha = .93$	$\alpha = .92$	$\alpha = .95$
<b>Component 2: Relying on others</b>					
Item 1: Got extra help on an assignment from a tutor		0.83	0.88	0.89	0.89
Item 2: Did less of their share of work in group project		0.89	0.85	0.84	0.78
Item 3: Worked on assignments with others when asked for individual work		0.87	0.84	0.86	0.90
		$\alpha = .82$	$\alpha = .82$	$\alpha = .82$	$\alpha = .81$

Table 3-13. Principal Components Analysis for all normative deviance items in instrument deviance variable

	Loading									
	Combined		MFB		MBA		WBB			
	1	2	1	2	3	1	2	1	2	3
Purposely damaged or destroyed property belonging to others?	0.75*	0.39	0.83*	0.28	0.17	0.68	0.44	0.60	0.27	0.64
Stolen (or tried to steal) something worth more than \$50?	0.84*	0.27	0.87*	0.16	0.30	0.85*	0.23	0.55	0.19	0.70
Thrown objects (such as rocks, bottles, etc.) at cars or people?	0.77*	0.30	0.67*	0.31	0.28	0.81*	0.17	0.69	0.22	0.47
Lied about their age to gain entrance or to purchase something: for example, lying about their age to buy liquor?	0.32	0.75*	0.25	0.74*	0.12	0.33	0.72*	0.10	0.68	0.45
Drank alcohol?	0.15	0.86*	0.20	0.82*	0.07	0.08	0.87*	0.15	0.88*	0.07
Drank more than 5 alcoholic drinks at once?	0.22	0.83*	0.16	0.83*	0.08	0.14	0.82*	0.25	0.83*	0.07
Stolen (or tried to steal) things worth \$50 or less?	0.80*	0.33	0.82*	0.23	0.33	0.80*	0.26	0.44	0.22	0.79
Had sexual relations with a person other than their significant other?	0.26	0.78*	0.28	0.70*	0.20	0.16	0.78*	0.02	0.74*	0.34
Been involved in a group fight?	0.63	0.49	0.53	0.41	0.29	0.57	0.49	0.51	0.34	0.51
Sold marijuana or hashish ("pot", "grass", "hash")?	0.73*	0.35	0.31	0.36	0.64*	0.76*	0.28	0.81*	0.26	0.21
Used marijuana or hashish ("pot", "grass", "hash")?	0.42	0.68	0.27	0.67*	0.24	0.37	0.68*	0.39	0.61*	0.26
Stolen money or other things from their friends, neighbors, or roommates?	0.81*	0.31	0.68	0.24	0.50	0.81*	0.25	0.55	0.32	0.61
Taken money or gifts from alumni	0.52	0.51	0.14	0.49	0.58	0.56	0.47	0.19	0.40	0.54
Hit (or threatened to hit) other people?	0.63	0.51	0.37	0.48	0.45	0.58	0.49	0.34	0.28	0.74*
Been loud, rowdy, or unruly in a public place (disorderly conduct)?	0.46	0.68	0.35	0.61*	0.27	0.32	0.71*	0.34	0.57	0.49

Table 3-13. Continued

	Loading									
	Combined		MFB		MBA		WBB			
	1	2	1	2	3	1	2	1	2	3
Sold harsh drugs such as heroin, cocaine, and LSD?	0.81*	0.12	0.26	0.08	0.86*	0.81*	0.06	0.89*	0.13	0.16
Used hard drugs such as heroin, cocaine, and LSD?	0.77*	0.28	0.35	0.19	0.72*	0.73*	0.30	0.82*	0.22	0.25
Bought or provided liquor for a minor?	0.39	0.72*	0.07	0.73*	0.35	0.39	0.66*	0.36	0.69*	0.37
Had (or tried to have) sexual relations with someone against their will?	0.61	0.49	0.42	0.42	0.47	0.42	0.58	0.63	0.19	0.41
Avoided paying for such things as movies, clothing, and food?	0.54	0.54	0.28	0.54	0.40	0.57	0.42	0.27	0.47	0.67
Been drunk in a public place?	0.31	0.82*	0.16	0.78*	0.26	0.18	0.84*	0.27	0.81*	0.31
Broken into a building or vehicle (or tried to break in) to steal something or just look around?	0.81*	0.27	0.43	0.23	0.64	0.83*	0.19	0.80*	0.18	0.33

Table 3-14. Principal Components Analysis for individual components of normative deviance

	Loading
Component 1: Criminal deviance	
Item 1: Purposely damaged or destroyed property belonging to others?	0.86
Item 2: Stolen (or tried to steal) something worth more than \$50?	0.90
Item 3: Thrown objects (such as rocks, bottles, etc.) at cars or people?	0.84
Item 4: Stolen (or tried to steal) things worth \$50 or less?	0.87
Item 5: Sold marijuana or hashish ("pot", "grass", "hash")?	0.83
Item 6: Stolen money or other things from their friends, neighbors, or roommates?	0.89
Item 7: Sold harsh drugs such as heroin, cocaine, and LSD?	0.82
Item 8: Used hard drugs such as heroin, cocaine, and LSD?	0.83
Item 9: Broken into a building or vehicle (or tried to break in) to steal something or just look around?	0.86
	$\alpha = 0.95$
Component 2: Minor deviance	
Item 1: Lied about their age to gain entrance or to purchase something: for example, lying about their age to buy liquor?	0.84
Item 2: Drank alcohol?	0.84
Item 3: Drank more than 5 alcoholic drinks at once?	0.88
Item 4: Had sexual relations with a person other than their significant other?	0.72
Item 5: Bought or provided liquor for a minor?	0.84
Item 6: Been drunk in a public place?	0.89
	$\alpha = 0.92$

## CHAPTER 4

### DESCRIPTIVE STATISTICS

#### **Independent Variables**

##### **Faculty Status Attributes**

The sample consisted of 1,100 faculty (Table 4-1). Faculty respondents' ages ranged from 26 to 85<sup>25</sup> (mean = 49.95; median = 50). A majority of the sample was male (n = 608; 58.2%). The racial composition of the sample was a majority White (n = 920; 87.0%), 4.4% Asian/Pacific Islander (n = 46), 3.2% Black/African American (n = 34), 2.6% Hispanic/Latino (n = 27), 1.3% Mixed Race/Biracial (n = 14), and 1.5% Other (n = 16). However, to allow for comparison throughout the study between whites and non-whites, the group non-white was comprised of Asian/Pacific Islander, Black/African American, Hispanic/Latino, Mixed Race/Biracial, and Other, which represented 13.0% of respondents (n = 137).

Faculty respondents average years at their institution was 14.1 (sd = 10.47). The academic rank composition of faculty that participated in the study was a majority full professor (n = 407; 39.0%), 25.1% associate professor (n = 262), 19.8% assistant professor (n = 206), 11.7% lecturer (n = 122), and 4.4% other (n = 46). A majority of the sample also were tenured (n = 670; 66.2%), 19.7% were not yet tenured (n = 199), and 14.1% were not in tenure track (n = 143).

A majority of faculty surveyed were not in administrative positions (n = 800; 76.9%), However, 10.1% were department or program head, 0.4% were assistant deans (n = 4), 1.7% were associate deans (n = 18), and 10.9% said they had other

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<sup>25</sup> Two participants' age responses were coded as missing because they entered 0 and 16 years old for their age.

administrative positions ( $n = 113$ ). Faculty specified “other” administrative positions as associate director, director of center, associate chair, chair of undergraduate studies, teaching coordinator, graduate coordinator, and program coordinator.

Social and behavioral sciences (20.5%) and arts and humanities (18.7%) were the most common academic disciplines reported by faculty. After that, faculty reported the following disciplines: 13.0% life sciences, 10.7% physical sciences and mathematics, 9.0% engineering, 8.1% other, 7.9% education, 5.9% business, 4.3% medicine and health sciences, 1.4% architecture, and 0.4% law. Faculty specified the other disciplines as advertising, public affairs, agriculture, crop science, food science, environmental studies, horticulture, construction management, textiles, city and regional planning, urban planning, and sport management.

A majority of faculty had not participated in service for athletics (65.9%,  $n = 681$ ). However, faculty that did participate in service for athletics specified the type of service, with most faculty claiming teaching student-athletes and filling out progress reports for athletics as service (Table 4-2 for types of responses). Additionally, only 3.8% ( $n = 39$ ) of faculty indicated they served in an institutional governance role for athletics. There were 4 faculty that said they were faculty athletic representatives, 16 on the campus advisory board, 5 on the NCAA certification team, and 18 in some other institutional governance role.

The mean of the sport fandom scale was a 3.86 (s.d. = 1.60). The fandom items included: I consider myself to be a (Gator/Buckeye/Bulldog/Illini) fan, my friends see me as a (Gator/Buckeye/Bulldog/Illini) fan, and I believe that following (Gator/Buckeye/Bulldog/Illini) sports is the most enjoyable form of entertainment. The

scale ranges from 1 to 6, with higher scores indicating stronger fandom. Therefore, most faculty were between the somewhat disagree or neither agree or disagree range for fandom of their university's teams.

The mean for attendance at men's football (MFB) events was 1.86 (s.d. = 1.26), men's baseball (MBA) events 1.35 (s.d. = 0.76), and women's basketball (WBB) events 1.26 (s.d. = 0.68). For this measure faculty were asked how often they attended (Gator/Buckeye/Bulldog/Illini) football, baseball, or women's basketball sporting events in the 2015-2016 academic year. Answer options ranged from 1 to 5, which means most faculty indicated that they rarely or never attended university athletic events. However, MFB had the most self-reported attendance by faculty.

Additionally, faculty indicated that they had between rarely and some interaction with student-athletes on their campuses during the 2015-2016 academic year with a mean of 2.47 (s.d. = 1.31). The items for this scale included: student-athletes are in your courses, student-athletes communicate with you by email or in person, and student-athletes interact with you during your class sessions. The response options ranged from 1 to 5, with higher score indicating more interaction.

### **University Status Attributes**

The composition of university faculty surveyed were 29.9% from OSU (n = 266), 23.8% UF (n = 212), 25.1% UGA (n = 223), and 21.2% UI (n = 189). Therefore, 48.9% (n = 435) of faculty in the sample work for universities in the south region or a university in the Southeastern Conference and 51.1% (n = 455) work in the Midwest region or university in the Big Ten Conference.

The undergraduate student populations are 32,959 (UI), 32,829 (UF), 44,741 (OSU), and 26,882 (UGA) (Table 3-2). Table 3-2 also includes a breakdown of the

undergraduate student populations by race and gender. Finally, the instructional faculty populations are 2,224 (UI), 2,472 (UF), 3,587 (OSU), and 1,908 (UGA).

### **Perceptions of Student-Athlete Attributes**

The average percentage respondents estimated of student-athletes on campus was 6.16% (Table 4-3). The average percentage of male student-athletes estimated by respondents was 42.48% and females was 35.47%.<sup>26</sup> The average percentage estimated by respondents of student-athletes racial groups was 32.71% black/African American, 45.75% white/Caucasian, 9.10% Latino/Hispanic, 4.90% Asian/pacific islander, and 4.75% other. Additionally, the average percentage respondents estimated of student-athletes by sport that play football was 19.01%, 9.38% men's baseball, and 8.39% women's basketball.

### **University Athletic Status Attributes**

Recall that the actual student-athlete populations are 456 (UI), 512 (UF), 1050 (OSU), and 552 (UGA) (Table 3-2). UI, UF, and UGA all have 17 varsity athletic teams, where OSU has 32. Each of the institutions has had at least one NCAA infraction in the last 10 years, OSU has had two infractions. The total athletic revenue of each of the institutions is \$74,469,976 (UI), \$130,772,424 (UF), \$170,903,135 (OSU), and \$116,151,279 (UGA). For Directors' Cup standings, UF ranked 4<sup>th</sup>, OSU 7<sup>th</sup>, UGA 14th, and UI 31<sup>st</sup>.

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<sup>26</sup> An issue with this measure using the Qualtrics software was that it did not force the respondents answers to add up to 100%.

## **Dependent Variables**

### **Academic Deviance**

Results indicated that the mean of the general cheating academic deviance scale for the combined sample was 1.93 (s.d. = 0.66), meaning faculty rarely believe student-athletes cheat generally. Recall, the general cheating items included: passed answers to other students during a test, used prohibited notes, obtained the test questions illegally, used unauthorized equipment on a test or assignment, provided a paper or assignment for another student, falsified athletic travel letters to postpone exams or assignments. The scale ranges from 1 to 5.

The mean for the relying on others academic deviance scale for the combined sample was 2.76 (s.d. = 0.81), meaning faculty sometimes believed student-athletes rely on others to cheat. See Table 4-4 for scale items descriptive statistics for the combined sample. Recall, the general cheating items included: passed answers to other students during a test, used prohibited notes, obtained the test questions illegally, used unauthorized equipment on a test or assignment, provided a paper or assignment for another student, falsified athletic travel letters to postpone exams or assignments. The scale ranges from 1 to 5.

### **Normative Deviance**

Results indicated that the mean of the criminal deviance scale for the combined sample was 1.66 (s.d. = 0.53), meaning faculty rarely believe student-athletes engage in criminal deviance. Recall, the criminal deviance items included: sold harsh drugs such as heroin, cocaine, and LSD, stolen something worth more than \$50, purposely damaging or destroying property belonging to others, throwing objects at cars or people, stealing things worth \$50 or less, selling marijuana or hashish, stealing money or things

from friends, neighbors or roommates, using harsh drugs such as heroin, cocaine, and LSD, and breaking into a building or vehicle to steal something or just look around. The scale ranges from 1 to 5.

The mean of the drinking-related deviance scale for the combined sample was 2.65 (s.d. = 0.77), meaning faculty rarely believe student-athletes engage in drinking-related deviance. Recall, the drinking-related deviance items included: had sexual relations with a person other than their significant other, been drunk in a public place, lying about their age to gain entrance or to purchase something, drinking alcohol, drinking more than 5 alcohol drinks at once, and buying or providing liquor for a minor. The scale ranges from 1 to 5. See Table 4-5 for scale items descriptive statistics for the combined sample.

### **Diagnosing Missing Data**

For the dependent variables, there are significant missing data due to item non-response. Several participants selected either “prefer not to answer” (about a quarter of respondents on most items) or did not respond to items at all (about 30% of respondents) (Tables 4-4 and 4-5 provide more details in regards to the dependent variable items and missing data). Therefore, it is important to determine the type of missing data and possible strategies to address it. The three types of missing data are: missing at random (MAR), missing completely at random (MCAR), or missing not at random (MNAR) (Rubin, 1976). Missing data methods can be used for data that are MCAR and MAR. However, there are limited solutions for data that are MNAR.

Data that are MCAR have missing values that are unrelated to other variables in the data set as well as variables that are not measured in the dataset (Peugh & Enders, 2004). The cause of missingness is completely at random, which is the ideal type of

missing data to have because it is the least harmful to estimates. This is the only type of missing data that can be empirically tested for, via Little's (1988) MCAR test. For the present study, Little's MCAR test rules out the possibility that data are MCAR ( $\chi^2 = 86.47$ ,  $p < .01$ ).<sup>27</sup>

Data are MAR when the missing values on a variable can be related to another measured variable or variables in the data set (Peugh & Enders, 2004). Additionally, the missing values must be unrelated to the values of the variable with missingness itself to be MAR. There is no way to empirically confirm if the MAR mechanism is occurring in the data solely because of a variable that is measured in the data set because the data are missing.

There were two codes of missing data for the dependent variable, "prefer not to answer," and missing. Some respondents selected "prefer not to answer" on the matrix of answer options. Missing refers to the group of respondents that did not select anything. Chi-square analyses were run to compare these three group differences on categorical variables. ANOVA were run to compares these three group differences on quantitative variables. There are several variables related to whether respondents selected an answer option, selected "prefer not to answer", or were missing in the dataset as shown in Tables 4-6 through 4-29. Variables that were consistently related to missingness for both academic and normative deviance were: academic discipline, service to athletics, sports fandom, interaction with student-athletes, and attendance at men's football events. Additionally, academic rank, tenure status, and attendance at

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<sup>27</sup> Little's (1988) MCAR test evaluates the differences across subgroups means and the grand means. It has the null hypotheses that data are MCAR. Since the chi-square has a p-value that is statistically significant, I reject the null hypothesis that data are MCAR.

MFB and WBB events were significantly related to missingness on the academic deviance items. More specifically, lecturers and non-tenure track faculty were more likely to respond to the academic deviance items than faculty in other academic ranks. Additionally, faculty in the disciplines of business and medicine and health sciences were more likely to respond to the academic and normative deviance items than select prefer not to answer or not respond at all. In general, faculty who indicated they had more involvement and experience with athletics were more likely to respond to the deviance items than those who did not. For example, faculty involved in service for athletics were more likely to respond to the deviance items than those who did not. Additionally, faculty that selected “prefer not to answer” for most of the deviance items had significantly more negative views of student-athletes generally compared to those who responded to the items (Tables 4-6 to 4-29). Also, faculty that responded to the items had significantly higher levels of fandom, interaction with student-athletes, and attendance at MFB events compared to those that selected “prefer not to answer” or were missing (Tables 4-6 to 4-29).

There is a strong possibility that the data are missing not at random (MNAR), meaning there is a relationship between the tendency of a value to be missing and its values (Peugh & Enders, 2004). The issue with MNAR is that missing cases are produced by factors that are unknown, so the researcher cannot effectively control for them. In this particular study, data may be MNAR due to the sensitivity of the questions, which is common in social science research (Allison, 2002; Schwartz & Beaver, 2014).

There is reason to believe that respondents that selected “prefer not to answer” are systematically different from faculty that did answer beyond the variables that are

already measured in the data set. For most of the deviance items, more than 25% of respondents selected “prefer not to answer” (Table 4-4 and 4-5). For example, one respondent emailed me after taking the survey saying she selected “prefer not to answer” to the dependent variable items because, “unfortunately, I have a more negative view of what I see some of the players in other sports getting away with because some of them have been arrested. I also do think that it is very likely that athletes have access to old exams, old papers and do share that information in the same way that we are aware that some of the fraternities and sororities do. I have no evidence of this, but many think that the Athletic Department itself provides that material to the student athletes.” Responses like this convey that for some respondents they felt uncomfortable or bad responding to the deviance items, meaning there was a social desirability response bias. Therefore, it was the items themselves that caused respondents to not respond, providing strong evidence that the data are MNAR.

Additionally, there were a few faculty that emailed me after taking the survey saying they felt uncomfortable selecting a response about student-athlete deviance because they “simply [did] not know” or they did not “know anything at all about [student-athletes] collectively or individually.” This may explain some of the reason for the high percentage of missingness for the dependent variables items. Participants may have selected a “don’t know” answer option if that was present rather than not answering at all. This may have made the data more valid they don’t actually know, but also makes it harder to analyze the construct of interest. In addition, the respondents are researchers and analytical, so they may be less likely than the general public might be to make opinions without data.

The most common way to deal with missing data is list-wise deletion, where the entire case is deleted from the analysis if a single value is missing (Peugh & Enders, 2004). The advantage of list-wise deletion is the ease of its use and that it provides a solid basis for estimating standard errors because the sample size is known. A disadvantage of list-wise deletion is that it could result in biased parameter estimates when the data are not MCAR and the fraction of missing data are more than 5% (Graham & Hofer, 2000). In this case, the data are not MCAR based on Little's (1988) MCAR test. Another disadvantage of listwise deletion is a loss of statistical power because the sample size is substantially reduced by eliminating cases with one or more missing values (Peugh & Enders, 2004). According to Enders (2010), there ad hoc methods to account for MNAR data, which are the selection model and pattern mixture model. However, these methods are primarily used with longitudinal data and clinical trials with attrition issues (Enders, 2010). Additionally, the assumptions to these methods require the researcher the specify values for the imputed scores. For this study, the reasons the data are missing are uncertain and believed to be because of social desirability. Due to these concerns, I will use the traditional list-wise deletion method for non-response and caution the results of the study due to missing data.

Table 4-1. Independent variables descriptive statistics (N = 1,100)

Age		Mean = 49.95	SD = 11.80	Administrative Position		
Sex				No	76.9%	800
	Female	41.8%	437	Department/Program Head	10.1%	105
	Male	58.2%	608	Assistant Dean	0.4%	4
Race				Associate Dean	1.7%	18
	White	87.0%	920	Other	10.9%	113
	Non-White	13.0%	137	Discipline		
	Black/African American	3.2%	34	Architecture	1.4%	15
	Latino/Hispanic	2.6%	27	Arts and Humanities	18.7%	194
	Asian/Pacific Islander	4.4%	46	Business	5.9%	61
	Mixed Race/Biracial	1.3%	14	Education	7.9%	82
	Other	1.5%	16	Engineering	9.0%	93
University				Law	0.4%	4
	Ohio State University	29.9%	266	Life Sciences	13.0%	135
	University of Florida	23.8%	212	Medicine and Health Sciences	4.3%	45
	University of Georgia	25.1%	223	Physical Sciences and Mathematics	10.7%	111
	University of Illinois	21.2%	189	Social and Behavioral Sciences	20.5%	212
Region/Conference				Other	8.1%	84
	South/SEC	48.9%	435	Years at Institution	Mean= 14.10	SD = 10.47
	Midwest/Big 10	51.1%	455	Service for athletics		
Academic Rank				No	65.9%	681
	Lecturer	11.7%	122	Yes	34.1%	353
	Assistant Professor	19.8%	206	Institutional Governance Role for athletics		
	Associate Professor	25.1%	262	No	96.2%	996
	Full Professor	39.0%	407	Yes	3.8%	39
	Other	4.4%	46	Faculty Athletic Representative	0.4%	4
Tenure Status				Campus Advisory Board	1.4%	16
	Tenured	66.2%	670	NCAA Certification Team	0.5%	5

Table 4-1. Continued

Not yet tenured	19.7%	199	Other	1.6%	18
Not in tenure track	14.1%	143	Sport fandom	Mean = 3.86	SD = 1.60
			Attendance at MFB events	Mean = 1.86	SD = 1.26
			Attendance at MBA events	Mean = 1.35	SD = 0.76
			Attendance at WBB events	Mean = 1.26	SD = 0.68
			Student-athlete interaction	Mean = 2.47	SD = 1.31

Table 4-2. Faculty athletic service themes (N = 353)

Type of service	n	%
Teaching student-athletes	96	27.2%
Filling out progress reports about student-athletes	51	14.4%
Serving on various committees (IAC, Title IX, audit, admissions review, eligibility, facility, coach search)	34	9.6%
Involved with sports in college or high school	22	6.2%
Tutoring	21	5.9%
Attending athletic events	19	5.4%
Leadership/professional development for athletes	18	5.1%
Athletic board member	15	4.2%
Consulting (Research, psychology, nutrition, medical)	11	3.1%
Working with band	11	3.1%
Recruiting	9	2.5%
Handling absences/accommodating travel	8	2.3%
Advising	7	2.0%
Mentoring	7	2.0%
Recommending tutors/Grad students tutors	5	1.4%
Student conduct cases	2	0.1%
Support student-athletes with disabilities	2	0.1%
Volunteering in community with athletes	2	0.1%
NCAA certification team	1	0.0%
No response	12	3.4%

Table 4-3. Individual status attributes of student-athletes descriptive statistics

	Mean	s.d.	n
Estimate % of total student-athletes on campus	6.16	6.48	686
Estimate % of student-athlete gender			
Male	42.48	21.83	629
Female	35.47	18.50	627
Estimate % of student-athlete race			
Black/African American	34.71	17.34	563
White/Caucasian	45.75	19.66	571
Latino/Hispanic	9.10	6.15	515
Asian/Pacific Islander	4.90	3.96	437
Other	4.75	4.17	237
Estimate % of student-athlete sport			
MFB	19.01	17.73	586
MBA	9.38	9.38	581
WBB	8.39	8.39	578

Table 4-4. Descriptives of academic deviance scales and items for the entire sample

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	All of the time (5)	mean	SD	n	Prefer not to answer	Missing
<b>General cheating</b>										
Passed answers to other students during a test	26.6% 131	53.7% 264	17.9% 88	1.2% 6	0.6% 3	1.96	0.74	492 44.7%	319 29.0%	289 26.3%
Used prohibited notes	21.7% 107	51.2% 252	22.4% 110	3.7% 18	1.0% 5	2.11	0.82	492 44.7%	316 28.7%	292 26.5%
Obtained the test questions illegally	29.9% 146	50.0% 244	16.8% 82	2.5% 12	0.8% 4	1.94	0.80	488 44.4%	321 29.2%	291 26.5%
Used unauthorized electronic equipment on a test or assignment	27.0% 133	51.6% 254	18.3% 90	2.4% 12	0.6% 3	1.98	0.78	492 44.7%	319 29.0%	289 26.3%
Provided a paper or assignment for another student	26.5% 130	53.0% 260	17.9% 88	1.8% 9	80.0% 4	1.98	0.77	491 44.6%	310 28.2%	299 27.2%
Falsified athletic travel letters to postpone exams or assignments	49.6% 246	42.1% 209	7.1% 35	0.6% 3	0.6% 3	1.60	0.70	496 45.1%	310 28.2%	294 26.7%
<b>Relying on others</b>										
Got extra help on an assignment from a tutor	6.6% 34	13.2% 68	36.4% 188	34.5% 178	9.3% 48	3.27	1.02	516 46.9%	288 26.2%	296 26.9%
Did less of their share of work in a group project	11.3% 57	32.0% 161	45.5% 229	9.5% 48	1.6% 8	2.58	0.87	503 45.7%	303 27.5%	294 26.7%
Worked on assignments with others when asked for individual work	14.9% 74	35.9% 178	37.9% 188	9.3% 46	2.0% 10	2.48	0.93	496 45.1%	310 28.2%	294 26.7%

Table 4-5. Descriptives of normative deviance scales and items for the entire sample

	Never (1)	Rarely (2)	Sometimes (3)	Often (4)	All of the time (5)	mean	SD	n	Prefer not to answer	Missing
<b>Criminal deviance</b>										
Purposely damaged or destroyed property belonging to others?	34.7% 176	53.5% 271	10.7% 54	0.8% 4	0.4% 2	1.79	0.69	507 46.1%	271 24.6%	322 29.3%
Stolen (or tried to steal) something worth more than \$50?	36.2% 182	55.7% 280	7.4% 37	0.4% 2	0.4% 2	1.73	0.64	503 45.7%	272 24.7%	325 29.5%
Thrown objects (such as rocks, bottles, etc.) at cars or people?	44.5% 221	48.7% 242	6.0% 30	0.4% 2	40.0% 2	1.64	0.65	497 45.2%	279 25.4%	324 29.5%
Stolen (or tried to steal) things worth \$50 or less?	29.8% 147	61.3% 302	8.1% 40	0.4% 2	0.4% 2	1.80	0.63	493 44.8%	283 25.7%	324 29.5%
Sold marijuana or hashish ("pot", "grass", "hash")?	40.0% 188	54.0% 254	4.7% 22	0.9% 4	0.4% 2	1.68	0.64	470 42.7%	303 27.5%	327 29.7%
Stolen money or other things from their friends, neighbors, or roommates?	35.3% 168	58.8% 280	5.3% 25	0.2% 1	0.4% 2	1.72	0.61	476 43.3%	296 26.9%	328 29.8%
Sold harsh drugs such as heroin, cocaine, and LSD?	56.9% 268	41.6% 196	1.1% 5	0.0% 0	0.4% 2	1.45	0.57	471 42.8%	302 27.5%	327 29.7%
Used hard drugs such as heroin, cocaine, and LSD?	45.3% 214	50.4% 238	3.8% 18	0.0% 0	0.4% 2	1.60	0.61	472 42.9%	299 27.2%	329 29.9%
Broken into a building or vehicle (or tried to break in) to steal something or just look around?	42.9% 207	53.2% 257	3.3% 16	0.2% 1	0.4% 2	1.62	0.60	483 43.9%	291 26.5%	326 29.6%
<b>Drinking-related deviance</b>										
Lied about their age to gain entrance or to purchase something: for example, lying about their age to buy liquor?	17.4% 88	35.4% 179	34.1% 172	11.1% 56	2.0% 10	2.45	0.97	505 45.9%	274 24.9%	321 29.2%

Table 4-5. Continued

Drank alcohol?	6.6% 34	9.3% 48	39.0% 201	41.5% 214	3.7% 19	3.26	0.92	516 46.9%	262 23.8%	322 29.3%
Drank more than 5 alcoholic drinks at once?	10.0% 49	22.8% 112	42.3% 208	22.8% 112	2.2% 11	2.85	0.96	492 44.7%	284 25.8%	324 29.5%
Had sexual relations with a person other than their significant other?	9.2% 43	24.1% 113	54.5% 255	10.5% 49	1.7% 8	2.71	0.84	468 42.5%	306 27.8%	326 29.6%
Bought or provided liquor for a minor?	20.9% 100	42.6% 204	29.2% 140	6.1% 29	1.3% 6	2.24	0.89	479 43.5%	292 26.5%	329 29.9%
Been drunk in a public place?	12.8% 65	33.7% 171	44.4% 225	8.1% 41	1.0% 5	2.51	0.85	507 46.1%	271 24.6%	322 29.3%

Table 4-6. Missing data analysis for item 1 of academic deviance scale (N = 492)

Item 1: Passed answers to other students during a test	Response		Prefer not to answer		Missing		$\chi^2$		
	n	%	n	%	n	%			
Chi-square analysis for nominal and ordinal variables			(N = 492)			(N = 319)		(N = 289)	
Sex									
Female	202	46.2%	124	28.4%	111	25.4%	1.62		
Male	283	46.5%	189	31.1%	136	22.4%			
Race									
Non-white	47	41.6%	46	33.6%	34	24.8%	1.47		
White	432	47.0%	274	29.6%	216	23.5%			
University									
OSU	133	50.0%	71	26.7%	62	23.3%	5.31		
UF	106	50.0%	55	25.9%	51	24.1%			
UGA	107	48.0%	72	32.3%	44	19.7%			
UI	86	45.5%	64	33.9%	39	20.6%			
Region									
South/SEC	213	49.0%	127	29.2%	95	21.8%	0.06		
Midwest/Big 10	219	48.1%	135	29.7%	101	22.2%			
Academic Rank									
Lecturer	73	59.8%	27	22.1%	22	18.0%	19.65*		
Assistant Professor	102	49.5%	66	32.0%	38	18.4%			
Associate Professor	105	40.1%	82	31.3%	75	28.6%			
Full Professor	192	47.2%	130	31.9%	85	20.9%			
Other	20	43.5%	12	26.1%	14	30.4%			
Tenure Status									
Non-tenure	196	52.5%	105	28.2%	72	19.3%	7.34*		
Tenure	295	44.0%	212	31.6%	163	24.3%			
Administrative position									
Non-administrator	373	46.6%	240	30.0%	187	23.40%	1.56		
Administrator	116	48.3%	77	32.1%	47	19.60%			
Discipline									
Architecture	3	20.0%	9	60.0%	3	20.0%	34.21*		
Arts and Humanities	88	45.4%	62	32.0%	44	22.7%			
Business	40	65.6%	13	21.3%	8	13.1%			
Education	37	45.1%	23	28.0%	22	26.8%			
Engineering	40	43.0%	25	26.9%	28	30.1%			
Law	4	100%	0	0.0%	0	0.0%			
Life Sciences	62	45.9%	48	35.6%	25	18.5%			
Medicine and Health Sciences	25	55.6%	14	31.1%	6	13.3%			

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-6. Continued

Item 1: Passed answers to other students during a test	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 492)		(N = 319)		(N = 289)	
Physical Sciences and Mathematics	45	40.5%	38	34.2%	28	25.2%	
Social and Behavioral Sciences	104	49.1%	65	30.7%	43	20.3%	
Other	39	46.4%	20	23.8%	25	29.8%	
Service to athletics							
No	302	44.3%	220	32.3%	159	23.3%	7.03*
Yes	187	53.0%	94	26.6%	72	20.4%	
Athletic governance							
No	470	47.2%	309	31.0%	217	21.8%	1.28
Yes	22	56.4%	10	25.6%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	485	50.02 (11.88)	309	50.21 (11.67)	236	49.48 (11.82)	0.27
Years at institution	488	13.89 (10.48)	314	14.37 (10.78)	221	14.19 (10.04)	0.21
Negative perceptions of student-athletes	434	2.12 (0.66)	199	2.25 (0.68)	105	2.10 (0.65)	2.66
Sport fandom Interaction with student-athletes	429	4.19 (1.58)	262	3.61 (1.55)	184	2.66 (1.64)	9.35***
Attendance at MFB events	482	2.63 (1.14)	298	2.31 (1.13)	202	2.32 (1.07)	9.92***
Attendance at MBA events	431	2.06 (1.39)	262	1.70 (1.10)	184	1.61 (1.10)	11.44***
Attendance at WBB events	428	1.42 (0.80)	259	1.27 (0.64)	183	1.31 (0.81)	3.59*
	429	1.30 (0.71)	260	1.27 (0.72)	183	1.14 (0.52)	3.47*

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-7. Missing data analysis for item 2 of academic deviance scale (N = 492)

Item 2: Used prohibited notes	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 492)		(N = 316)		(N = 292)	
Sex							
Female	202	46.2%	123	28.1%	112	25.6%	1.50
Male	283	46.5%	187	30.8%	138	22.7%	
Race							
Non-white	59	43.1%	43	31.4%	35	25.5%	0.65
White	430	46.7%	272	29.6%	218	23.7%	
University							
OSU	132	50.0%	72	27.1%	62	23.3%	3.88
UF	107	51.0%	55	25.9%	50	23.6%	
UGA	107	48.0%	71	31.8%	45	20.2%	
UI	88	46.6%	62	32.8%	39	20.6%	
Region							
South/SEC	214	49.0%	126	29.0%	95	21.8%	0.06
Midwest/Big 10	220	48.4%	134	29.5%	101	22.2%	
Academic Rank							
Lecturer	74	60.7%	26	21.3%	22	18.0%	18.41*
Assistant Professor	101	49.0%	65	31.6%	40	19.4%	
Associate Professor	107	40.8%	80	30.5%	75	28.6%	
Full Professor	189	46.4%	131	32.2%	87	21.4%	
Other	21	45.7%	12	26.1%	13	28.3%	
Tenure Status							
Non-tenure	196	52.5%	103	27.6%	74	19.8%	7.15*
Tenure	295	44.0%	211	31.5%	164	24.5%	
Administrative position							
Non-administrator	371	46.4%	238	29.8%	191	23.9%	2.33
Administrator	118	49.2%	76	31.7%	46	19.2%	
Discipline							
Architecture	3	20.0%	9	60.0%	3	20.0%	36.08*
Arts and Humanities	90	46.4%	60	30.9%	44	22.7%	
Business	40	65.6%	13	21.3%	8	13.1%	
Education	35	42.7%	23	28.0%	24	29.3%	
Engineering	38	41.0%	26	28.0%	29	31.2%	
Law	4	100%	0	0.0%	0	0.0%	
Life Sciences	62	45.9%	48	35.6%	25	18.5%	
Medicine and Health Sciences	26	57.8%	13	28.9%	6	13.3%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-7. Continued

Item 2: Used prohibited notes	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
Physical Sciences and Mathematics	46	41.4%	37	33.3%	28	25.2%	
Social and Behavioral Sciences	104	49.1%	65	30.7%	43	20.3%	
Other	39	46.4%	20	23.8%	25	29.8%	
Service to athletics							
No	302	44.3%	217	31.9%	162	23.8%	6.96*
Yes	187	53.0%	94	26.6%	72	20.4%	
Athletic governance							
No	469	47.1%	306	30.7%	221	22.2%	2.23
Yes	23	59.0%	10	25.6%	6	15.4%	
ANOVA for scale variables							
Age	485	49.89 (11.90)	306	50.39 (11.63)	239	49.54 (11.82)	0.37
Years at institution	489	13.93 (10.52)	311	14.46 (10.77)	223	13.99 (9.96)	0.26
Negative perceptions of student-athletes	432	2.11 (0.65)	198	2.27 (0.69)	108	2.10 (0.64)	3.87*
Sport fandom	431	4.11 (1.58)	260	3.61 (1.57)	184	3.65 (1.62)	10.08***
Interaction with student-athletes	482	2.64 (1.14)	295	2.30 (1.13)	205	2.30 (1.07)	11.53***
Attendance at MFB events	433	2.06 (1.39)	260	1.70 (1.10)	184	1.61 (1.10)	11.50***
Attendance at MBA events	430	1.42 (0.80)	257	1.26 (0.64)	183	1.31 (0.81)	3.68*
Attendance at WBB events	431	1.30 (0.71)	258	1.26 (0.72)	183	1.14 (0.52)	3.50*

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-8. Missing data analysis for item 3 of academic deviance scale (N = 488)

Item 3: Obtained the test questions illegally	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables			(N = 488)		(N = 321)		(N = 291)
Sex							
Female	200	45.8%	125	28.6%	112	25.6%	1.63
Male	281	46.2%	190	31.3%	137	22.5%	
Race							
Non-white	55	40.9%	46	41.5%	35	32.7%	1.62
White	429	46.6%	274	29.8%	217	23.6%	
University							
OSU	130	48.9%	74	27.8%	62	23.3%	3.68
UF	105	49.5%	56	26.4%	51	24.1%	
UGA	107	48.0%	72	32.3%	44	19.7%	
UI	87	46.0%	62	32.8%	40	21.2%	
Region							
South/SEC	212	48.7%	128	29.4%	95	21.8%	0.10
Midwest/Big 10	217	47.7%	136	29.9%	102	22.4%	
Academic Rank							
Lecturer	73	59.8%	28	23.0%	21	17.2%	19.28*
Assistant Professor	102	49.5%	65	31.6%	39	18.9%	
Associate Professor	104	39.7%	82	31.3%	76	29.0%	
Full Professor	188	46.2%	132	32.4%	87	21.4%	
Other	21	45.7%	12	26.1%	13	28.3%	
Tenure Status							
Non-tenure	196	52.5%	105	28.2%	72	19.3%	8.15*
Tenure	292	43.6%	213	31.8%	165	24.6%	
Administrative position							
Non-administrator	370	46.3%	240	30.0%	190	23.8%	2.33
Administrator	115	47.9%	79	32.9%	46	19.2%	
Discipline							
Architecture	2	13.3%	9	60.0%	4	26.7%	30.37**
Arts and Humanities	88	45.4%	62	32.0%	44	22.7%	
Business	41	67.2%	13	21.3%	7	11.5%	
Education	37	45.1%	23	28.0%	22	26.8%	
Engineering	40	43.0%	25	26.9%	28	30.1%	
Law	4	100%	0	0.0%	0	0.0%	
Life Sciences	62	45.9%	48	35.6%	25	18.%	
Medicine and Health Sciences	26	57.8%	14	31.1%	5	11.1%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-8. Continued

Item 3: Obtained the test questions illegally	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
Physical Sciences and Mathematics	44	39.6%	39	35.1%	28	25.2%	
Social and Behavioral Sciences	101	47.6%	66	31.1%	45	21.2%	
Other	38	45.2%	20	23.8%	26	31.0%	
Service to athletics							
No	299	43.9%	219	32.2%	163	23.9%	7.23*
Yes	186	52.7%	97	27.5%	70	19.8%	
Athletic governance							
No	466	46.8%	311	31.2%	219	22.0%	1.40
Yes	22	56.4%	10	25.6%	7	17.9%	
ANOVA for scale variables							
Age	481	49.98 (11.94)	311	50.32 (11.61)	238	49.44 (11.78)	0.38
Years at institution	484	13.85 (10.53)	316	14.47 (10.78)	223	14.13 (9.91)	0.34
Negative perceptions of student-athletes	428	2.12 (0.65)	201	2.26 (0.68)	109	2.10 (0.66)	2.79*
Sport fandom	426	4.10 (1.59)	264	3.63 (1.57)	185	2.65 (1.62)	9.30***
Interaction with student-athletes	478	2.64 (1.13)	300	2.32 (1.13)	204	2.30 (1.07)	10.25***
Attendance at MFB events	428	2.06 (1.39)	264	1.70 (1.10)	185	1.61 (1.09)	11.40***
Attendance at MBA events	425	1.42 (0.80)	261	1.27 (0.66)	184	1.30 (0.81)	3.32*
Attendance at WBB events	426	1.30 (0.71)	262	1.26 (0.72)	184	1.14 (0.51)	3.59*

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-9. Missing data analysis for item 4 of academic deviance scale (N = 492)

Item 4: Used unauthorized electronic equipment on a test or assignment	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables			(N = 492)		(N = 319)		(N = 289)
Sex							
Female	203	46.5%	123	28.1%	111	25.4%	1.81
Male	282	46.4%	190	31.3%	136	22.4%	
Race							
Non-white	59	43.1%	44	32.1%	34	24.8%	0.65
White	430	46.7%	274	29.8%	216	23.5%	
University							
OSU	130	48.9%	73	27.4%	63	23.7%	4.40
UF	107	50.5%	55	25.9%	50	23.9%	
UGA	108	48.4%	72	32.3%	43	19.3%	
UI	88	46.6%	62	32.8%	39	20.6%	
Region							
South/SEC	215	49.4%	127	29.2%	93	21.4%	0.23
Midwest/Big 10	218	47.9%	135	29.7%	102	22.4%	
Academic Rank							
Lecturer	75	61.5%	26	21.3%	21	17.2%	21.94**
Assistant Professor	103	50.0%	65	31.6%	38	18.4%	
Associate Professor	105	40.1%	81	30.9%	76	29.0%	
Full Professor	188	46.2%	133	32.7%	86	21.1%	
Other	21	45.7%	12	26.1%	13	28.3%	
Tenure Status							
Non-tenure	199	53.4%	103	27.6%	71	19.0%	9.48**
Tenure	292	43.6%	214	31.9%	164	24.5%	
Administrative position							
Non-administrator	373	46.6%	240	30.0%	187	23.4%	1.56
Administrator	116	48.3%	77	32.1%	47	19.6%	
Discipline							
Architecture	3	20.0%	9	60.0%	3	20.0%	37.84**
Arts and Humanities	88	45.5%	60	30.9%	46	23.7%	
Business	41	67.2%	13	21.3%	7	11.5%	
Education	37	45.1%	23	28.0%	22	26.8%	
Engineering	39	41.9%	26	28.0%	28	30.1%	
Law	4	100%	0	0.0%	0	0.0%	
Life Sciences	62	45.9%	48	35.6%	25	18.5%	
Medicine and Health Sciences	26	57.8%	14	31.1%	5	11.1%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-9. Continued

Item 4: Used unauthorized electronic equipment on a test or assignment	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 492)		(N = 319)		(N = 289)	
Physical Sciences and Mathematics	44	39.6%	39	35.1%	28	25.2%	
Social and Behavioral Sciences	104	49.1%	65	30.7%	43	20.3%	
Other	39	46.4%	20	23.8%	25	29.8%	
Service to athletics							
No	301	44.2%	219	32.2%	161	23.6%	7.65*
Yes	188	53.3%	95	26.9%	70	19.8%	
Athletic governance							
No	468	47.1%	309	31.0%	218	21.9%	2.20
Yes	23	59.0%	10	25.6%	6	15.4%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	485	49.83 (11.91)	309	50.43 (11.61)	236	49.60 (11.84)	0.38
Years at institution	488	13.79 (10.49)	314	14.48 (10.80)	221	14.24 (9.98)	0.44
Negative perceptions of student-athletes	432	2.11 (0.65)	199	2.27 (0.69)	107	2.12 (0.65)	3.92*
Sport fandom	430	4.10 (1.58)	262	3.61 (1.58)	183	3.65 (1.62)	9.80***
Interaction with student-athletes	482	2.64 (1.14)	298	2.30 (1.12)	202	2.30 (1.07)	11.53***
Attendance at MFB events	432	2.05 (1.29)	262	1.70 (1.10)	183	1.62 (1.10)	10.62***
Attendance at MBA events	429	1.42 (0.80)	259	1.26 (0.64)	182	1.31 (0.81)	3.79*
Attendance at WBB events	430	1.30 (0.71)	260	1.26 (0.72)	182	1.15 (0.52)	3.13*

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-10. Missing data analysis for item 5 of academic deviance scale (N = 491)

Item 5: Provided a paper or assignment for another student	Response		Prefer not to answer		Missing		$\chi^2$	
	n	%	n	%	n	%		
Chi-square analysis for nominal and ordinal variables			(N = 491)			(N = 299)		
Sex								
Female	204	46.7%	118	27.0%	115	26.3%	2.17	
Male	279	45.9%	187	30.8%	142	23.4%		
Race								
Non-white	59	43.1%	43	31.4%	35	25.5%	0.64	
White	429	46.6%	266	28.9%	225	24.5%		
University								
OSU	132	49.6%	71	26.7%	63	23.7%	4.38	
UF	104	49.1%	54	25.5%	54	25.5%		
UGA	106	47.5%	71	31.8%	46	20.6%		
UI	87	46.0%	61	32.3%	41	21.7%		
Region								
South/SEC	210	48.3%	125	28.7%	100	23.0%	0.01	
Midwest/Big 10	219	48.1%	132	29.0%	104	22.9%		
Academic Rank								
Lecturer	74	60.7%	25	20.5%	23	18.9%	18.59*	
Assistant Professor	100	48.5%	65	31.6%	41	19.9%		
Associate Professor	106	40.5%	80	30.5%	76	29.0%		
Full Professor	191	46.9%	126	31.0%	90	22.1%		
Other	20	43.5%	12	26.1%	14	30.4%		
Tenure Status								
Non-tenure	195	52.3%	102	27.3%	76	20.4%	6.81*	
Tenure	295	44.0%	206	30.7%	169	25.2%		
Administrative position								
Non-administrator	371	46.4%	232	29.0%	197	24.6%	2.67	
Administrator	117	48.8%	76	31.7%	47	19.6%		
Discipline								
Architecture	3	20.0%	9	60.0%	3	20.0%	32.78*	
Arts and Humanities	90	46.4%	59	30.4%	45	23.3%		
Business	40	65.6%	13	21.3%	8	13.1%		
Education	37	45.1%	23	28.0%	22	26.8%		
Engineering	39	41.9%	25	26.9%	29	31.2%		
Law	4	100%	0	0.0%	0	0.0%		
Life Sciences	60	44.4%	47	34.8%	28	20.7%		
Medicine and Health Sciences	24	53.3%	13	28.9%	8	17.8%		

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-10. Continued

Item 5: Provided a paper or assignment for another student	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
	(N = 491)		(N = 310)		(N = 299)		
Physical Sciences and Mathematics	45	40.5%	37	33.3%	29	26.1%	
Social and Behavioral Sciences	106	50.0%	62	29.2%	44	20.8%	
Other	38	45.2%	20	23.8%	26	31.0%	
Service to athletics							
No	301	44.2%	213	31.3%	167	24.5%	7.20*
Yes	187	53.0%	92	26.1%	74	21.0%	
Athletic governance							
No	468	47.1%	300	30.1%	227	22.8%	1.33
Yes	22	56.4%	10	25.6%	7	17.9%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	484	49.92 (11.92)	300	50.26 (11.63)	246	49.64 (11.80)	0.19
Years at institution	485	13.93 (10.47)	308	14.22 (10.69)	230	14.31 (10.22)	0.13
Negative perceptions of student-athletes	433	2.12 (0.66)	194	2.26 (0.69)	111	1.09 (0.64)	3.52*
Sport fandom	426	4.10 (1.57)	257	3.60 (1.57)	192	3.68 (1.64)	9.69***
Interaction with student-athletes	481	2.65 (1.14)	290	2.28 (1.11)	211	2.31 (1.08)	12.56***
Attendance at MFB events	428	2.06 (1.38)	257	1.69 (1.09)	192	1.64 (1.13)	10.62***
Attendance at MBA events	425	1.41 (0.80)	254	1.26 (0.63)	191	1.33 (0.82)	3.52*
Attendance at WBB events	426	1.29 (0.70)	255	1.25 (0.69)	191	1.18 (0.60)	1.93

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-11. Missing data analysis for item 6 of academic deviance scale (N = 496)

Item 6: Falsified athletic travel letters to postpone exams or assignments	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables	(N = 496)		(N = 310)		(N = 294)		
Sex							
Female	206	47.1%	118	27.0%	113	25.9%	2.21
Male	282	46.4%	187	30.8%	139	22.9%	
Race							
Non-white	60	43.8%	43	31.4%	34	34.8%	0.55
White	433	47.1%	266	28.9%	221	24.0%	
University							
OSU	132	49.6%	70	26.3%	64	24.1%	4.89
UF	107	50.5%	53	25.0%	53	24.5%	
UGA	109	48.9%	70	31.4%	44	19.7%	
UI	87	46.0%	61	32.3%	41	21.7%	
Region							
South/SEC	216	49.7%	123	28.3%	96	22.1%	0.23
Midwest/Big 10	219	48.1%	131	28.8%	105	23.1%	
Academic Rank							
Lecturer	75	61.5%	24	19.7%	23	18.9%	20.47**
Assistant Professor	105	51.0%	61	30.1%	39	18.9%	
Associate Professor	105	40.1%	82	31.3%	75	28.6%	
Full Professor	190	46.7%	128	31.4%	89	21.9%	
Other	21	45.7%	12	26.1%	13	28.3%	
Tenure Status							
Non-tenure	201	53.9%	98	26.3%	74	19.8%	9.68**
Tenure	294	43.9%	210	31.3%	166	24.8%	
Administrative position							
Non-administrator	376	47.0%	232	29.0%	192	24.0%	2.13
Administrator	117	48.8%	76	31.7%	47	19.6%	
Discipline							
Architecture	3	20.0%	9	60.0%	3	20.0%	40.30**
Arts and Humanities	92	47.4%	57	29.4%	45	23.2%	
Business	41	67.2%	12	19.7%	8	13.1%	
Education	36	43.9%	23	28.0%	23	28.0%	
Engineering	39	41.9%	25	26.9%	29	31.2%	
Law	4	100%	0	0.0%	0	0.0%	
Life Sciences	60	44.4%	49	36.3%	26	19.3%	
Medicine and Health Sciences	27	60.0%	13	28.9%	5	11.1%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-11. Continued (N = 496)

Item 6: Falsified athletic travel letters to postpone exams or assignments	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
	(N = 496)		(N = 310)		(N = 294)		
Physical Sciences and Mathematics	43	38.7%	39	35.1%	29	26.1%	
Social and Behavioral Sciences	107	50.5%	61	28.8%	44	20.8%	
Other	39	46.4%	20	23.8%	25	29.8%	
Service to athletics							
No	304	44.6%	213	31.3%	164	24.1%	7.39*
Yes	189	53.5%	92	26.1%	72	20.4%	
Athletic governance							
No	473	47.5%	300	30.1%	223	22.4%	2.12
Yes	23	59.0%	10	25.6%	6	15.4%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	489	49.71 (11.88)	300	50.73 (11.69)	241	49.50 (11.77)	0.93
Years at institution	491	13.77 (10.46)	307	14.49 (10.79)	225	14.30 (10.07)	0.50
Negative perceptions of student-athletes	438	2.12 (0.66)	191	2.28 (0.68)	109	2.09 (0.64)	4.56*
Sport fandom	432	4.10 (1.58)	254	3.59 (1.57)	189	3.68 (1.61)	9.98***
Interaction with student-athletes	485	2.67 (1.14)	290	2.24 (1.10)	207	2.31 (1.07)	15.70***
Attendance at MFB events	434	2.06 (1.38)	254	1.67 (1.09)	189	1.65 (1.13)	11.03***
Attendance at MBA events	431	1.42 (0.80)	251	1.25 (0.63)	188	1.32 (0.82)	2.94*
Attendance at WBB events	432	1.30 (0.71)	252	1.25 (0.69)	188	1.16 (0.58)	2.57

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-12. Missing data analysis for item 1 of relying on others scale (N = 516)

Item 1: Got extra help on an assignment from a tutor	Response		Prefer not to answer		Missing		$\chi^2$		
	n	%	n	%	n	%			
Chi-square analysis for nominal and ordinal variables			(N = 516)			(N = 288)		(N = 296)	
Sex									
Female	218	49.9%	108	24.7%	111	25.4%	2.34		
Male	289	47.5%	176	28.9%	143	23.5%			
Race									
Non-white	61	44.5%	42	30.7%	34	24.8%	1.25		
White	452	49.1%	245	26.6%	223	24.4%			
University									
OSU	136	51.1%	67	25.2%	63	23.7%	3.60		
UF	109	51.4%	50	23.6%	53	25.0%			
UGA	117	52.5%	61	27.4%	45	20.2%			
UI	92	48.7%	57	30.2%	40	21.2%			
Region									
South/SEC	226	52.0%	111	25.5%	98	22.5%	0.40		
Midwest/Big 10	228	50.1%	124	27.3%	103	22.6%			
Academic Rank									
Lecturer	77	63.1%	22	18.0%	23	18.9%	19.49*		
Assistant Professor	104	50.5%	61	30.1%	40	19.4%			
Associate Professor	110	42.0%	76	29.0%	76	29.0%			
Full Professor	203	49.9%	115	28.3%	89	21.9%			
Other	21	45.7%	12	26.1%	13	28.3%			
Tenure Status									
Non-tenure	202	54.2%	96	25.7%	75	20.1%	5.87		
Tenure	312	46.6%	191	28.5%	167	24.9%			
Administrative position									
Non-administrator	388	48.5%	217	27.1%	195	24.4%	2.82		
Administrator	124	51.7%	70	29.2%	46	19.2%			
Discipline									
Architecture	3	20.0%	9	60.0%	3	20.0%	37.09*		
Arts and Humanities	96	49.5%	53	27.3%	45	23.2%			
Business	42	68.9%	11	18.0%	8	13.1%			
Education	38	46.3%	22	26.8%	22	26.8%			
Engineering	40	43.0%	24	25.8%	29	31.2%			
Law	4	100%	0	0.0%	0	0.0%			
Life Sciences	63	46.7%	44	32.6%	28	20.7%			
Medicine and Health Sciences	27	60.0%	12	26.7%	6	13.3%			

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-12. Continued

Item 1: Got extra help on an assignment from a tutor	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
	(N = 516)		(N = 288)		(N = 296)		
Physical Sciences and Mathematics	47	42.3%	35	31.5%	29	26.1%	
Social and Behavioral Sciences	111	52.4%	58	27.4%	43	20.3%	
Other	39	46.4%	19	22.6%	26	31.0%	
Service to athletics							
No	317	46.5%	199	29.2%	165	24.2%	7.06*
Yes	195	55.2%	85	24.1%	73	20.7%	
Athletic governance							
No	492	49.4%	279	28.0%	225	22.6%	2.31
Yes	24	61.5%	9	23.1%	6	15.4%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	506	50.07 (11.97)	281	50.16 (11.55)	243	49.47 (11.75)	0.27
Years at institution	510	14.15 (10.65)	286	13.97 (10.51)	227	14.16 (10.05)	0.03
Negative perceptions of student-athletes	450	2.13 (0.66)	179	2.26 (0.69)	109	2.09 (0.64)	3.21*
Sport fandom	451	4.08 (1.58)	235	3.60 (1.56)	189	3.67 (1.63)	8.73***
Interaction with student-athletes	505	2.66 (1.14)	268	2.25 (1.10)	209	2.29 (1.08)	14.78***
Attendance at MFB events	453	2.03 (1.37)	235	1.69 (1.09)	189	1.65 (1.13)	9.02***
Attendance at MBA events	450	1.40 (0.79)	232	1.26 (0.65)	188	1.34 (0.83)	2.52
Attendance at WBB events	451	1.28 (0.69)	233	1.27 (0.71)	188	1.18 (0.60)	1.48

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-13. Missing data analysis for item 2 of relying on others scale (N = 503)

Item 2: Did less of their share of work in a group project	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables	(N = 503)		(N = 303)		(N = 294)		
Sex							
Female	208	47.6%	117	26.8%	112	25.6%	1.52
Male	287	47.2%	181	29.8%	140	23.0%	
Race							
Non-white	58	42.3%	44	32.1%	35	25.5%	1.65
White	442	48.0%	258	28.0%	220	23.9%	
University							
OSU	134	50.4%	69	25.9%	63	23.7%	5.09
UF	109	51.4%	51	24.1%	52	24.5%	
UGA	107	48.0%	71	31.8%	45	20.2%	
UI	89	47.1%	59	31.2%	41	21.7%	
Region							
South/SEC	216	49.7%	122	28.0%	97	22.3%	0.05
Midwest/Big 10	223	49.0%	128	28.1%	104	22.9%	
Academic Rank							
Lecturer	74	60.7%	25	20.5%	23	18.9%	19.30*
Assistant Professor	106	51.5%	62	30.1%	38	18.4%	
Associate Professor	106	40.5%	80	30.5%	76	29.0%	
Full Professor	195	47.9%	123	30.2%	89	21.9%	
Other	22	47.8%	11	23.9%	13	28.3%	
Tenure Status							
Non-tenure	201	53.9%	99	26.5%	73	19.6%	8.06*
Tenure	301	44.9%	202	30.1%	167	24.9%	
Administrative position							
Non-administrator	381	47.6%	227	28.4%	192	24.0%	2.10
Administrator	119	49.6%	74	30.8%	47	19.6%	
Discipline							
Architecture	3	20.0%	9	60.0%	3	20.0%	39.05**
Arts and Humanities	94	48.5%	55	28.4%	45	23.2%	
Business	40	65.6%	13	21.3%	8	13.1%	
Education	37	45.1%	22	26.8%	23	28.0%	
Engineering	40	43.0%	24	25.8%	29	31.2%	
Law	4	100%	0	0.0%	0	0.0%	
Life Sciences	63	46.7%	46	34.1%	26	19.3%	
Medicine and Health Sciences	27	60.0%	13	28.9%	5	11.1%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-13. Continued

Item 2: Did less of their share of work in a group project	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 503)		(N = 303)		(N = 294)	
Physical Sciences and Mathematics	42	37.8%	39	35.1%	30	27.0%	
Social and Behavioral Sciences	108	50.9%	61	28.8%	43	20.3%	
Other	40	47.6%	19	22.6%	25	29.8%	
Service to athletics							
No	307	45.1%	210	30.8%	164	24.1%	8.62*
Yes	193	54.7%	88	24.9%	72	20.4%	
Athletic governance							
No	480	48.2%	293	29.4%	223	22.4%	1.91
Yes	23	59.0%	10	25.6%	6	15.4%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	495	49.95 (11.87)	294	50.31 (11.73)	241	49.52 (11.75)	0.30
Years at institution	497	13.90 (10.45)	301	14.29 (10.69)	225	14.29 (10.07)	0.18
Negative perceptions of student-athletes	443	2.14 (0.67)	187	2.23 (0.67)	108	2.09 (0.64)	1.83
Sport fandom	436	4.08 (1.59)	250	3.63 (1.57)	189	3.66 (1.62)	8.34***
Interaction with student-athletes	493	2.65 (1.14)	282	2.27 (1.11)	207	2.31 (1.08)	13.09***
Attendance at MFB events	438	2.04 (1.37)	250	1.71 (1.12)	189	1.64 (1.13)	9.09***
Attendance at MBA events	436	1.42 (0.80)	246	1.25 (0.63)	188	1.32 (0.82)	3.75*
Attendance at WBB events	436	1.29 (0.69)	248	1.27 (0.72)	188	1.16 (0.58)	2.25

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-14. Missing data analysis for item 3 of relying on others scale (N = 496)

Item 3: Worked on an assignment with others when asked for individual work	Response		Prefer not to answer		Missing		$\chi^2$		
	n	%	n	%	n	%			
Chi-square analysis for nominal and ordinal variables			(N = 496)			(N = 310)		(N = 294)	
Sex									
Female	206	47.1%	120	27.5%	111	25.4%	1.31		
Male	282	46.6%	185	30.4%	141	23.3%			
Race									
Non-white	60	43.8%	43	31.4%	34	24.8%	0.55		
White	433	47.1%	266	28.9%	221	24.0%			
University									
OSU	134	50.4%	69	25.9%	63	23.7%	5.11		
UF	105	49.5%	54	25.5%	53	25.0%			
UGA	108	48.4%	71	31.8%	44	19.7%			
UI	88	46.6%	61	32.3%	40	21.2%			
Region									
South/SEC	213	49.0%	125	28.7%	97	22.3%	0.02		
Midwest/Big 10	222	48.8%	130	28.6%	103	22.6%			
Academic Rank									
Lecturer	74	60.7%	25	20.5%	23	18.9%	18.39*		
Assistant Professor	102	49.5%	65	31.6%	39	18.9%			
Associate Professor	106	40.5%	81	30.9%	75	28.6%			
Full Professor	193	47.4%	125	30.7%	89	21.9%			
Other	21	45.7%	12	26.1%	13	28.3%			
Tenure Status									
Non-tenure	197	52.8%	102	27.3%	74	19.8%	6.99*		
Tenure	298	44.5%	206	30.7%	166	24.8%			
Administrative position									
Non-administrator	375	46.9%	232	29.0%	193	24.1%	2.62		
Administrator	118	49.2%	76	31.7%	46	19.2%			
Discipline									
Architecture	3	20.0%	9	60.0%	3	20.0%	35.83*		
Arts and Humanities	92	47.4%	57	29.4%	45	23.2%			
Business	40	65.6%	13	21.3%	8	13.1%			
Education	37	45.1%	23	28.0%	22	26.8%			
Engineering	40	43.0%	24	25.8%	29	31.2%			
Law	4	100.0%	0	0.0%	0	0.0%			
Life Sciences	61	45.2%	48	35.6%	26	19.3%			
Medicine and Health Sciences	26	57.8%	13	28.9%	6	13.3%			

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-14. Continued

Item 3: Worked on an assignment with others when asked for individual work	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
	(N = 496)		(N = 310)		(N = 294)		
Physical Sciences and Mathematics	45	40.50%	37	33.3%	29	26.1%	
Social and Behavioral Sciences	105	49.5%	64	30.2%	43	20.3%	
Other	38	45.2%	20	23.8%	26	31.0%	
Service to athletics							
No	304	44.6%	213	31.3%	164	24.1%	7.39*
Yes	189	53.5%	92	26.1%	72	20.4%	
Athletic governance							
No	473	47.5%	300	30.1%	223	22.4%	2.12
Yes	23	59.0%	10	25.6%	6	15.4%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	489	49.97 (11.89)	300	50.29 (11.69)	241	29.50 (11.78)	0.30
Years at institution	491	13.89 (10.48)	307	14.34 (10.77)	225	14.24 (10.06)	0.20
Negative perceptions of student-athletes	437	2.12 (0.66)	193	2.26 (0.69)	108	2.10 (0.64)	3.45*
Sport fandom	432	4.09 (1.59)	255	3.61 (1.56)	188	3.68 (1.62)	8.89***
Interaction with student-athletes	486	2.65 (1.14)	289	2.29 (1.12)	207	2.30 (1.08)	12.23***
Attendance at MFB events	434	2.04 (1.38)	255	1.69 (1.10)	188	1.65 (1.13)	9.55***
Attendance at MBA events	431	1.41 (0.80)	252	1.25 (0.63)	187	1.34 (0.83)	3.41*
Attendance at WBB events	432	1.29 (0.70)	253	1.25 (0.69)	187	1.17 (0.59)	2.15

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-15. Missing data analysis for Item 1 of criminal deviance scale (N = 507)

Item 1: Purposely damaged or destroyed property belonging to others	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables	(N = 507)			(N = 271)		(N = 322)	
Sex	209	47.8%	105	24.0%	123	26.1%	1.04
Female	291	47.9%	160	26.3%	157	25.8%	
Male							
Race							
Non-white	58	42.3%	40	29.2%	39	28.5%	1.93
White	446	48.5%	230	25.0%	244	26.5%	
University							
OSU	130	48.9%	64	24.1%	72	27.1%	3.81
UF	106	50.0%	47	22.2%	59	27.8%	
UGA	116	52.0%	57	25.6%	50	22.4%	
UI	95	50.3%	52	27.5%	42	22.2%	
Region							
South/SEC	222	51.0%	104	23.9%	109	25.1%	0.34
Midwest/Big 10	225	49.5%	116	25.5%	114	25.1%	
Academic Rank							
Lecturer	72	59.0%	21	17.2%	29	23.8%	15.44
Assistant Professor	95	46.1%	63	30.6%	48	23.3%	
Associate Professor	115	43.9%	68	26.0%	79	30.2%	
Full Professor	206	50.6%	106	26.0%	95	23.3%	
Other	19	41.3%	11	23.9%	16	34.8%	
Tenure Status							
Non-tenure	185	49.6%	95	25.5%	93	24.9%	0.30
Tenure	321	47.9%	174	26.0%	175	26.1%	
Administrative position							
Non-administrator	387	48.4%	205	25.6%	208	26.0%	0.34
Administrator	118	40.2%	64	26.7%	58	24.2%	
Discipline							
Architecture	2	13.3%	6	40.0%	7	46.7%	34.66*
Arts and Humanities	94	48.5%	53	27.3%	47	24.2%	
Business	39	63.9%	11	18.0%	11	18.0%	
Education	39	47.6%	20	24.4%	23	28.0%	
Engineering	43	46.2%	21	22.6%	29	31.2%	
Law	4	100.0%	0	0.0%	0	0.0%	
Life Sciences	68	50.4%	37	27.4%	30	22.2%	
Medicine and Health Sciences	30	66.7%	9	20.0%	6	13.3%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-15. Continued

Item 1: Purposely damaged or destroyed property belonging to others	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 507)		(N = 271)		(N = 322)	
Physical Sciences and Mathematics	43	38.7%	32	28.8%	36	32.4%	
Social and Behavioral Sciences	101	47.6%	62	29.2%	49	23.1%	
Other	42	50.0%	17	20.2%	25	29.8%	
Service to athletics							
No	312	45.8%	186	27.3%	183	26.9%	5.98
Yes	190	53.8%	83	23.5%	80	22.7%	
Athletic governance							
No	482	48.4%	264	26.5%	250	25.1%	3.71
Yes	25	64.1%	7	17.9%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	500	50.45 (11.80)	260	49.99 (11.97)	270	49.00 (11.61)	1.33
Years at institution	503	14.68 (10.82)	267	13.39 (10.16)	253	13.71 (10.05)	1.58
Negative perceptions of student-athletes	439	2.14 (0.65)	171	2.26 (0.71)	128	2.08 (0.63)	3.03*
Sport fandom	444	4.06 (1.56)	220	3.61 (1.62)	211	3.70 (1.62)	7.39**
Interaction with student-athletes	496	2.61 (1.13)	256	2.30 (1.12)	230	2.36 (1.10)	8.23***
Attendance at MFB events	446	2.02 (1.35)	220	1.70 (1.13)	211	1.67 (1.16)	8.09***
Attendance at MBA events	443	1.40 (0.80)	218	1.28 (0.64)	209	1.31 (0.79)	2.22
Attendance at WBB events	444	1.29 (0.71)	219	1.24 (0.67)	209	1.20 (0.61)	1.44

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-16. Missing data analysis for Item 2 of criminal deviance scale (N = 503)

Item 2: Stolen (or tried to steal) something worth more than \$50	Response		Prefer not to answer		Missing		$\chi^2$		
	n	%	n	%	n	%			
Chi-square analysis for nominal and ordinal variables			(N = 503)			(N = 272)		(N = 325)	
Sex									
Female	208	47.6%	103	23.6%	126	28.8%	1.90		
Male	288	47.4%	163	26.8%	157	25.8%			
Race									
Non-white	57	41.6%	41	29.9%	39	28.5%	2.41		
White	444	48.3%	229	24.9%	247	26.8%			
University									
OSU	129	48.5%	65	24.4%	72	27.1%	3.57		
UF	105	49.5%	47	22.2%	60	28.3%			
UGA	116	52.0%	56	25.1%	51	22.9%			
UI	94	49.7%	52	27.5%	43	22.8%			
Region									
South/SEC	221	50.8%	103	23.7%	111	25.5%	0.52		
Midwest/Big 10	223	49.0%	117	25.7%	115	25.3%			
Academic Rank									
Lecturer	70	57.4%	24	19.7%	28	23.0%	12.59		
Assistant Professor	95	46.1%	63	30.6%	48	23.3%			
Associate Professor	116	44.3%	66	25.2%	80	30.5%			
Full Professor	203	49.9%	106	26.0%	98	24.1%			
Other	19	41.3%	11	23.9%	16	34.8%			
Tenure Status									
Non-tenure	183	49.1%	98	26.3%	92	24.7%	0.53		
Tenure	319	47.6%	172	25.7%	179	26.7%			
Administrative position									
Non-administrator	383	47.9%	206	25.8%	211	26.4%	0.47		
Administrator	118	49.2%	64	26.7%	58	24.2%			
Discipline									
Architecture	2	13.3%	6	40.0%	7	46.7%	30.88		
Arts and Humanities	92	47.4%	54	27.8%	48	24.7%			
Business	38	62.3%	11	18.0%	12	19.7%			
Education	39	47.6%	20	24.4%	23	28.0%			
Engineering	43	46.2%	21	22.6%	29	31.2%			
Law	4	100.0%	0	0.0%	0	0.0%			
Life Sciences	68	50.4%	36	26.7%	31	23.0%			
Medicine and Health Sciences	29	64.4%	10	22.2%	6	13.3%			

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-16. Continued

Item 2: Stolen (or tried to steal) something worth more than \$50	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
	(N = 503)		(N = 272)		(N = 325)		
Physical Sciences and Mathematics	43	38.7%	33	29.7%	35	31.5%	
Social and Behavioral Sciences	102	48.1%	60	28.3%	50	23.6%	
Other	41	48.8%	18	21.4%	25	29.8%	
Service to athletics							
No	308	45.2%	187	27.5%	186	27.3%	6.91*
Yes	190	53.8%	83	23.5%	80	22.7%	
Athletic governance							
No	479	48.0%	266	26.7%	252	25.3%	4.18
Yes	25	64.1%	6	15.4%	8	20.5%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	496	50.50 (11.79)	261	49.89 (12.02)	273	49.02 (11.57)	1.39
Years at institution	499	14.67 (10.79)	268	13.33 (10.21)	256	13.82 (10.09)	1.55
Negative perceptions of student-athletes	434	2.14 (0.65)	174	2.26 (0.71)	130	2.07 (0.63)	3.70*
Sport fandom	441	4.07 (1.55)	220	3.61 (1.63)	214	3.69 (1.62)	8.01***
Interaction with student-athletes	492	2.60 (1.13)	259	2.31 (1.13)	231	2.37 (1.10)	6.92**
Attendance at MFB events	443	2.03 (1.36)	220	1.71 (1.14)	214	1.65 (1.14)	8.55***
Attendance at MBA events	439	1.40 (0.80)	219	1.29 (0.65)	212	1.30 (0.77)	2.21
Attendance at WBB events	441	1.30 (0.73)	219	1.22 (0.63)	212	1.19 (0.60)	2.33

Table 4-17. Missing data analysis for Item 3 of criminal deviance scale (N = 497)

Item 3: Thrown objects (such as rocks, bottles, etc.) at cars or people	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables	(N = 497)		(N = 279)		(N = 324)		
Sex							
Female	206	47.1%	108	24.7%	123	28.1%	0.96
Male	284	46.7%	165	27.1%	159	26.2%	
Race							
Non-white	57	41.6%	41	29.9%	39	28.5%	1.88
White	438	47.6%	236	26.7%	246	26.7%	
University							
OSU	126	47.4%	67	25.2%	73	27.4%	4.01
UF	105	49.5%	48	22.6%	59	27.8%	
UGA	114	51.1%	58	26.0%	51	22.9%	
UI	93	49.2%	54	28.6%	42	22.2%	
Region							
South/SEC	219	50.3%	106	24.4%	110	25.3%	0.65
Midwest/Big 10	219	48.1%	121	26.6%	115	25.3%	
Academic Rank							
Lecturer	71	58.2%	22	18.0%	29	23.8%	13.90
Assistant Professor	95	46.1%	63	30.6%	48	23.3%	
Associate Professor	114	43.5%	69	26.3%	79	30.2%	
Full Professor	198	48.6%	112	27.5%	97	23.8%	
Other	19	41.3%	11	23.9%	16	34.8%	
Tenure Status							
Non-tenure	184	49.3%	96	25.7%	93	24.9%	0.74
Tenure	312	46.6%	181	27.0%	177	26.4%	
Administrative position							
Non-administrator	379	47.4%	212	26.5%	209	26.1%	0.23
Administrator	116	48.3%	65	27.1%	59	24.6%	
Discipline							
Architecture	2	13.3%	6	40.0%	7	46.7%	37.13*
Arts and Humanities	92	47.4%	55	28.4%	47	24.2%	
Business	39	63.9%	11	18.0%	11	18.0%	
Education	38	46.3%	20	24.4%	24	29.3%	
Engineering	42	45.2%	21	22.6%	30	32.3%	
Law	4	100.0%	0	0.0%	0	0.0%	
Life Sciences	65	48.1%	40	29.6%	30	22.2%	
Medicine and Health Sciences	30	66.7%	9	20.0%	6	13.3%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-17. Continued

Item 3: Thrown objects (such as rocks, bottles, etc.) at cars or people	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables			(N = 497)		(N = 279)		(N = 324)
Physical Sciences and Mathematics	41	36.9%	34	30.6%	36	32.4%	
Social and Behavioral Sciences	101	47.6%	62	29.2%	49	23.1%	
Other	41	48.8%	18	21.4%	25	29.8%	
Service to athletics							
No	303	44.5%	193	28.3%	185	27.2%	7.63*
Yes	189	53.5%	84	23.8%	80	22.7%	
Athletic governance							
No	472	47.4%	272	27.3%	252	25.3%	4.21
Yes	25	64.1%	7	17.9%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	491	50.41 (11.81)	267	50.11 (11.98)	272	48.97 (11.58)	1.34
Years at institution	493	14.46 (10.66)	275	13.80 (10.55)	255	13.74 (10.03)	0.55
Negative perceptions of student-athletes	431	2.13 (0.65)	177	2.26 (0.72)	130	2.08 (0.62)	3.49*
Sport fandom	435	4.07 (1.58)	227	3.61 (1.63)	213	3.71 (1.61)	7.49**
Interaction with student-athletes	486	2.62 (1.14)	264	2.30 (1.12)	232	2.35 (1.10)	8.64***
Attendance at MFB events	437	2.03 (1.36)	227	1.70 (1.12)	213	1.67 (1.16)	8.46***
Attendance at MBA events	434	1.41 (0.81)	225	1.27 (0.64)	211	1.32 (0.79)	2.55
Attendance at WBB events	435	1.30 (0.72)	226	1.23 (0.66)	211	1.19 (0.61)	1.77

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-18. Missing data analysis for item 4 of criminal deviance scale (N = 493)

Item 4: Stolen (or tried to steal) things worth \$50 or less	Response		Prefer not to answer		Missing		$\chi^2$	
	n	%	n	%	n	%		
Chi-square analysis for nominal and ordinal variables			(N = 493)			(N = 324)		
Sex								
Female	204	46.7%	110	25.2%	123	28.1%	0.89	
Male	282	46.4%	167	27.5%	159	26.2%		
Race								
Non-white	57	41.6%	41	29.9%	39	28.5%	1.59	
White	434	47.2%	240	26.1%	246	26.7%		
University								
OSU	125	47.0%	69	25.9%	72	27.1%	4.00	
UF	104	49.1%	49	23.1%	59	27.8%		
UGA	116	52.0%	57	25.6%	50	22.4%		
UI	90	47.6%	55	29.1%	44	23.3%		
Region								
South/SEC	220	50.6%	106	24.4%	109	25.1%	1.24	
Midwest/Big 10	215	47.3%	124	27.3%	116	25.5%		
Academic Rank								
Lecturer	66	54.1%	27	22.1%	29	23.8%	8.97	
Assistant Professor	94	45.6%	63	30.6%	49	23.8%		
Associate Professor	115	43.9%	69	26.3%	78	29.8%		
Full Professor	199	48.9%	111	27.3%	97	23.8%		
Other	19	41.3%	11	23.9%	16	32.8%		
Tenure Status								
Non-tenure	178	47.7%	101	27.1%	94	25.2%	0.15	
Tenure	314	46.9%	180	26.9%	176	26.3%		
Administrative position								
Non-administrator	373	46.6%	216	27.0%	211	26.4%	0.75	
Administrator	118	49.2%	65	27.1%	57	23.8%		
Discipline								
Architecture	2	13.3%	6	40.0%	7	26.7%	31.97*	
Arts and Humanities	90	46.6%	56	28.9%	48	24.7%		
Business	39	63.9%	11	18.0%	11	18.0%		
Education	39	47.6%	20	24.4%	23	28.0%		
Engineering	42	45.2%	23	24.7%	28	30.1%		
Law	3	75.0%	1	25.0%	0	0.0%		
Life Sciences	65	48.1%	40	29.6%	30	22.2%		
Medicine and Health Sciences	29	64.4%	10	22.2%	6	13.3%		

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-18. Continued

Item 4: Stolen (or tried to steal) things worth \$50 or less	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
	(N = 493)		(N = 283)		(N = 324)		
Physical Sciences and Mathematics	42	37.8%	32	28.8%	37	33.3%	
Social and Behavioral Sciences	100	37.2%	63	29.7%	49	23.1%	
Other	40	47.6%	18	21.4%	26	31.0%	
Service to athletics							
No	301	44.2%	195	28.6%	185	27.2%	7.68*
Yes	188	79.0%	86	24.4%	79	22.4%	
Athletic governance							
No	468	47.0%	276	27.7%	252	25.3%	4.43
Yes	25	64.1%	7	17.9%	7	17.9%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	486	50.42 (11.82)	272	50.01 (11.94)	272	49.06 (11.80)	1.16
Years at institution	490	14.55 (10.73)	278	13.57 (10.32)	255	13.82 (10.12)	0.91
Negative perceptions of student-athletes	428	2.13 (0.65)	181	2.26 (0.71)	129	2.09 (0.63)	3.24*
Sport fandom	432	4.09 (1.55)	230	3.60 (1.62)	213	3.68 (1.62)	9.03***
Interaction with student-athletes	482	2.61 (1.13)	268	2.32 (1.14)	232	2.35 (1.10)	7.17**
Attendance at MFB events	434	2.04 (1.36)	230	1.69 (1.13)	213	1.66 (1.16)	9.30***
Attendance at MBA events	430	1.40 (0.80)	229	1.30 (0.69)	211	1.30 (0.75)	1.05
Attendance at WBB events	432	1.30 (0.73)	229	1.23 (0.64)	211	1.19 (0.61)	2.04

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-19. Missing data analysis for item 5 of criminal deviance scale (N = 470)

Item 5: Sold marijuana or hashish ("pot", "grass", "hash")	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables	(N = 470)		(N = 303)		(N = 327)		
Sex							
Female	195	44.6%	118	27.0%	124	28.4%	0.81
Male	269	44.2%	178	29.3%	161	26.5%	
Race							
Non-white	53	38.7%	44	32.1%	40	29.2%	2.06
White	415	45.1%	257	27.9%	248	27.0%	
University							
OSU	122	45.9%	72	27.1%	72	27.1%	4.38
UF	101	47.6%	51	24.1%	60	28.3%	
UGA	106	47.5%	66	29.6%	51	22.9%	
UI	87	46.0%	59	31.2%	43	22.8%	
Region							
South/SEC	207	47.6%	117	26.9%	111	25.5%	0.42
Midwest/Big 10	209	45.9%	131	28.8%	115	25.3%	
Academic Rank							
Lecturer	67	54.9%	26	21.3%	29	23.8%	11.96
Assistant Professor	93	45.1%	64	31.1%	49	23.8%	
Associate Professor	109	41.6%	73	27.9%	80	30.5%	
Full Professor	184	45.2%	125	30.7%	98	24.1%	
Other	17	37.0%	13	28.3%	16	34.8%	
Tenure Status							
Non-tenure	177	47.5%	102	27.3%	94	25.2%	1.47
Tenure	292	43.6%	199	29.7%	179	26.7%	
Administrative position							
Non-administrator	358	44.8%	229	28.6%	213	26.6%	0.60
Administrator	110	45.8%	72	30.0%	58	24.2%	
Discipline							
Architecture	2	13.3%	6	40.0%	7	46.7%	35.95*
Arts and Humanities	89	45.9%	57	29.4%	48	24.7%	
Business	39	63.9%	11	18.0%	11	18.0%	
Education	35	42.7%	24	29.3%	23	28.0%	
Engineering	41	44.1%	23	24.7%	29	31.2%	
Law	3	75.0%	1	25.0%	0	0.0%	
Life Sciences	62	45.9%	42	31.1%	31	23.0%	
Medicine and Health Sciences	28	62.2%	11	24.4%	6	13.3%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-19. Continued

Item 5: Sold marijuana or hashish ("pot", "grass", "hash")	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 470)		(N = 303)		(N = 327)	
Physical Sciences and Mathematics	38	34.2%	37	33.3%	36	32.4%	
Social and Behavioral Sciences	92	43.4%	70	33.0%	50	23.6%	
Other	39	46.4%	18	21.4%	27	32.1%	
Service to athletics							
No	287	42.1%	207	30.4%	187	27.5%	6.99*
Yes	179	50.7%	94	26.6%	80	22.7%	
Athletic governance							
No	449	45.1%	292	29.3%	255	25.6%	1.52
Yes	21	53.8%	11	28.2%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	464	50.03 (11.81)	291	50.65 (11.94)	275	49.09 (11.61)	1.26
Years at institution	467	14.27 (10.64)	298	14.08 (10.57)	258	13.82 (10.07)	0.16
Negative perceptions of student-athletes	409	2.13 (0.65)	196	2.25 (0.71)	133	2.09 (0.63)	2.99
Sport fandom	413	4.09 (1.55)	248	3.61 (1.62)	214	3.70 (1.62)	8.55***
Interaction with student-athletes	459	2.61 (1.13)	288	2.34 (1.14)	235	2.35 (1.10)	6.98**
Attendance at MFB events	415	2.04 (1.35)	248	1.72 (1.16)	214	1.67 (1.16)	8.09***
Attendance at MBA events	412	1.40 (0.79)	246	1.30 (0.69)	212	1.32 (0.79)	1.63
Attendance at WBB events	414	1.29 (0.70)	246	1.25 (0.69)	212	1.20 (0.61)	1.31

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-20. Missing data analysis for item 6 of criminal deviance scale (N = 476)

Item 6: Stolen money or other things from their friends, neighbors, or roommates	Response		Prefer not to answer		Missing		$\chi^2$	
	n	%	n	%	n	%		
Chi-square analysis for nominal and ordinal variables			(N = 476)			(N = 328)		
Sex								
Female	195	44.6%	118	27.0%	124	28.4%	0.42	
Male	275	45.2%	171	28.1%	162	26.6%		
Race								
Non-white	53	38.7%	45	32.8%	39	28.5%	2.79	
White	421	45.8%	250	27.2%	249	27.1%		
University								
OSU	122	45.9%	70	26.3%	74	27.8%	5.21	
UF	104	49.1%	48	22.6%	60	28.3%		
UGA	109	48.9%	63	28.3%	51	22.9%		
UI	87	46.0%	58	30.7%	44	23.3%		
Region								
South/SEC	213	49.0%	111	25.5%	111	25.5%	1.01	
Midwest/Big 10	209	45.9%	128	28.1%	118	25.9%		
Academic Rank								
Lecturer	65	53.3%	27	22.1%	30	24.6%	9.72	
Assistant Professor	94	45.6%	63	30.6%	49	23.8%		
Associate Professor	109	41.6%	73	27.9%	80	30.5%		
Full Professor	190	46.7%	119	29.2%	98	24.1%		
Other	18	39.1%	12	26.1%	16	34.8%		
Tenure Status								
Non-tenure	176	47.2%	102	27.3%	95	25.5%	0.63	
Tenure	299	44.6%	192	28.7%	179	26.7%		
Administrative position								
Non-administrator	363	45.4%	223	27.9%	214	26.8%	0.69	
Administrator	111	46.3%	71	29.6%	58	24.2%		
Discipline								
Architecture	2	13.3%	6	40.0%	7	46.7%	35.08*	
Arts and Humanities	89	45.9%	57	29.4%	48	24.7%		
Business	39	63.9%	11	18.0%	11	18.0%		
Education	37	45.1%	22	26.8%	23	28.0%		
Engineering	42	45.2%	22	23.7%	29	31.2%		
Law	3	75.0%	1	25.0%	0	0.0%		
Life Sciences	63	46.7%	41	30.4%	31	23.0%		
Medicine and Health Sciences	28	62.2%	11	24.4%	6	13.3%		

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-20. Continued

Item 6: Stolen money or other things from their friends, neighbors, or roommates	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 476)		(N = 296)		(N = 328)	
Physical Sciences and Mathematics	38	34.2%	36	32.4%	37	33.3%	
Social and Behavioral Sciences	93	43.9%	68	32.1%	51	24.1%	
Other	40	47.6%	18	21.4%	26	31.0%	
Service to athletics							
No	290	42.6%	204	30.0%	187	27.5%	7.56*
Yes	182	51.6%	90	25.5%	81	22.9%	
Athletic governance							
No	454	45.6%	286	28.7%	256	25.7%	1.97
Yes	22	56.4%	10	25.6%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	470	50.15 (11.76)	284	50.46 (11.98)	276	49.10 (11.66)	1.05
Years at institution	473	14.33 (10.64)	291	13.99 (10.59)	259	13.83 (10.06)	0.22
Negative perceptions of student-athletes	413	2.12 (0.65)	192	2.25 (0.71)	133	2.10 (0.63)	2.97
Sport fandom	419	4.10 (1.56)	239	3.60 (1.59)	217	3.69 (1.63)	9.11***
Interaction with student-athletes	465	2.60 (1.13)	281	2.35 (1.14)	236	2.35 (1.09)	5.97**
Attendance at MFB events	421	2.04 (1.36)	239	1.72 (1.14)	217	1.66 (1.16)	8.32***
Attendance at MBA events	418	1.41 (0.81)	237	1.27 (0.64)	215	1.31 (0.79)	2.81
Attendance at WBB events	420	1.30 (0.72)	237	1.23 (0.65)	215	1.20 (0.60)	1.90

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-21. Missing data analysis for item 7 of criminal deviance scale (N = 471)

Item 7: Sold harsh drugs such as heroin, cocaine, and LSD	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables			(N = 471)		(N = 302)		(N = 327)
Sex							
Female	196	44.9%	118	27.0%	123	28.1%	0.63
Male	269	44.2%	177	29.1%	162	26.6%	
Race							
Non-white	53	38.7%	45	32.8%	39	28.5%	2.34
White	416	45.2%	255	27.7%	249	27.1%	
University							
OSU	123	46.2%	71	26.7%	72	27.1%	4.13
UF	100	47.2%	52	24.5%	60	28.3%	
UGA	106	47.5%	66	29.6%	51	22.9%	
UI	87	46.0%	59	31.2%	43	22.8%	
Region							
South/SEC	206	47.4%	118	27.1%	111	25.5%	0.24
Midwest/Big 10	210	46.2%	130	28.6%	115	25.3%	
Academic Rank							
Lecturer	67	54.9%	26	21.3%	29	23.8%	13.30
Assistant Professor	93	45.1%	65	31.6%	48	23.3%	
Associate Professor	110	42.0%	72	27.5%	80	30.5%	
Full Professor	185	45.5%	124	30.5%	98	24.1%	
Other	16	34.8%	13	28.3%	17	37.0%	
Tenure Status							
Non-tenure	177	47.5%	103	27.6%	93	24.9%	1.35
Tenure	293	43.7%	197	29.4%	180	26.9%	
Administrative position							
Non-administrator	359	44.9%	228	28.5%	213	26.6%	0.61
Administrator	110	45.8%	72	30.0%	58	24.2%	
Discipline							
Architecture	2	13.3%	6	40.0%	7	46.7%	39.32**
Arts and Humanities	88	45.4%	58	29.9%	48	24.7%	
Business	39	63.9%	11	18.0%	11	18.0%	
Education	35	42.7%	24	29.3%	23	28.0%	
Engineering	41	44.1%	22	23.7%	30	32.3%	
Law	4	100.0%	0	0.0%	0	0.0%	
Life Sciences	61	45.2%	42	31.1%	32	23.7%	
Medicine and Health Sciences	28	62.2%	11	24.4%	6	13.3%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-21. Continued

Item 7: Sold harsh drugs such as heroin, cocaine, and LSD	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
	(N = 471)		(N = 302)		(N = 327)		
Physical Sciences and Mathematics	38	34.2%	37	33.3%	36	32.4%	
Social and Behavioral Sciences	93	43.9%	70	33.0%	49	23.1%	
Other	40	47.6%	18	21.4%	26	31.0%	
Service to athletics							
No	288	42.3%	208	30.5%	185	27.2%	6.65*
Yes	179	50.7%	92	26.1%	82	23.2%	
Athletic governance							
No	449	45.1%	292	29.3%	255	25.6%	2.10
Yes	22	56.4%	10	25.6%	7	17.9%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	465	49.98 (11.71)	291	50.63 (12.01)	274	49.20 (11.72)	1.05
Years at institution	468	14.22 (10.51)	297	14.03 (10.65)	258	13.97 (10.22)	0.06
Negative perceptions of student-athletes	410	2.13 (0.65)	196	2.25 (0.71)	132	2.09 (0.64)	3.12*
Sport fandom	413	4.11 (1.55)	248	3.59 (1.62)	214	3.70 (1.62)	9.49***
Interaction with student-athletes	460	2.61 (1.13)	287	2.33 (1.14)	235	2.36 (1.09)	6.99**
Attendance at MFB events	415	2.05 (1.36)	248	1.70 (1.13)	214	1.67 (1.17)	9.15***
Attendance at MBA events	412	1.41 (0.79)	246	1.29 (0.68)	212	1.31 (0.78)	2.13
Attendance at WBB events	413	1.30 (0.70)	247	1.24 (0.69)	212	1.19 (0.60)	0.19

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-22. Missing data analysis for item 8 of criminal deviance scale (N = 472)

Item 8: Used hard drugs such as heroin, cocaine, and LSD	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables			(N = 472)		(N = 299)		(N = 329)
Sex							
Female	194	44.4%	118	27.0%	125	28.6%	0.60
Male	272	44.7%	174	28.6%	162	26.6%	
Race							
Non-white	53	38.7%	44	32.1%	40	29.2%	2.27
White	417	45.3%	253	27.5%	250	27.2%	
University							
OSU	123	46.2%	70	26.3%	73	27.4%	3.72
UF	100	47.2%	52	24.5%	60	28.3%	
UGA	107	48.0%	65	29.1%	51	22.9%	
UI	86	45.5%	58	30.7%	45	23.8%	
Region							
South/SEC	207	47.6%	117	26.9%	111	25.5%	0.27
Midwest/Big 10	209	45.9%	128	28.1%	118	25.9%	
Academic Rank							
Lecturer	67	54.9%	26	21.3%	29	23.8%	13.25
Assistant Professor	94	45.6%	64	31.1%	48	23.3%	
Associate Professor	109	41.6%	72	27.5%	81	30.9%	
Full Professor	186	45.7%	122	30.0%	99	24.3%	
Other	16	34.8%	13	28.3%	17	37.0%	
Tenure Status							
Non-tenure	178	47.7%	102	27.3%	93	24.9%	1.56
Tenure	293	43.7%	195	29.1%	182	27.2%	
Administrative position							
Non-administrator	360	45.0%	226	28.2%	214	26.8%	0.47
Administrator	110	45.8%	71	29.6%	59	24.6%	
Discipline							
Architecture	2	13.3%	6	40.0%	7	46.7%	37.85**
Arts and Humanities	88	45.4%	58	29.9%	48	24.7%	
Business	38	62.3%	11	18.0%	12	19.7%	
Education	35	42.7%	24	29.3%	23	28.0%	
Engineering	42	45.2%	21	22.6%	30	32.3%	
Law	4	100.0%	0	0.0%	0	0.0%	
Life Sciences	61	45.2%	42	31.1%	32	23.7%	
Medicine and Health Sciences	28	62.2%	11	24.4%	6	13.3%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-22. Continued

Item 8: Used hard drugs such as heroin, cocaine, and LSD	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
	(N = 472)		(N = 299)		(N = 329)		
Physical Sciences and Mathematics	39	35.1%	35	31.5%	37	33.3%	
Social and Behavioral Sciences	93	43.9%	70	33.0%	49	23.1%	
Other	40	47.6%	18	21.4%	26	31.0%	
Service to athletics							
No	289	42.4%	206	30.2%	186	27.3%	6.42*
Yes	179	50.7%	91	25.8%	83	23.5%	
Athletic governance							
No	449	45.1%	290	29.1%	257	25.8%	2.97
Yes	23	59.0%	9	23.1%	7	17.9%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	466	50.03 (11.80)	287	50.53 (11.88)	277	49.22 (11.70)	0.89
Years at institution	469	14.31 (10.67)	294	13.89 (10.37)	260	13.98 (10.26)	0.17
Negative perceptions of student-athletes	410	2.12 (0.65)	194	2.26 (0.71)	134	2.09 (0.64)	3.56*
Sport fandom	413	4.11 (1.56)	245	3.60 (1.60)	217	3.69 (1.62)	9.86***
Interaction with student-athletes	461	2.60 (1.13)	284	2.34 (1.15)	237	2.37 (1.09)	6.13**
Attendance at MFB events	415	2.06 (1.36)	245	1.69 (1.12)	217	1.67 (1.17)	9.85***
Attendance at MBA events	412	1.41 (0.79)	243	1.30 (0.69)	215	1.30 (0.78)	2.11
Attendance at WBB events	413	1.30 (0.70)	244	1.23 (0.67)	215	1.20 (0.63)	1.45

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-23. Missing data analysis for item 9 of criminal deviance scale (N = 483)

Item 9: Broken into a building or vehicle to steal something or just look around	Response		Prefer not to answer		Missing		$\chi^2$	
	n	%	n	%	n	%		
Chi-square analysis for nominal and ordinal variables		(N = 483)		(N = 291)		(N = 326)		
Sex								
Female	194	44.4%	117	26.8%	126	28.8%	1.05	
Male	282	46.4%	168	27.6%	158	26.0%		
Race								
Non-white	55	40.1%	43	31.4%	39	28.5%	2.04	
White	426	46.3%	246	26.7%	248	27.0%		
University								
OSU	123	46.2%	69	25.9%	74	27.8%	4.88	
UF	104	49.1%	49	23.1%	59	27.8%		
UGA	109	48.9%	63	28.3%	51	22.9%		
UI	88	46.6%	58	30.7%	43	22.8%		
Region								
South/SEC	213	49.0%	112	25.7%	110	25.3%	0.72	
Midwest/Big 10	211	46.4%	127	27.9%	117	25.7%		
Academic Rank								
Lecturer	65	53.3%	27	22.1%	30	24.6%	9.07	
Assistant Professor	94	45.6%	63	30.6%	49	23.8%		
Associate Professor	113	43.1%	70	26.7%	79	30.2%		
Full Professor	192	47.2%	118	29.0%	97	23.8%		
Other	19	41.3%	11	23.9%	16	34.8%		
Tenure Status								
Non-tenure	177	47.5%	101	27.1%	95	25.5%	0.36	
Tenure	305	45.5%	188	28.1%	177	26.4%		
Administrative position								
Non-administrator	367	45.9%	221	27.6%	212	26.5%	0.53	
Administrator	114	47.5%	68	28.3%	58	24.2%		
Discipline								
Architecture	2	13.3%	6	40.0%	7	46.7%	32.38*	
Arts and Humanities	90	46.4%	56	28.9%	48	24.7%		
Business	39	63.9%	11	18.0%	11	18.0%		
Education	36	43.9%	22	26.8%	24	29.3%		
Engineering	44	47.3%	21	22.6%	28	30.1%		
Law	3	75.0%	1	25.0%	0	0.0%		
Life Sciences	62	45.9%	43	31.9%	30	22.2%		
Medicine and Health Sciences	28	62.2%	11	24.4%	6	13.3%		

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-23. Continued

Item 9: Broken into a building or vehicle to steal something or just look around	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 483)		(N = 291)		(N = 326)	
Physical Sciences and Mathematics	42	37.8%	33	29.7%	36	32.4%	
Social and Behavioral Sciences	95	44.8%	66	31.1%	51	24.1%	
Other	40	47.6%	18	21.4%	26	31.0%	
Service to athletics							
No	297	43.6%	199	29.2%	185	27.2%	5.93
Yes	182	51.6%	90	25.5%	81	22.9%	
Athletic governance							
No	460	46.2%	282	28.3%	254	25.5%	2.53
Yes	23	59.0%	9	23.1%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	477	50.36 (11.87)	279	50.16 (11.83)	274	49.04 (11.63)	1.16
Years at institution	480	14.52 (10.77)	286	13.70 (10.33)	257	13.76 (10.06)	0.74
Negative perceptions of student-athletes	418	2.13 (0.65)	187	2.26 (0.71)	133	2.08 (0.63)	3.30*
Sport fandom	421	4.11 (1.56)	239	3.57 (1.60)	215	3.69 (1.61)	10.49***
Interaction with student-athletes	471	2.59 (1.13)	276	2.36 (1.15)	235	2.36 (1.09)	5.17**
Attendance at MFB events	423	2.05 (1.37)	239	1.68 (1.11)	215	1.67 (1.16)	10.12***
Attendance at MBA events	419	1.41 (0.81)	238	1.27 (0.63)	213	1.31 (0.78)	2.94
Attendance at WBB events	421	1.31 (0.74)	238	1.22 (0.63)	213	1.19 (0.60)	2.59

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-24. Missing data analysis for item 1 of drinking-related deviance scale (N = 505)

Item 1: Lied about their age to gain entrance or to purchase something	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables	(N = 505)		(N = 274)		(N = 321)		
Sex							
Female	209	47.8%	105	24.0%	123	28.1%	1.46
Male	288	47.4%	164	27.0%	156	25.7%	
Race							
Non-white	61	44.5%	37	27.0%	39	28.5%	0.57
White	441	47.9%	236	25.7%	243	26.4%	
University							
OSU	132	49.6%	63	23.7%	71	26.7%	4.38
UF	105	49.5%	48	22.6%	59	27.8%	
UGA	116	52.0%	57	25.6%	50	22.4%	
UI	92	48.7%	55	29.1%	42	22.2%	
Region							
South/SEC	221	50.8%	105	24.1%	109	25.1%	0.40
Midwest/Big 10	224	29.2%	118	25.9%	113	24.8%	
Academic Rank							
Lecturer	71	58.2%	23	18.9%	28	23.0%	13.68
Assistant Professor	95	46.1%	63	30.6%	48	23.3%	
Associate Professor	116	44.3%	67	25.6%	79	30.2%	
Full Professor	203	49.9%	109	26.8%	95	23.3%	
Other	20	43.5%	10	21.7%	16	34.8%	
Tenure Status							
Non-tenure	185	49.6%	96	25.7%	92	24.7%	0.42
Tenure	319	47.6%	176	26.3%	175	26.1%	
Administrative position							
Non-administrator	386	48.3%	207	25.9%	207	25.9%	0.32
Administrator	117	48.8%	65	27.1%	58	24.2%	
Discipline							
Architecture	2	13.3%	6	40.0%	7	46.7%	34.27*
Arts and Humanities	94	48.5%	53	27.3%	47	24.2%	
Business	40	65.6%	11	18.0%	10	16.4%	
Education	38	46.3%	21	35.6%	23	28.0%	
Engineering	43	46.2%	21	22.6%	29	31.2%	
Law	4	100.0%	0	0.0%	0	0.0%	
Life Sciences	66	48.9%	39	28.9%	30	22.2%	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-24. Continued

Item 1: Lied about their age to gain entrance or to purchase something; for example, lying about their age to buy liquor	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 505)		(N = 274)		(N = 321)	
Medicine and Health Sciences	29	64.4%	10	22.2%	6	13.3%	
Physical Sciences and Mathematics	43	38.7%	32	28.8%	36	32.4%	
Social and Behavioral Sciences	103	48.6%	60	28.3%	49	23.1%	
Other	41	48.8%	18	21.4%	25	29.8%	
Service to athletics							
No	308	45.2%	191	28.0%	182	26.7%	7.85*
Yes	192	54.4%	81	22.9%	80	22.7%	
Athletic governance							
No	479	48.1%	268	26.9%	249	25.0%	5.29
Yes	26	66.7%	6	15.4%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	499	50.36 (11.79)	262	50.19 (11.98)	269	48.96 (11.62)	1.31
Years at institution	500	14.54 (10.62)	271	13.70 (10.59)	252	13.68 (10.06)	0.84
Negative perceptions of student-athletes	436	2.14 (0.65)	174	2.25 (0.71)	128	2.08 (0.63)	2.53
Sport fandom	442	4.06 (1.56)	223	3.62 (1.62)	210	3.70 (1.62)	7.39**
Interaction with student-athletes	494	2.61 (1.12)	259	2.30 (1.14)	229	2.35 (1.10)	8.09***
Attendance at MFB events	444	2.03 (1.36)	223	1.69 (1.12)	210	1.67 (1.17)	8.67***
Attendance at MBA events	440	1.40 (0.80)	222	1.28 (0.66)	208	1.31 (0.79)	2.04
Attendance at WBB events	442	1.30 (0.71)	222	1.23 (0.67)	208	1.19 (0.61)	1.97

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-25. Missing data analysis for item 2 of drinking-related deviance scale (N = 516)

Item 2: Drank alcohol	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables			(N = 516)		(N = 262)		(N = 322)
Sex							
Female	218	49.9%	97	22.2%	122	27.9%	2.36
Male	290	47.7%	160	26.3%	158	26.0%	
Race							
Non-white	61	44.5%	37	27.0%	39	28.5%	1.03
White	452	49.1%	224	24.3%	244	26.5%	
University							
OSU	130	48.9%	64	24.1%	72	27.1%	4.25
UF	110	51.9%	43	20.3%	59	27.8%	
UGA	118	52.9%	56	25.1%	49	22.0%	
UI	98	51.9%	48	25.4%	43	22.8%	
Region							
South/SEC	228	52.4%	99	22.8%	108	24.8%	0.57
Midwest/Big 10	228	50.1%	112	24.6%	115	25.3%	
Academic Rank							
Lecturer	73	59.8%	21	17.2%	28	23.0%	14.70
Assistant Professor	97	47.1%	62	30.1%	47	22.8%	
Associate Professor	119	45.4%	64	24.4%	79	30.2%	
Full Professor	207	50.9%	103	25.3%	97	23.8%	
Other	20	43.5%	10	21.7%	16	34.8%	
Tenure Status							
Non-tenure	189	50.7%	93	24.9%	91	24.4%	0.58
Tenure	326	48.7%	167	24.9%	177	26.4%	
Administrative position							
Non-administrator	396	49.5%	197	24.6%	207	25.9%	0.32
Administrator	118	49.2%	63	26.3%	59	24.6%	
Discipline							
Architecture	2	13.3%	6	40.0%	7	46.7%	32.78*
Arts and Humanities	100	51.5%	46	23.7%	48	24.7%	
Business	41	67.2%	10	16.4%	10	16.4%	
Education	39	47.6%	20	24.4%	23	28.0%	
Engineering	43	46.2%	21	22.6%	29	31.2%	
Law	3	75.0%	1	25.0%	0	0.0%	
Life Sciences	70	51.9%	35	25.9%	30	22.2%	
Medicine and Health Sciences	29	64.4%	10	22.2%	6	13.3%	

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-25. Continued

Item 2: Drank alcohol	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 516)		(N = 262)		(N = 322)	
Physical Sciences and Mathematics	43	38.7%	33	29.7%	35	31.5%	
Social and Behavioral Sciences	102	48.1%	60	28.3%	50	23.6%	
Other	42	50.0%	17	20.2%	25	29.8%	
Service to athletics							
No	318	46.7%	179	26.3%	184	27.0%	5.55
Yes	192	54.4%	81	22.9%	80	22.7%	
Athletic governance							
No	493	49.5%	253	25.4%	250	25.1%	1.53
Yes	23	59.0%	9	23.1%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	509	50.43 (11.81)	252	50.00 (11.98)	269	49.01 (11.60)	1.28
Years at institution	511	14.68 (10.72)	259	13.35 (10.31)	253	13.71 (10.09)	1.61
Negative perceptions of student-athletes	443	2.14 (0.66)	167	2.25 (0.71)	128	2.09 (0.62)	2.41
Sport fandom	454	4.04 (1.55)	211	3.64 (1.64)	210	3.69 (1.63)	5.99**
Interaction with student-athletes	504	2.61 (1.14)	248	2.29 (1.12)	230	2.36 (1.10)	7.86***
Attendance at MFB events	455	2.01 (1.35)	211	1.72 (1.13)	211	1.68 (1.17)	6.71**
Attendance at MBA events	452	1.39 (0.79)	209	1.28 (0.65)	209	1.32 (0.80)	1.73
Attendance at WBB events	453	1.30 (0.72)	210	1.21 (0.63)	209	1.20 (0.62)	2.48

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-26. Missing data analysis for item 3 of drinking-related deviance scale (N = 492)

Item 3: Drank more than 5 alcoholic drinks at once	Response		Prefer not to answer		Missing		$\chi^2$	
	n	%	n	%	n	%		
Chi-square analysis for nominal and ordinal variables	(N = 492)			(N = 284)		(N = 324)		
Sex								
Female	204	46.7%	110	25.2%	123	28.1%	1.05	
Male	280	46.1%	169	27.8%	159	26.2%		
Race								
Non-white	60	43.8%	39	28.5%	38	27.7%	0.41	
White	429	46.6%	244	26.5%	247	26.8%		
University								
OSU	127	47.7%	68	25.6%	71	26.7%	5.57	
UF	109	50.9%	45	21.2%	59	27.8%		
UGA	112	50.2%	60	26.9%	51	22.9%		
UI	90	47.6%	57	30.2%	42	22.2%		
Region								
South/SEC	220	50.6%	105	24.1%	110	25.3%	1.35	
Midwest/Big 10	217	47.7%	125	27.5%	113	24.8%		
Academic Rank								
Lecturer	69	56.6%	25	20.5%	28	23.0%	11.88	
Assistant Professor	96	46.6%	62	30.1%	48	23.3%		
Associate Professor	113	43.1%	69	26.3%	80	30.5%		
Full Professor	195	47.9%	115	28.3%	97	23.8%		
Other	19	41.3%	11	23.9%	16	34.8%		
Tenure Status								
Non-tenure	183	49.1%	98	26.3%	92	24.7%	0.95	
Tenure	308	46.0%	184	27.5%	178	26.6%		
Administrative position								
Non-administrator	378	47.3%	213	26.6%	209	26.1%	0.49	
Administrator	112	46.7%	69	28.7%	59	24.6%		
Discipline								
Architecture	0	0.0%	8	53.3%	7	46.7%	41.04**	
Arts and Humanities	96	49.5%	50	25.8%	48	24.7%		
Business	40	65.6%	10	16.4%	11	18.0%		
Education	36	43.9%	23	28.0%	23	28.0%		
Engineering	43	46.2%	21	22.6%	29	31.2%		
Law	3	75.0%	1	25.0%	0	0.0%		
Life Sciences	66	48.9%	39	28.9%	30	22.2%		
Medicine and Health Sciences	29	64.4%	10	22.2%	6	13.3%		

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-26. Continued

Item 3: Drank more than 5 alcoholic drinks at once	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 492)		(N = 284)		(N = 324)	
Physical Sciences and Mathematics	42	37.8%	34	30.6%	35	31.5%	
Social and Behavioral Sciences	95	44.8%	67	31.6%	50	23.6%	
Other	40	47.6%	18	21.4%	26	31.0%	
Service to athletics							
No	303	44.5%	194	28.5%	184	27.0%	5.85
Yes	185	52.4%	87	24.6%	81	22.9%	
Athletic governance							
No	470	47.2%	274	27.5%	252	25.3%	1.53
Yes	22	56.4%	10	25.6%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	486	50.08 (11.75)	272	50.63 (12.09)	272	49.06 (11.56)	1.27
Years at institution	487	14.25 (10.57)	281	14.24 (10.67)	255	13.67 (10.08)	0.29
Negative perceptions of student-athletes	421	2.14 (0.65)	187	2.25 (0.71)	130	2.07 (0.63)	3.03*
Sport fandom	434	4.06 (1.57)	230	3.61 (1.59)	211	3.72 (1.62)	7.24**
Interaction with student-athletes	481	2.59 (1.13)	269	2.34 (1.13)	232	2.36 (1.11)	5.37**
Attendance at MFB events	436	2.02 (1.36)	230	1.70 (1.11)	211	1.69 (1.19)	7.33**
Attendance at MBA events	434	1.39 (0.79)	227	1.30 (0.66)	209	1.32 (0.80)	1.39
Attendance at WBB events	434	1.29 (0.71)	229	1.24 (0.67)	209	1.20 (0.62)	1.64

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-27. Missing data analysis for item 4 of drinking-related deviance scale (N = 468)

Item 4: Had sexual relations with a person other than their significant other	Response		Prefer not to answer		Missing		$\chi^2$		
	n	%	n	%	n	%			
Chi-square analysis for nominal and ordinal variables			(N = 468)			(N = 306)		(N = 326)	
Sex									
Female	196	44.9%	117	26.8%	124	28.4%	1.35		
Male	266	42.8%	182	29.9%	160	26.3%			
Race									
Non-white	52	38.0%	46	33.6%	39	28.5%	2.62		
White	413	44.9%	259	28.2%	248	27.0%			
University									
OSU	115	43.2%	79	29.7%	72	27.1%	4.63		
UF	101	47.6%	51	24.1%	60	28.3%			
UGA	106	47.5%	66	29.6%	51	22.9%			
UI	90	47.6%	56	29.6%	43	22.8%			
Region									
South/SEC	207	47.6%	117	26.9%	11	25.5%	0.92		
Midwest/Big 10	205	45.1%	135	29.7%	115	25.3%			
Academic Rank									
Lecturer	66	54.1%	27	22.1%	29	23.8%	11.77		
Assistant Professor	89	43.2%	68	33.0%	49	23.8%			
Associate Professor	106	40.5%	77	29.4%	79	30.2%			
Full Professor	188	46.2%	121	29.7%	98	24.1%			
Other	19	41.3%	11	23.9%	16	34.8%			
Tenure Status									
Non-tenure	174	46.6%	105	28.2%	94	25.2%	0.83		
Tenure	293	43.7%	199	29.7%	178	26.6%			
Administrative position									
Non-administrator	355	44.4%	233	29.1%	212	26.5%	0.55		
Administrator	111	46.3%	71	29.6%	58	24.2%			
Discipline									
Architecture	2	13.3%	6	40.0%	7	46.7%	32.98*		
Arts and Humanities	87	44.8%	59	30.4%	48	24.7%			
Business	38	62.3%	12	19.7%	11	18.0%			
Education	35	42.7%	24	29.3%	23	28.0%			
Engineering	40	43.0%	24	25.8%	29	31.2%			
Law	3	75.0%	1	25.0%	0	0.0%			
Life Sciences	64	47.4%	41	30.4%	30	22.2%			
Medicine and Health Sciences	27	60.0%	12	26.7%	6	13.3%			

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-27. Continued

Item 4: Had sexual relations with a person other than their significant other	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 468)		(N = 306)		(N = 326)	
Physical Sciences and Mathematics	39	35.1%	36	32.4%	36	32.4%	
Social and Behavioral Sciences	92	43.4%	70	33.0%	50	23.6%	
Other	39	46.4%	18	21.4%	27	32.1%	
Service to athletics							
No	291	42.7%	205	30.1%	185	27.2%	3.72
Yes	172	48.7%	100	28.3%	81	22.9%	
Athletic governance							
No	447	44.9%	295	29.6%	254	25.5%	1.54
Yes	21	53.8%	11	28.2%	7	17.9%	
ANOVA for scale variables	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	460	50.33 (11.89)	296	50.21 (11.83)	274	49.05 (11.60)	1.11
Years at institution	464	14.50 (10.75)	302	13.78 (10.42)	257	13.78 (10.04)	0.60
Negative perceptions of student-athletes	406	2.14 (0.65)	200	2.23 (0.71)	132	2.07 (0.63)	2.28
Sport fandom	409	4.10 (1.54)	252	3.61 (1.63)	214	3.71 (1.62)	9.00***
Interaction with student-athletes	457	2.61 (1.12)	291	2.35 (1.16)	234	2.35 (1.10)	6.41**
Attendance at MFB events	411	2.01 (1.35)	252	1.75 (1.15)	214	1.69 (1.18)	6.17**
Attendance at MBA events	409	1.39 (0.79)	249	1.31 (0.69)	212	1.32 (0.79)	1.31
Attendance at WBB events	410	1.29 (0.70)	250	1.25 (0.70)	212	1.20 (0.61)	1.32

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-28. Missing data analysis for item 5 of drinking-related deviance scale (N = 479)

Item 5: Bought or provided liquor for a minor	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables		(N = 479)		(N = 292)		(N = 329)	
Sex							
Female	197	45.1%	115	26.3%	125	28.6%	0.66
Male	275	45.2%	171	28.1%	162	26.6%	
Race							
Non-white	56	40.9%	41	29.9%	40	29.2%	1.11
White	420	45.7%	250	27.2%	250	27.2%	
University							
OSU	123	46.2%	70	26.3%	73	27.4%	4.98
UF	102	48.1%	49	23.1%	61	28.8%	
UGA	109	48.9%	63	28.3%	51	22.9%	
UI	88	46.6%	58	30.7%	43	22.8%	
Region							
South/SEC	211	48.5%	112	25.7%	112	25.7%	0.69
Midwest/Big 10	211	46.4%	128	28.1%	116	25.5%	
Academic Rank							
Lecturer	65	53.3%	27	22.1%	30	24.6%	9.72
Assistant Professor	94	45.6%	63	30.6%	49	23.8%	
Associate Professor	112	42.7%	71	27.1%	29	30.2%	
Full Professor	190	46.7%	118	29.0%	99	24.3%	
Other	18	39.1%	11	23.9%	17	37.0%	
Tenure Status							
Non-tenure	178	47.7%	100	26.8%	95	25.5%	0.84
Tenure	300	44.8%	190	28.4%	180	26.9%	
Administrative position							
Non-administrator	364	45.5%	221	27.6%	215	26.9%	0.70
Administrator	113	47.1%	69	28.7%	58	24.2%	
Discipline							
Architecture	2	13.3%	6	40.0%	7	46.7%	34.09*
Arts and Humanities	91	46.9%	54	27.8%	49	25.3%	
Business	39	63.9%	11	18.0%	11	18.0%	
Education	36	43.9%	23	28.0%	23	28.0%	
Engineering	42	45.2%	21	22.6%	30	32.3%	
Law	3	75.0%	1	25.0%	0	0.0%	
Life Sciences	63	46.7%	40	29.6%	32	23.7%	
Medicine and Health Sciences	28	62.2%	11	24.4%	6	13.3%	

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-28. Continued

Item 5: Bought or provided liquor for a minor	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
Physical Sciences and Mathematics	40	36.0%	35	31.5%	36	32.4%	
Social and Behavioral Sciences	93	43.9%	69	32.5%	50	23.6%	
Other	40	47.6%	18	21.4%	26	31.0%	
Service to athletics							
No	296	43.5%	198	29.1%	187	27.5%	4.67
Yes	178	50.4%	93	26.3%	82	23.2%	
Athletic governance							
No	458	46.0%	281	28.2%	257	25.8%	1.41
Yes	21	52.8%	11	28.2%	7	17.9%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	473	49.94 (11.77)	280	50.73 (11.94)	277	49.20 (11.69)	1.17
Years at institution	475	14.19 (10.52)	288	14.10 (10.62)	260	13.95 (10.25)	0.04
Negative perceptions of student-athletes	415	2.12 (0.65)	189	2.26 (0.70)	134	2.10 (0.64)	3.04*
Sport fandom	419	4.11 (1.55)	240	3.58 (1.61)	216	3.70 (1.62)	9.98***
Interaction with student-athletes	467	2.60 (1.13)	278	2.34 (1.15)	237	2.36 (1.10)	5.87**
Attendance at MFB events	421	2.03 (1.35)	240	1.70 (1.14)	216	1.69 (1.19)	7.95***
Attendance at MBA events	418	1.40 (0.79)	238	1.30 (0.69)	214	1.31 (0.78)	1.75
Attendance at WBB events	419	1.29 (0.70)	239	1.25 (0.69)	214	1.19 (0.60)	1.63

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 4-29. Missing data analysis for item 6 of drinking-related deviance scale (N = 507)

Item 6: Been drunk in a public place	Response		Prefer not to answer		Missing		$\chi^2$		
	n	%	n	%	n	%			
Chi-square analysis for nominal and ordinal variables			(N = 507)			(N = 271)		(N = 322)	
Sex									
Female	213	48.7%	102	23.3%	122	27.9%	1.83		
Male	286	47.0%	164	27.0%	158	26.0%			
Race									
Non-white	60	43.8%	39	28.5%	38	27.7%	1.08		
White	444	48.3%	231	25.1%	245	26.6%			
University									
OSU	131	49.2%	64	24.1%	71	26.7%	4.88		
UF	110	51.9%	43	20.3%	59	27.8%			
UGA	112	50.2%	61	27.4%	50	22.4%			
UI	95	50.3%	51	27.0%	43	22.8%			
Region									
South/SEC	222	51.0%	104	23.9%	109	25.1%	0.25		
Midwest/Big 10	226	49.7%	115	25.3%	114	25.1%			
Academic Rank									
Lecturer	69	56.6%	24	19.7%	29	23.8%	10.87		
Assistant Professor	97	47.1%	62	30.1%	47	22.8%			
Associate Professor	119	45.4%	65	24.8%	78	29.8%			
Full Professor	202	49.6%	108	26.5%	97	23.8%			
Other	20	43.5%	10	21.7%	16	34.8%			
Tenure Status									
Non-tenure	185	49.6%	96	25.7%	92	24.7%	0.38		
Tenure	321	47.9%	173	25.8%	176	26.3%			
Administrative position									
Non-administrator	386	48.3%	206	25.8%	208	26.0%	0.33		
Administrator	119	49.6%	63	26.3%	58	24.2%			
Discipline									
Architecture	2	13.3%	6	40.0%	7	46.7%	31.55*		
Arts and Humanities	99	51.0%	48	24.7%	47	24.2%			
Business	39	63.9%	11	18.0%	11	18.0%			
Education	37	45.1%	21	25.6%	24	29.3%			
Engineering	44	47.3%	21	22.6%	28	30.1%			
Law	3	75.0%	1	25.0%	0	0.0%			
Life Sciences	70	51.9%	35	25.9%	30	22.2%			
Medicine and Health Sciences	29	64.4%	10	22.2%	6	13.3%			

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 4-29. Continued

Item 6: Been drunk in a public place	Response		Prefer not to answer		Missing		$\chi^2$
	n	%	n	%	n	%	
Chi-square analysis for nominal and ordinal variables							
Physical Sciences and Mathematics	43	38.7%	33	29.7%	35	31.5%	
Social and Behavioral Sciences	99	46.7%	64	30.2%	49	23.1%	
Other	40	47.6%	18	21.4%	26	31.0%	
Service to athletics							
No	313	46.0%	184	27.0%	184	27.0%	5.15
Yes	188	53.5%	86	24.4%	79	22.4%	
Athletic governance							
No	485	48.7%	261	26.2%	250	25.1%	1.23
Yes	22	56.4%	10	25.6%	7	17.9%	
ANOVA for scale variables							
	n	x-bar (sd)	n	x-bar (sd)	n	x-bar (sd)	F
Age	499	50.33 (11.86)	261	50.11 (11.86)	270	49.11 (11.61)	0.97
Years at institution	502	14.54 (10.69)	268	13.57 (10.42)	253	13.80 (10.08)	0.89
Negative perceptions of student-athletes	435	2.14 (0.66)	174	2.23 (0.70)	129	2.09 (0.63)	1.86
Sport fandom	445	4.06 (1.55)	219	3.61 (1.63)	211	3.70 (1.62)	7.37**
Interaction with student-athletes	494	2.59 (1.13)	256	2.34 (1.14)	232	2.36 (1.09)	5.48**
Attendance at MFB events	447	2.01 (1.35)	219	1.72 (1.13)	211	1.67 (1.16)	6.91**
Attendance at MBA events	444	1.40 (0.80)	217	1.29 (0.66)	209	1.32 (0.79)	1.81
Attendance at WBB events	445	1.30 (0.72)	218	1.22 (0.64)	209	1.19 (0.61)	2.35

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

## CHAPTER 5

### RESULTS PREDICTING ACADEMIC DEVIANCE

#### **Academic Deviance by University and Sporting Group**

##### **Factorial ANOVA for General Cheating**

A factorial ANOVA was conducted to compare the effect of university and sporting group and the interaction effect between university and sporting group on perceptions of general cheating academic deviance (Table 5-1). University included four levels: University of Illinois (UI), University of Florida (UF), University of Georgia (UGA), and Ohio State University (OSU) and sporting group consisted of three levels: men's football (MFB), men's baseball (MBA), and women's basketball (WBB). The interaction effect was not significant, but the main effects for university and sport were significant.

The main effect for university yielded an F ratio of  $F(3, 401) = 4.47, p < .01, \eta^2 = 0.03$ , indicating a significant difference between UI ( $M = 2.08, SD = 0.63$ ), UF ( $M = 2.02, SD = 0.64$ ), UGA ( $M = 1.83, SD = 0.68$ ), and OSU ( $M = 1.86, SD = 0.70$ ). Significant differences using Tukey HSD found that faculty from UGA were less likely to perceive student-athletes as general cheaters compared to faculty at UI (Table 5-2). Figure 5-1 shows a visual of the means for perceptions of general cheating by university.

The main effect for sporting group yielded an F ratio of  $F(2, 401) = 12.74, p < .001, \eta^2 = 0.06$ , indicating a significant difference between MFB ( $M = 2.08, SD = 0.68$ ), MBA ( $M = 2.01, SD = 0.63$ ), and WBB ( $M = 1.72, SD = 0.62$ ). Significant differences using Tukey HSD found faculty believed WBB student-athletes were less likely to be perceived as cheaters generally compared to MFB and MBA student-athletes (Table 5-3). Figure 5-2 shows a visual of the means for perceptions of general cheating by sport.

## Factorial ANOVA for Relying on Others

A factorial ANOVA was conducted to compare the effect of university and sporting group and the interaction effect between university and sporting group on perceptions of relying on others academic deviance (Table 5-4). University included four levels (UI, UF, UGA and OSU) and sporting group consisted of three levels (MFB, MBA, and WBB). The interaction effect was not significant, but the main effects for university and sport were significant.

The main effect for university yielded an F ratio of  $F(3, 415) = 4.31, p < .01, \eta^2 = 0.03$ , indicating a significant difference between UI ( $M = 2.80, SD = 0.71$ ), UF ( $M = 2.97, SD = 0.78$ ), UGA ( $M = 2.72, SD = 0.84$ ), and OSU ( $M = 2.68, SD = 0.83$ ). Significant differences using Tukey HSD found faculty at OSU had significantly lower perceptions of student-athletes relying on others compared to faculty at UF (Table 5-5). Figure 5-3 shows a visual of the means for perceptions of relying on others by university.

The main effect for sporting group yielded an F ratio of  $F(2, 415) = 13.99, p < .001, \eta^2 = 0.06$ , indicating a significant difference between MFB ( $M = 3.01, SD = 0.80$ ), MBA ( $M = 2.75, SD = 0.76$ ), and WBB ( $M = 2.52, SD = 0.80$ ). Significant differences using Tukey HSD found faculty believed WBB student-athletes were less likely to rely on others as a form of cheating compared to MFB and MBA student-athletes (Table 5-6). Additionally, faculty believed MFB student-athletes were significantly more likely to rely on others compared to both MBA and WBB. Figure 5-4 shows a visual of the means for perceptions of relying on others by sporting group.<sup>28</sup>

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<sup>28</sup> A MANOVA revealed there was a statistically significant multivariate main effect for university,  $F(6, 794) = 3.96, p < .001$ ; Wilk's  $\Lambda = 0.94$ , partial  $\eta^2 = .97$ . Also, there was a statistically significant main effect for sport,  $F(4, 796) = 8.77, p < .001$ ; Wilk's  $\Lambda = 0.92$ , partial  $\eta^2 = .99$ .

## **Bivariate Relationships for the Entire Sample**

Bivariate correlations were run for the two academic deviance scales (general cheating and relying on others) and the independent variables reflecting individual status attributes of faculty, student-athlete attributes, university attributes, and university athletic attributes (Tables 5-7, 5-8, 5-9, and 5-10). Following the correlational analysis, ordinary least squares (OLS) regressions were run for any variables correlated at the bivariate level for the entire sample.

### **General Cheating**

There were several independent variables that were significant at the bivariate level (Table 5-7, 5-8, 5-9, and 5-10). For the general cheating scale, faculty age, academic rank (lecturer status), participation in service involving athletics, sports fandom, attendance at MFB and MBA events, contact with student athletes, UI, MFB sporting group, and WBB sporting group were significantly related to perceptions of student-athlete general cheating.

As far as faculty status attributes, older faculty were less likely to perceive student-athletes as general cheaters ( $r = -0.11, p < .05$ ) (Table 5-7). Lecturers were less likely to perceive student-athletes as general cheaters compared to faculty of other ranks ( $r = -0.11, p < .05$ ). Faculty involved in service to athletics were also significantly less likely to perceive general cheating among student-athletes compared to those who had not participated in service to athletics ( $r = -0.11, p < .05$ ). Faculty that were bigger fans of their university sports program were less likely to perceive student-athletes as general cheaters ( $r = -0.22, p < .001$ ). Additionally, faculty that attended more MFB events were less likely to perceive student-athletes as general cheaters ( $r = -0.13, p < .01$ ). Finally, faculty with higher attendance at MBA events ( $r = -0.12, p < .05$ ) and that

had more contact with student-athletes ( $r = -0.12$ ,  $p < .05$ ) were less likely to perceive them as general cheaters.

Only one university status independent variable was significantly related to the general cheating scale (Table 5-8). Faculty at UI were more likely to perceive student athletes as general cheaters than faculty at the three other universities ( $r = 0.11$ ,  $p < .05$ ).

As far as student-athlete status attributes, two of the manipulation variables were significantly related to general cheating at the bivariate level, MFB and WBB (Table 5-9). Faculty who were randomly assigned MFB student-athletes were significantly more likely to perceive general cheating compared to faculty assigned MBA or WBB ( $r = 0.16$ ,  $p < .001$ ). Additionally, faculty who were randomly assigned WBB student-athletes were significantly less like to perceive general cheating compared to faculty assigned MFB and MBA ( $r = -0.23$ ,  $p < .001$ ). No perceptions of student-athlete attribute variables were significantly related to the general cheating scale at the bivariate level.

None of the university athletic status attributes were significantly associated with the general cheating scale of academic deviance (Table 5-10).

### **Relying on Others**

There were several variables significantly associated with the relying on others scale (Table 5-7, 5-8, 5-9, and 5-10). These included: faculty age, race, academic rank (assistant and full professor), tenure status, time at current institution, sports fandom, attendance at MFB events, UF, MFB sporting group, WBB sporting group, perceptions of female student-athletes, and perceptions of black student-athletes.

As far as faculty status attributes, older faculty were less likely to perceive student-athletes as reliant on others ( $r = -0.13$ ,  $p < .01$ ) (Table 5-7). White faculty were

significantly more likely to believe student-athletes are reliant on others compared to non-white faculty ( $r = 0.09$ ,  $p < .05$ ). Full professors and those with tenure status were less likely to perceive student-athletes as reliant on others compared to faculty of other ranks ( $r = -0.12$ ,  $p < .05$ ) and non-tenure status ( $r = -0.10$ ,  $p < .05$ ). However, assistant professors were more likely to perceive student-athletes as reliant on others compared to faculty of other ranks ( $r = 0.09$ ,  $p < .05$ ). Faculty that had been at their current institution longer were significantly less likely to perceive student-athletes as reliant on others ( $r = -0.11$ ,  $p < .05$ ). Faculty that were bigger fans of their university sports program were less likely to perceive student-athletes as reliant on others ( $r = -0.20$ ,  $p < .001$ ). Additionally, faculty that attended more MFB events were less likely to perceive student-athletes as reliant on others ( $r = -0.14$ ,  $p < .01$ ).

Only one university status independent variable was significantly related to the relying on others scale (Table 5-8). Faculty at UF were more likely to perceive student-athletes as reliant on others compared to faculty at the three other universities ( $r = 0.13$ ,  $p < .01$ ).

There were four student-athlete status attribute variables significantly associated with the relying on others academic deviance scale (Table 5-9). Faculty randomly assigned the MFB sporting group were more likely to perceive the athletes relying on others compared to faculty assigned MBA or WBB sporting groups ( $r = 0.22$ ,  $p < .001$ ). Faculty randomly assigned the WBB sporting group were less likely to perceive relying on others compared to faculty assigned MFB or MBA ( $r = -0.22$ ,  $p < .001$ ). Faculty that estimated a smaller percentage of female student-athletes on their campus were more likely to perceive student-athletes as reliant on others ( $r = -0.11$ ,  $p < .05$ ). Faculty that

also estimated a larger percentage of black student-athletes on their campus were more likely to perceive student-athletes as reliant on others ( $r = 0.18$ ,  $p < .001$ ).

None of the university athletic status attributes were significantly associated with the relying on others scale of academic deviance (Table 5-10).

### **OLS Regression Models for Entire Sample**

#### **Predicting General Cheating**

OLS regression models were run predicting the general cheating with independent variables that were significant at the bivariate level. Additionally, the models included the manipulation variables of university and sporting groups, which were dummy coded and with one variable left out. These independent variables include: age, academic rank (lecturer), service involving athletics, sports fandom, attendance at MFB events, attendance at MBA events, contact with student-athletes, UI, UF, UGA, MFB and MBA sporting groups (Table 5-11).

The overall model predicting general cheating was significant ( $F = 5.25$ ,  $p < .001$ ,  $R^2 = 0.14$ ). Several variables remained significant after controlling for other variables, which include sports fandom, attendance at MBA events, UI, UF, MFB and MBA. The bigger fans faculty are of their universities' sports programs the less likely they were to perceive student-athletes as general cheaters ( $b = -0.06$ ,  $p < .05$ ). The more MBA events faculty attended the less likely they were to perceive student-athletes as general cheaters ( $b = -0.10$ ,  $p < .05$ ). Faculty at UI and UF were significantly more likely to perceive student-athletes as general cheaters compared to faculty at OSU (UI:  $b = 0.24$ ,  $p < .01$ ; UF:  $b = 0.29$ ,  $p < .01$ ). Additionally, faculty that were assigned MFB and MBA were significantly more likely to perceive student-athletes as general cheaters compared to WBB (MFB:  $b = 0.34$ ,  $p < .001$ ; MBA:  $b = 0.29$ ,  $p < .001$ ).

## Predicting Relying on Others

An OLS regression model was run predicting the relying on others with faculty status attributes that were significant at the bivariate level. These independent variables include: age, race (white), academic rank (assistant professor and full professor), tenure status, time at current institution, sports fandom, attendance at MFB events, estimates of black student-athletes, estimates of female student-athletes, UI, UF, UGA, MFB and MBA sporting group (Table 5-12).

The overall model predicting relying on others academic deviance was significant ( $F = 4.39$ ,  $p < .001$ ,  $R^2 = 0.19$ ). Seven variables were significant after controlling for other variables, which included race, sports fandom, UF, perceptions of female student-athletes, perceptions of black student-athletes, MFB and MBA. White faculty were significantly more likely to perceive student-athletes as reliant on others compared to non-white faculty ( $b = 0.20$ ,  $p < .05$ ). Faculty that were bigger fans of their university sports program were significantly less likely to perceive student-athletes as reliant on others academically ( $b = -0.10$ ,  $p < .01$ ). Faculty at UF were significantly more likely to perceive student-athletes as reliant on others compared to faculty at OSU ( $b = 0.30$ ,  $p < .01$ ). Faculty that estimated higher percentages of female student-athletes on their campus were significantly less likely to perceive student-athletes as reliant on others ( $b = -0.01$ ,  $p < .05$ ). However, faculty that estimated higher percentages of black student-athletes on their campus were significantly more likely to perceive student-athletes as reliant on others ( $b = 0.01$ ,  $p < .001$ ). Additionally, faculty that were assigned MFB and MBA groups, were significantly more likely to perceive student-athletes as reliant on others (MFB:  $b = 0.38$ ,  $p < .001$ ; MBA:  $b = 0.25$ ,  $p < .05$ ).

## **Academic Deviance by University**

### **Bivariate Relationships for Individual Universities**

**University of Illinois.** There were five faculty status attributes significantly related to the general cheating academic deviance scale for UI (Table 5-13). Lecturers were significantly less likely to perceive student-athletes as general cheaters compared to faculty that were not lecturers ( $r = -0.22$ ,  $p < .05$ ). Alternatively, faculty with an associate professor rank at UI were significantly more likely to perceive student-athletes as general cheaters compared to faculty of other ranks ( $r = 0.27$ ,  $p < .05$ ). Additionally, UI faculty that described themselves as fans of UI sports ( $r = -0.32$ ,  $p < .01$ ), attended MBA events ( $r = -0.26$ ,  $p < .05$ ), and had more contact with student-athletes ( $r = -0.23$ ,  $p < .05$ ) were significantly less likely to perceive student-athletes as general cheaters.

Of the student-athlete status attributes, only two variables were significantly related to academic deviance at the bivariate level for UI (Table 5-14). Faculty that were randomly assigned WBB were less likely to perceive general cheating ( $b = -0.28$ ,  $p < .01$ ). Additionally, faculty at UI that estimated a larger percentage of black student-athletes on their campus were significantly more likely to perceive students-athletes as general cheaters ( $b = 0.24$ ,  $p < .05$ ).

There were four faculty status attributes significantly related to the relying on others academic deviance scale for UI, faculty race, academic discipline (law), sports fandom, and attendance at MBA events (Table 5-13). White faculty at UI were significantly more likely to perceive student-athletes as reliant on others compared to non-white faculty ( $r = 0.22$ ,  $p < .05$ ). UI faculty that identified law as their discipline were significantly less likely to perceive student-athletes as reliant on others ( $r = -0.28$ ,  $p < .01$ ). Additionally, UI faculty that described themselves as fans of UI sports ( $r = -0.23$ ,  $p$

$< .05$ ) and attended MBA events ( $r = -0.25$ ,  $p < .05$ ) were significantly less likely to perceive student-athletes as reliant on others. There were no student-athlete status attributes significantly related to relying on others for UI (Table 5-14)

**University of Florida.** Only one faculty status attribute was significantly associated with the general cheating academic deviance scale at UF, which was race (Table 5-13). White faculty at UF were significantly more likely to perceive student-athletes as general cheaters compared to non-white faculty ( $r = 0.22$ ,  $p < .05$ ).

Additionally, there were four student-athlete status attributes significantly related to general cheating at UF, MFB, WBB, and percentage of MFB and WBB athletes (Table 5-14). Faculty at UF that were randomly assigned to the MFB sporting group were significantly more likely to perceive general cheating compared to faculty assigned other sport groups ( $r = 0.23$ ,  $p < .05$ ). Additionally, those at UF randomly assigned WBB were significantly less likely to perceive general cheating compared to faculty assigned other groups ( $r = -0.28$ ,  $p < .01$ ). Faculty at UF that estimated a higher percentage of MFB and WBB athletes on their campus were significantly less likely to perceive student-athletes as general cheaters (MFB:  $r = -0.22$ ,  $p < .05$ ; WBB:  $r = -0.23$ ,  $p < .05$ ).

There were two faculty status attributes significantly associated with the relying on others scale at UF, race and academic rank (full professor) (Table 5-13). Again, white faculty at UF were significantly more likely to perceive student-athletes as reliant on others compared to non-white faculty ( $r = 0.19$ ,  $p < .05$ ). Also, UF faculty with the rank of full professor were significantly less likely to perceive student-athletes as reliant on others compared to faculty of other ranks ( $r = -0.21$ ,  $p < .05$ ).

There was only student-athlete status attribute significantly related to relying on others for UF (Table 5-14). Similar to the general cheating scale, faculty at UF randomly assigned to the WBB sporting group were significantly less likely to perceive relying on others compared to faculty assigned other sport groups ( $r = -0.28$ ,  $p < .01$ ).

**University of Georgia.** There were four faculty status attributes significantly associated with the general cheating academic deviance scale at UGA, which was academic discipline (education and physical sciences and mathematics), service involving athletics, and attendance at MBA events (Table 5-13). UGA faculty in education were less likely to perceive student-athletes as general cheaters compared to faculty in other disciplines ( $r = -0.21$ ,  $p < .05$ ). Alternatively, UGA faculty in physical sciences and mathematics were more likely to perceive student-athletes as general cheaters compared to faculty in other disciplines ( $r = 0.28$ ,  $p < .01$ ). Additionally, UGA faculty that were involved in service to athletics ( $r = -0.33$ ,  $p < .01$ ) and attended more MBA events ( $r = -0.30$ ,  $p < .01$ ) were significantly less likely to perceive student-athletes as general cheaters compared to faculty that were not as involved in service to athletics and attended less MBA events.

There were also two student-athlete status attributes significantly related to general cheating at the bivariate level for UGA (Table 5-14). First, faculty at UGA that were randomly assigned MFB were significantly more likely to perceive general cheating compared to faculty assigned other sport groups ( $r = 0.20$ ,  $p < .01$ ). Second, faculty at UGA that were assigned WBB were significantly less likely to perceive general cheating compared to faculty assigned to other sport groups ( $r = -0.33$ ,  $p < .001$ ).

There were slightly different faculty status attributes significantly associated with the relying on others academic deviance scale for UGA (Table 5-13). First, older faculty were significantly less likely to perceive student-athletes as reliant on others ( $r = -0.21$ ,  $p < .05$ ). Faculty that had been at UGA longer were also significantly less likely to perceive student-athletes as reliant on others compared to those who had been at UGA for a shorter period of time ( $r = -0.23$ ,  $p < .05$ ). Similar to the general cheating scale, faculty that were involved in service to athletics ( $r = -0.21$ ,  $p < .05$ ) and attended MBA events ( $r = -0.34$ ,  $p < .001$ ) were significantly less likely to perceive student-athletes as reliant on others compared to faculty that were not involved in service to athletics and attend less MBA events.

As for student-athlete attributes, three variables were significantly related to relying on others for UGA (Table 5-14). First, faculty at UGA that were randomly assigned to the MFB sporting group were significantly more likely to perceive relying on others academic deviance compared to faculty assigned other sport groups ( $r = 0.34$ ,  $p < .001$ ). Second, faculty at UGA that were randomly assigned to the WBB sporting group were significantly less likely to perceive general cheating compared to faculty assigned to other sport groups ( $r = -0.32$ ,  $p < .01$ ). Finally, faculty at UGA that estimated a higher percentage of black student-athletes on their campus were significantly more likely to perceive student-athletes as reliant on others ( $r = 0.29$ ,  $p < .05$ ).

**Ohio State University.** Only one faculty status attribute had a significant bivariate relationship with the general cheating scale at OSU, which was sports fandom (Table 5-13). Sports fandom was negatively related to general cheating, where faculty that are bigger fans of OSU sports were less likely to perceive student-athletes as

general cheaters compared to faculty that were not as big of fans of OSU sports ( $r = -0.26$ ,  $p < .01$ ). There were no student-athlete status attributes significantly related to general cheating at the bivariate level for OSU (Table 5-10).

There were two faculty status attributes significantly related to the relying on others academic deviance scale, which were sports fandom and attendance at MFB events (Table 5-13). Similar to the general cheating scale, faculty that are bigger fans of OSU sports were less likely to perceive student-athletes as reliant on others compared to faculty that were not as big of fans of OSU sports ( $r = -0.32$ ,  $p < .001$ ). Additionally, faculty that attended more MFB events at OSU were less likely to perceive student-athletes as reliant on others compared to faculty that attended less MFB events at OSU ( $r = -0.20$ ,  $p < .05$ ).

As for student-athlete status attributes, three variables were significantly related to relying on others for OSU (Table 5-14). OSU faculty that were randomly assigned MFB were significantly more likely to perceive student-athletes as reliant on others compared to faculty assigned other sporting groups ( $r = 0.26$ ,  $p < .01$ ). However, OSU faculty that were randomly assigned WBB were significantly less likely to perceive student-athletes as reliant on others compared to faculty assigned other groups ( $r = -0.21$ ,  $p < .05$ ). Additionally, faculty at OSU that estimated a higher percentage of black student-athletes on their campus were significantly more likely to perceive student-athletes as reliant on others ( $r = 0.24$ ,  $p < .05$ ).

### **OLS Regression by University and Clogg Coefficient Comparison Test**

**Predicting general cheating.** Independent variables that were significantly associated with at least one of the university groups were entered into OLS regression

models to predict general cheating<sup>29</sup>. More specifically, OLS regression models were run for each university using race, academic rank (lecturer and associate professor), academic discipline (education and physical sciences and math), service involving athletics, sports fandom, attendance at MBA events, contact with student-athletes, and the manipulation variables of MFB and MBA. Table 5-15 shows OLS regression results predicting general cheating by university.

For UI, the overall model was significant ( $F = 3.13$ ,  $p < .01$ ,  $R^2 = 0.34$ ) (Table 5-15). Two variables remained significant for the UI subgroup after controlling for other variables, which included the manipulation variables MFB and MBA. UI faculty that were randomly assigned MFB student-athletes to answer questions about were significantly more likely to perceive general cheating compared to faculty assigned WBB ( $b = 0.46$ ,  $p < .01$ ). Similarly, UI faculty that were randomly assigned MBA student-athletes were significantly more likely to perceive general cheating compared to faculty assigned WBB ( $b = 0.43$ ,  $p < .05$ ).

For UGA, the overall model was significant ( $F = 3.11$ ,  $p < .01$ ,  $R^2 = 0.28$ ) (Table 5-15). Two variables remained significant for the UGA subgroup after controlling for other variables, which included service involving athletics and MFB. Faculty at UGA that participated in service involving athletics were significantly less likely to perceive

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<sup>29</sup> No perceptions of student-athlete status attribute variables were included in the regression analysis, even though they were significant at the bivariate level. Adding these three variables to the model created power issues. When the models were run including all three variables, none of the overall models were significant. I suspect this is because of listwise deletion, where cases are thrown out if one or more variables are missing data. There was a high frequency of missingness for the perceptions of student-athlete status attribute variables. The sample size and number of independent variables included in regression model is important for power. A widely accepted rule of thumb for the minimum number of participants to use in multiple regression analysis is by Harris (1985), where the number of participants should exceed the number of independent variables by at least 50. By not including those variables, the n is more appropriate.

student-athlete general cheating compared to faculty that have not participated in service involving athletics ( $b = -0.29$ ,  $p < .05$ ). UGA faculty that were randomly assigned MFB student-athletes to answer questions about were significantly more likely to perceive general cheating compared to faculty assigned WBB ( $b = 0.36$ ,  $p < .05$ ).

The overall models for UF and OSU were not significant (UF:  $F = 0.32$ ,  $p > .05$ ,  $R^2 = 0.14$ ; OSU:  $F = 0.92$ ,  $p > .05$ ,  $R^2 = 0.09$ ) (Table 5-15). However, for the UF subgroup, MFB was significant controlling for other variables ( $b = 0.35$ ,  $p < .05$ ), meaning UF faculty that were assigned MFB student-athletes were significantly more likely to perceive general cheating than faculty assigned WBB student-athletes.

The regression coefficient comparison test developed by Clogg, Petkova, and Haritou (1995) determined there are some significant differences concerning some variables by university group (Table 5-16 for report of z-values associated with each independent variable and university). These findings indicate the effect of service involving athletics on perceptions of student-athlete general cheating was stronger for respondents at UGA than UI ( $z = 2.10$ ,  $p < .05$ ) and OSU ( $z = -2.56$ ,  $p < .05$ ). Additionally, the effect of the MFB manipulation on general cheating was stronger for UI compared to OSU ( $z = 1.96$ ,  $p < .05$ )

**Predicting relying on others.** Faculty and student-athlete status attributes that were significantly associated with at least one of the university groups were entered into OLS regression models to predict relying on others. More specifically, OLS regression models were run for each university using age, race, academic rank (full professor), time at current institution, service involving athletics, sports fandom, attendance at MFB

and MBA events, MFB, and MBA<sup>30</sup>. Table 5-17 shows OLS regression results predicting relying on others by university.

For UI, the overall model was significant ( $F = 2.24$ ,  $p < .05$ ,  $R^2 = 0.24$ ). Three variables remained significant in the model controlling for other variables, which include faculty race, sports fandom, and attendance at MBA events. White faculty at UI were significantly more likely to perceive student-athletes as reliant on others ( $b = 0.44$ ,  $p < .05$ ). Faculty at UI that were larger fans of their university sports program were less likely to perceive student-athletes as reliant on others ( $b = -0.15$ ,  $p < .05$ ). Additionally, faculty at UI that attended more MBA events were significantly less likely to perceive student-athletes as reliant on others ( $b = -0.22$ ,  $p < .05$ ).

For UGA, the overall model was significant ( $F = 3.32$ ,  $p < .01$ ,  $R^2 = 0.27$ ). Two variables remained significant in the model controlling for other variables, which include attendance at MBA events and MFB sporting group. Faculty at UGA that attended more MBA events were significantly less likely to perceive student-athletes as reliant on others ( $b = -0.25$ ,  $p < .05$ ). Additionally, faculty at UGA that were randomly assigned to the MFB manipulation were significantly more likely to perceive reliance on others compared to those assigned to the WBB sporting group ( $b = 0.64$ ,  $p < .01$ ).

For OSU, the overall model was significant ( $F = 2.40$ ,  $p < .05$ ,  $R^2 = 0.18$ ). There were two variables significantly related to relying on others after controlling for other variables, which include sports fandom and MFB sporting group. Faculty at OSU that

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<sup>30</sup> I chose not to include the academic discipline (law) variable in the models, even though it was significant at the bivariate level to at least one of the universities, because the UF, UGA, and OSU samples did not have any observations. Therefore, the variable would be dropped from their models. Additionally, no perceptions of student-athlete status attribute variables included in the regression analysis, even though they were significant at the bivariate level. Adding these variables to the model created power issues.

were bigger fans of the sports program were significantly less likely to perceive that student-athletes are reliant on others ( $b = -0.11$ ,  $p < .05$ ). Also, faculty at OSU that were assigned to the MFB manipulation were significantly more likely to perceive reliance on others compared to those assigned to the WBB sporting group ( $b = 0.52$ ,  $p < .01$ ).

For UF, the overall model was not significant ( $F = 1.32$ ,  $p > .05$ ,  $R^2 = 0.13$ ). In addition, none of the individual variables were significant predictors of relying on others.

The regression coefficient comparison test developed by Clogg, Petkova, and Haritou (1995) determined some significant differences concerning the variables by university group. Table 5-18 shows a report of z-values associated with each independent variable and university. The effect of race on perceptions of student-athletes relying on others was significantly different for faculty at UI compared to UGA ( $z = 2.01$ ,  $p < .05$ ). The coefficient for UI was significant and positive, meaning white faculty at UGA were significantly more likely to perceive student-athletes relying on others. However, for UGA, the coefficient was negative and non-significant. The effect of time faculty have been at their institution on perceptions of student-athletes relying on others was stronger for UGA compared to UI ( $z = 2.12$ ,  $p < .05$ ). Finally, the effect of attendance at MBA events on perceptions of student-athletes relying on others was significantly different for UGA compared to UF ( $z = 2.01$ ,  $p < .05$ ). The coefficient for UGA was significant and negative, meaning the more MBA events UGA faculty attended the less perceptions of relying on others they had regarding student-athletes. However, the coefficient for UF was positive and non-significant.

## **Academic Deviance by Student-Athlete Sporting Group**

### **Bivariate Relationships by Sporting Group**

**MFB.** Six independent variables were significantly associated with the general cheating academic deviance scale for the MFB subgroup (Table 5-19, 5-20, 5-21, and 5-22). Two of the significant independent variables are faculty status attributes, academic rank (associate professor) and sports fandom (Table 5-19). Associate professors were significantly more likely to perceive MFB athletes as general cheaters than faculty of other ranks ( $r = 0.25$ ,  $p < .01$ ). Also, faculty that were fans of their university sports program were significantly less likely to perceive MFB athletes as general cheaters (-0.24,  $p < .01$ ). No student-athlete status attributes were significantly related at the bivariate level with academic deviance for the MFB subgroup (Table 5-20). One university status attribute was significantly related for MFB at the bivariate level, which was OSU (Table 5-21). Faculty at OSU were significantly less likely to perceive MFB student-athletes as general cheaters compared to the other universities (-0.18,  $p < .05$ ). Finally, three university athletic attributes had significant negative relationships with general cheating for MFB (Table 5-22). These included student-athlete population ( $p = -0.18$ ,  $p < .05$ ), varsity athletic teams ( $p = -0.18$ ,  $p < .05$ ), and NCAA infractions ( $p = -0.18$ ,  $p < .05$ ).

There were seven independent variables significantly related to the relying on others academic deviance scale for MFB (Tables 5-19, 5-20, 5-21, and 5-22). They were all faculty status attributes, which included: age, academic rank (full professor), academic discipline (law and other), time at current institution, sports fandom, and attendance at MFB events (Table 5-19). Older faculty were less likely to perceive MFB student-athletes as reliant on others ( $r = -0.18$ ,  $p < .05$ ). Faculty in the rank of full

professor were significantly less likely to perceive MFB athletes as reliant on others compared to faculty in other ranks ( $r = -0.19$ ,  $p < .05$ ). Faculty in the academic disciplines of law ( $r = -0.15$ ,  $p < .05$ ) and other category ( $r = -0.17$ ,  $p < .05$ ) were significantly less likely to perceive MFB athletes as reliant on others compared faculty in other disciplines. Finally, faculty that had been at the institution longer ( $r = -0.17$ ,  $p < .05$ ), were bigger fans of their university sport program ( $r = -0.25$ ,  $p < .01$ ), and attended more MFB events ( $r = -0.22$ ,  $p < .01$ ) were also significantly less likely to perceive MFB athletes as reliant on others.

**MBA.** Four variables were significantly related to general cheating at the bivariate level for the MBA subgroup (Tables 5-19, 5-20, 5-21, and 5-22). Two were faculty status attributes, which included academic discipline (engineering) and sports fandom (Table 5-19). Faculty in engineering were significantly less likely to perceive MBA athletes as general cheaters compared to faculty in other disciplines ( $r = -0.29$ ,  $p < .001$ ). Additionally, faculty that are bigger fans of their university sports program were significantly less likely to perceive MBA athletes as general cheaters ( $r = -0.34$ ,  $p < .001$ ).

There was one student-athlete status attribute related at the bivariate level, which was perception of percentage of MBA athletes (Table 5-20). Faculty that estimated a higher percentage of MBA student-athletes on their campus, were significantly more likely to perceive MBA athletes as general cheaters ( $r = 0.19$ ,  $p < .05$ ). There was also one university status attribute significantly related to general cheating at the bivariate level for the MBA subgroup, which was UI (Table 5-21). Faculty at UI were more likely to perceive MBA athletes as general cheaters compared to the three other

institutions ( $r = 0.22$ ,  $p < .05$ ) There were no athletic status attributes significantly related to general cheating at the bivariate level for the MBA subgroup (Table 5-22).

There were eleven independent variables significantly related to the relying on others academic deviance scale for MBA (Tables 5-19, 5-20, 5-21, and 5-22). Three were faculty status attributes, which included academic rank (full professor), academic discipline (business), and sports fandom (Table 5-19). Full professors were significantly less likely to perceive MBA athletes as reliant on others compared to faculty of other ranks ( $b = -0.18$ ,  $p < .05$ ). Faculty in business were significantly more likely to perceive MBA athletes as general cheaters compared to other disciplines ( $r = 0.17$ ,  $p < .05$ ). Additionally, faculty that are bigger fans of their university sports program were significantly less likely to perceive MBA athletes as general cheaters ( $r = -0.31$ ,  $p < .001$ ).

There were three student-athlete status attributes significantly related to relying on others at the bivariate level for the MBA subgroup (Table 5-20). Faculty that estimated a higher percentage of black student-athletes on their campus, were significantly more likely to perceive MBA athletes as reliant on others ( $r = 0.26$ ,  $p < .01$ ). Additionally, faculty that estimated a higher percentage of MFB and MBA athletes on their campus were significantly more likely to perceive MBA athletes as reliant on others (MFB:  $r = 0.21$ ,  $p < .05$ ; MBA:  $r = 0.18$ ,  $p < .05$ ).

There were two university status attributes significantly related to relying on others- OSU and UF- for the MBA subgroup (Table 5-21). Faculty at OSU were significantly less likely to perceive MBA student-athletes as reliant on others compared to the three other universities ( $r = -0.18$ ,  $p < .05$ ). However, faculty at UF were

significantly more likely to perceive MBA student-athletes as reliant on others compared to faculty at the three other universities ( $r = 0.23$ ,  $p < .01$ ).

Finally, there were three university athletic status attributes significantly related to the relying on other academic deviance scale for the MBA subgroup (Table 5-22). These include: student-athlete population, varsity athletic teams, and NCAA infractions. Faculty at universities with larger student-athlete populations ( $r = -0.19$ ,  $p < .05$ ), more varsity athletic teams ( $r = -0.19$ ,  $p < .05$ ), and NCAA infractions ( $r = -0.19$ ,  $p < .05$ ) were significantly less likely to perceive MBA student-athletes as reliant on others.

**WBB.** There were five independent variables significantly related to general cheating for the WBB subgroup (Tables 5-19, 5-20, 5-21, and 5-22). Faculty status attributes were four of the five significant variables, which included age, service involving athletics, attendance at MBA events, and contact with student-athletes (Table 5-19). Older faculty were significantly less likely to perceive WBB student-athletes as general cheaters ( $r = -0.20$ ,  $p < .05$ ). Faculty that were involved in service to athletics were significantly less likely to perceive WBB athletes as general cheaters compared to faculty that were not involved in service to athletics ( $r = -0.17$ ,  $p < .05$ ). Additionally, faculty that attended more MBA events ( $r = -0.20$ ,  $p < .05$ ) and had more contact with student-athletes on their campuses ( $r = -0.26$ ,  $p < .001$ ) were significantly less likely to perceive WBB as general cheaters compared to faculty that attended less MBA events and had less contact with student-athletes on their campus.

Only one of the university status attribute variables was significantly related to general cheating for the WBB subgroup (Table 5-20). Faculty at UGA were significantly

less likely to perceive WBB athletes as general cheaters compared to faculty at the three other universities ( $r = -0.20$ ,  $p < .05$ ).

There were only two independent variables significantly related to the relying on others academic deviance scale for the WBB subgroup (Tables 5-19, 5-20, 5-21, and 5-22). These included academic rank (assistant professor) and perception of percentage of male athletes on their campus. Assistant professors were significantly less likely to perceive WBB athletes as reliant on others compared to faculty of other ranks ( $b = -0.16$ ,  $p < .05$ ) (Table 5-19). Faculty that estimated a larger number of male athletes on their campus were significantly less likely to perceive WBB student-athletes as reliant on others ( $r = -0.17$ ,  $p < .05$ ) (Table 5-20).

### **OLS Regression by Sporting Group and Clogg Coefficient Comparison Test**

**Predicting general cheating.** Variables that were significantly associated with at least one of the sporting groups were entered into OLS regression models to predict general cheating. More specifically, OLS regression models were run for each sporting group using age, academic rank (associate professor), academic discipline (engineering), service involving athletics, sports fandom, attendance MBA events, contact with student-athletes, UI, UGA, and UF<sup>31</sup>. Table 5-23 shows OLS regression results predicting general cheating by sporting group.

For MFB, the overall model is significant ( $F = 2.31$ ,  $p < .05$ ,  $R^2 = 0.16$ ) (Table 5-23). Two variables remained significant after controlling for other variables in the MFB model, academic rank (associate professor) and UF. Associate professors were

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<sup>31</sup> The significant university athletic status attributes were not included in the models due to multicollinearity. These variables were highly correlated with the university status attributes, especially OSU. Additionally, the significant perceptions of student-athlete status attributes were not included in the analysis for power issues.

significantly more likely to perceive MFB athletes as general cheaters compared to faculty of other ranks ( $b = 0.38$ ,  $p < .01$ ). Additionally, faculty at UF were significantly more likely to perceive MFB athletes as general cheaters compared to faculty at OSU ( $b = 0.37$ ,  $p < .05$ ).

For MBA, the overall model is significant ( $F = 3.16$ ,  $p < .01$ ,  $R^2 = 0.23$ ) (Table 5-23). Three variables remained significant after controlling for other variables in the MBA model, academic discipline (engineering), sports fandom, and UI. Faculty in engineering were significantly less likely to perceive MBA student-athletes as general cheaters compared to faculty in other disciplines ( $b = -0.68$ ,  $p < .01$ ). Faculty that were bigger sports fans of their university sports program were significantly less likely to perceive MBA athletes as general cheaters ( $b = -0.11$ ,  $p < .01$ ). Additionally, faculty at UI were significantly more likely to perceive MBA athletes as general cheaters compared to faculty at OSU ( $b = 0.37$ ,  $p < .05$ ).

For WBB, the overall model is significant ( $F = 2.98$ ,  $p < .01$ ,  $R^2 = 0.20$ ) (Table 5-23). Two variables remained significant after controlling for other variables in the WBB model, attendance at MBA events and contact with student-athletes. Faculty that attended more MBA events ( $b = -0.13$ ,  $p < .05$ ) and had more contact with student athletes ( $b = -0.11$ ,  $p < .05$ ) were less likely to perceive WBB athletes as general cheaters.

The regression coefficient comparison test developed by Clogg, Petkova, and Haritou (1995) determined there are significant differences concerning some independent variables by sporting group. Table 5-24 reports the z-values associated with each independent variable. First, the effect of academic rank (associate professor

status) on perceptions of student-athletes general cheating was significantly different MFB compared to WBB ( $z = 3.15$ ,  $p < .05$ ). The coefficient for MFB was significant and positive, meaning associate professors were more likely to perceive MFB student athletes as involved in general cheating. However, the coefficient for WBB was non-significant. Second, the effect of academic discipline (engineering) on perceptions of student-athletes general cheating was significantly different for MBA compared to MFB ( $z = 2.48$ ,  $p < .05$ ) and WBB ( $z = -2.09$ ,  $p < .05$ ). The coefficient for MBA was negative and significant, meaning faculty in engineering were less likely to perceive general cheating among MBA student-athletes. However, for MFB and WBB the coefficient was non-significant. Third, the effect of sports fandom on perceptions of student-athletes general cheating was significantly different for MBA compared to WBB ( $z = -2.80$ ,  $p < .05$ ). The coefficient for MBA was negative and significant, meaning faculty that were bigger fans of their university sports program were less likely to perceive MBA student-athletes as general cheaters. However, for WBB, the coefficient was non-significant. Last, the effect of contact with student-athletes on perceptions of student-athlete cheating was significantly different for WBB than MBA ( $z = 2.34$ ,  $p < .05$ ). The coefficient for WBB is negative and significant, meaning faculty with more contact with student-athletes are less likely to perceive WBB athletes as general cheaters. However, the coefficient for MBA was non-significant.

**Predicting relying on others.** Variables that were significantly associated with relying on others for at least one of the sporting groups were entered into OLS regression models to predict relying on others. More specifically, OLS regression models were run for each sporting group using age, academic rank (associate professor

and full professor), academic discipline (business and other category<sup>32</sup>), time at current institution, sports fandom, attendance MFB events, UI, UGA and UF<sup>33</sup>. Table 5-25 shows OLS regression results predicting relying on others by sporting group.

For MFB, the overall model is significant ( $F = 2.08$ ,  $p < .05$ ,  $R^2 = 0.14$ ) (Table 5-25). There is only one variable that remains significant after controlling for other variables, which is sport fandom. Faculty that were bigger fans of their university sports program were significantly less likely to perceive MFB student-athletes as reliant on others ( $b = -0.10$ ,  $p < .05$ ).

For MBA, the overall model is significant ( $F = 2.96$ ,  $p < .01$ ,  $R^2 = 0.23$ ) (Table 5-25). There are two variables that remain significant after controlling for other variables, which are academic discipline (business) and sport fandom. Faculty in business were significantly more likely to perceive MBA student-athletes as reliant on others compared to faculty in other disciplines ( $b = 0.43$ ,  $p < .05$ ). Additionally, faculty that were bigger fans of their university sports programs were significantly less likely to perceive MBA student-athletes as reliant on others ( $b = -0.19$ ,  $p < .001$ ).

For WBB, the overall model is significant ( $F = 2.25$ ,  $p < .05$ ,  $R^2 = 0.16$ ) (Table 5-25). There are two variables that remain significant after controlling for other variables, attendance at MFB events and UF. Faculty that attended more MFB events were significantly less likely to perceive WBB student-athletes as reliant on others ( $b = -0.16$ ,

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<sup>32</sup> Although the law academic discipline was significant at the bivariate level for at least one of the sporting groups, I chose not to include the variable in the regression models because there were too few cases in the sample ( $n = 4$ ).

<sup>33</sup> Again, student athlete status attribute variables were not included in the regression models by sport because of power issues. The athletic status attribute variables that were significant at the bivariate level were also not included in the regression analysis because of multicollinearity. They are highly correlated with the university status attributes, especially OSU.

$p < .05$ ). Additionally, faculty at UF were significantly more likely to perceive WBB student-athletes as reliant on others compared to faculty at OSU ( $b = 0.49$ ,  $p < .01$ ).

The regression coefficient comparison test developed by Clogg, Petkova, and Haritou (1995) determined there are significant differences concerning some variables by sporting group. Table 5-26 reports the z-values associated with each independent variable in the models. First, the effect of academic rank (associate professor status) on faculty perceptions of student-athletes relying on others was significantly different for WBB than MBA ( $z = 1.96$ ,  $p < .05$ ). The coefficient for WBB was negative, meaning associate professors were less likely to perceive WBB student-athletes as reliant on others compared to faculty of other ranks. Alternatively, the coefficient for MBA was positive, meaning associate professors are more likely to perceive MBA athletes as reliant on others. Second, the effect of academic discipline (business) on perceptions of student-athletes relying on others was significantly different for MBA than WBB ( $z = 2.76$ ,  $p < .05$ ). The coefficient for MBA was positive and significant, meaning faculty in business are significant more likely to perceive MBA athletes as reliant on others. However, for WBB the coefficient is non-significant. Third, the effect of sports fandom on faculty perceptions of relying on others was significantly different for MFB and MBA compared to WBB (MFB:  $z = -2.12$ ,  $p < .05$ ; MBA:  $z = -3.28$ ,  $p < .05$ ). The coefficients for MFB and MBA were negative and significant, meaning faculty that were bigger fans of their university sports programs were significantly less likely to perceive MFB and MBA student-athletes as reliant on others. However, the coefficient for WBB was non-significant. Fourth, the effect of attendance at MFB events on perceptions of student-athletes relying on others was significantly different for WBB than MBA ( $z = 2.50$ ,  $p <$

.05). For WBB, the coefficient is positive and significant, meaning faculty that attended more MFB events were more likely to perceive WBB athletes as reliant on others. However, the coefficient for MBA was non-significant. Finally, the effect of UI on perceptions of student-athletes relying on others was significantly different for WBB than MFB ( $z = -2.06$ ,  $p < .05$ ). Although neither coefficient was significant, they were in different directions. For WBB, the effect was positive, meaning faculty at UI were more likely to perceive WBB student-athletes as reliant on others. However, for MBA, the effect was negative, meaning faculty at UI were less likely to perceive MBA student-athletes as reliant on others.

Table 5-1. Factorial ANOVA of university and sporting group for general cheating

Source	Subjects	df	MS	F	$\eta^2$
Model	17.81	11	1.62	3.84***	0.10
University	5.65	3	1.89	4.47**	0.03
Sport	10.74	2	5.37	12.74***	0.06
University*Sport	3.01	6	0.50	1.19	0.02
Residual	168.97	401	0.42		
Total	186.78	412			

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-2. Mean differences and confidence intervals of perceptions of general cheating by university

		Mean Difference	SE	p-value	95% Confidence Interval	
					Lower Bound	Upper Bound
Ohio State University	University of Florida	-0.16	0.09	0.242	-0.39	0.06
	University of Georgia	0.03	0.09	0.979	-0.19	0.26
	University of Illinois	-0.22	0.09	0.076	-0.46	0.01
University of Florida	Ohio State University	0.16	0.09	0.242	-0.06	0.39
	University of Georgia	0.20	0.09	0.138	-0.04	0.43
	University of Illinois	-0.06	0.10	0.929	-0.31	0.19
	University of Georgia	-0.03	0.09	0.979	-0.26	0.19
University of Georgia	Ohio State University	-0.20	0.09	0.138	-0.43	0.04
	University of Illinois	-.25*	0.10	0.040	-0.50	-0.01
	University of Georgia	0.22	0.09	0.076	-0.01	0.46
University of Illinois	Ohio State University	0.06	0.10	0.929	-0.19	0.31
	University of Georgia	.25*	0.10	0.040	0.01	0.50

Note. \*p < .05

Table 5-3. Mean differences and confidence intervals of perceptions of general cheating by sport

		95% Confidence Interval				
		Mean Difference	SE	p-value	Lower Bound	Upper Bound
Football	Baseball	0.06	0.08	0.694	-0.12	0.25
	Women's Basketball	0.34*	0.08	0.000	0.16	0.52
Baseball	Football	-0.06	0.08	0.694	-0.25	0.12
	Women's Basketball	0.28*	0.08	0.002	0.09	0.46
Women's Basketball	Football	-0.34*	0.08	0.000	-0.52	-0.16
	Baseball	-0.28*	0.08	0.002	-0.46	-0.09

Note. \*p < .05

Table 5-4. Factorial ANOVA of university and sporting group for relying on others

Source	Subjects	df	MS	F	$\eta^2$
Model	27.83	11	2.53	4.27***	0.10
University	7.66	3	2.55	4.31**	0.03
Sport	16.57	2	8.29	13.99***	0.06
University*Sport	3.99	6	0.67	1.12	0.02
Residual	245.83	415	0.59		
Total	273.67	426			

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-5. Mean differences and confidence intervals of perceptions of relying on others by university

		95% Confidence Interval				
		Mean Difference	SE	p-value	Lower Bound	Upper Bound
Ohio State University	University of Florida	-0.29*	0.10	0.023	-0.55	-0.03
	University of Georgia	-0.04	0.10	0.973	-0.30	0.22
	University of Illinois	-0.12	0.11	0.666	-0.40	0.15

Table 5-5. Continued

		95% Confidence Interval				
		Mean Difference	SE	p-value	Lower Bound	Upper Bound
University of Florida	Ohio State University	0.29*	0.10	0.023	0.03	0.55
	University of Georgia	0.24	0.11	0.099	-0.03	0.52
	University of Illinois	0.17	0.11	0.445	-0.12	0.46
University of Georgia	Ohio State University	0.04	0.10	0.973	-0.22	0.30
	University of Florida	-0.24	0.11	0.099	-0.52	0.03
	University of Illinois	-0.08	0.11	0.899	-0.37	0.21
University of Illinois	Ohio State University	0.12	0.11	0.666	-0.15	0.40
	University of Florida	-0.17	0.11	0.445	-0.46	0.12
	University of Georgia	0.08	0.11	0.899	-0.21	0.37

Note. \*p &lt; .05

Table 5-6. Mean differences and confidence intervals of perceptions of relying on others by sport

		95% Confidence Interval				
		Mean Difference	SE	p-value	Lower Bound	Upper Bound
Football	Baseball	0.22*	0.09	0.045	0.00	0.44
	Women's Basketball	0.47*	0.09	0.000	0.26	0.68
Baseball	Football	-0.22*	0.09	0.045	-0.44	0.00
	Women's Basketball	0.25*	0.09	0.021	0.03	0.47
Women's Basketball	Football	-0.47*	0.09	0.000	-0.68	-0.26
	Baseball	-0.25*	0.09	0.021	-0.47	-0.03

Note. \*p &lt; .05

Table 5-7. Correlations of academic deviance and faculty status attributes

	General cheating	Relying on others
Faculty status attributes		
Age	-0.11*	-0.13**
Gender (Male = 1; Female = 0)	-0.01	-0.01
Race (White = 1; Non-white = 0)	0.06	0.09*
Academic Rank		
Lecturer = 1	-0.11*	0.01
Assistant Professor = 1	0.05	0.09*
Associate Professor = 1	0.08	0.02
Full Professor = 1	-0.05	-0.12*
Other = 1	0.04	0.03
Tenure status (Tenure = 1; Non-tenure = 0)	0.02	-0.10*
Administrative position (Yes = 1; No = 0)	-0.05	-0.07
Academic Discipline		
Architecture = 1	0.00	0.06
Arts and Humanities = 1	0.03	0.03
Business = 1	0.03	0.02
Education = 1	-0.09	-0.07
Engineering = 1	-0.06	0.00
Law = 1	-0.01	-0.08
Life Sciences = 1	0.01	0.01
Medicine and Health Sciences = 1	-0.05	-0.02
Physical sciences and mathematics = 1	0.06	-0.02
Social and Behavior sciences = 1	0.01	0.04
Other = 1	0.03	-0.04
Time at current institution	-0.05	-0.11*
Service involving athletics	-0.11*	-0.02
Sports fandom	-0.22***	-0.20***
Attendance at MFB events	-0.13**	-0.14**
Attendance at MBA events	-0.12*	-0.08
Attendance at WBB events	-0.10	-0.08
Contact with student-athletes	-0.12*	-0.06

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-8. Correlations of academic deviance and university status attributes

	General cheating	Relying on others
<b>University status attributes</b>		
University		
OSU	-0.08	-0.09
UF	0.07	0.13**
UGA	-0.09	-0.04
UI	0.11*	0.01
Region (Midwest = 1; South = 0)	0.02	-0.07
Undergraduate Student		
Population	-0.02	-0.05
Faculty population	0.00	0.06

Table 5-9. Correlations of academic deviance variables and student-athlete status attributes

	General cheating	Relying on others
<b>Sporting group assigned</b>		
MFB	0.16***	0.22***
MBA	0.07	-0.01
WBB	-0.23***	-0.22***
<b>Faculty perception of student-athlete attributes</b>		
Estimate % of student-athlete gender		
Male	0.00	-0.07
Female	-0.05	-0.11*
Estimate % of student-athlete race		
Black	0.08	0.18***
White	0.03	-0.06
Hispanic	0.04	0.02
Asian	0.07	0.04
Other	-0.09	-0.06
Estimate % of student-athlete sport		
MFB	0.00	0.08
MBA	0.00	0.03
WBB	-0.02	0.02

Table 5-10. Correlations of academic deviance and university athletic status attributes

	General cheating	Relying on others
<b>Athletic status attributes</b>		
Student-athlete population	-0.09	-0.09
Varsity athletic teams	-0.08	-0.09
NCAA infractions	-0.08	-0.09
Athletic revenue	-0.09	-0.05
Directors cup standing	0.07	-0.02

Table 5-11. OLS regression predicting general cheating academic deviance for the entire sample

	b	SE	B
<b>Faculty status attributes</b>			
Age	0.00	0.00	-0.08
Academic Rank (Lecturer = 1)	-0.06	0.09	-0.03
Service involving athletics	-0.03	0.07	-0.02
Sports fandom	-0.06*	0.02	-0.14
Attendance at MFB events	0.03	0.03	0.07
Attendance at MBA events	-0.10*	0.04	-0.13
Contact with student-athletes	-0.04	0.03	-0.07
<b>University status attributes</b>			
UI	0.24**	0.09	0.15
UGA	0.00	0.08	0.00
UF	0.29**	0.09	0.20
<b>Student-athlete status attributes</b>			
MFB	0.34***	0.07	0.25
MBA	0.29***	0.08	0.21
Constant	2.26***	0.18	
R-square		0.14	
df		12	
F		5.25***	
N		392	

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 5-12. OLS regression predicting relying on others academic deviance for the entire sample

Variable	b	SE	B
Faculty status attributes			
Age	-0.01	0.01	-0.10
Race (White)	0.20*	0.13	0.12
Academic Rank (Assistant Professor)	-0.12	0.13	-0.07
Academic Rank (Full Professor)	0.03	0.11	0.01
Tenure status (Tenure)	-0.08	0.13	-0.05
Time at current institution	0.00	0.01	-0.05
Sports fandom	-0.10**	0.03	-0.22
Attendance at MFB events	0.03	0.04	0.05
University status attributes			
UI	0.09	0.11	0.05
UGA	0.12	0.11	0.07
UF	0.30**	0.11	0.18
Perceptions of student-athlete attributes			
Gender (Female)	-0.01*	0.00	-0.12
Race (Black)	0.01***	0.00	0.21
Student-athlete status attributes			
MFB	0.38***	0.09	0.24
MBA	0.25*	0.10	0.15
Constant	2.88***	0.33	
R-square		0.19	
df		15	
F		4.39***	
N		306	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-13. Correlations of academic deviance and faculty status attributes

	UI General cheating	UI Relying on others	UF General cheating	UF Relying on others	UGA General cheating	UGA Relying on others	OSU General cheating	OSU Relying on others
<b>Faculty status attributes</b>								
Age	0.07	0.04	-0.10	-0.12	-0.11	-0.21*	-0.16	-0.11
Gender (Male = 1; Female = 0)	-0.07	-0.10	0.10	0.11	-0.05	0.05	0.00	-0.04
Race (White = 1; Non-white = 0)	0.02	0.22*	0.22*	0.19*	-0.03	-0.15	0.07	0.13
<b>Academic Rank</b>								
Lecturer = 1	-0.22*	-0.02	-0.06	0.08	-0.09	0.02	0.00	0.11
Assistant Professor = 1	0.00	0.09	0.05	0.08	0.02	0.07	0.01	0.02
Associate Professor = 1	0.27*	0.13	-0.02	0.05	0.15	0.10	0.00	-0.13
Full Professor = 1	-0.07	-0.17	-0.04	-0.21*	-0.04	-0.11	-0.02	0.01
Other = 1	-0.05	0.00	0.09	0.07	-0.07	-0.12	0.02	0.02
Tenure status (Tenure = 1; Non-tenure = 0)	0.10	-0.09	-0.06	-0.19	0.08	-0.04	0.00	-0.09
Administrative position (Yes = 1; No = 0)	0.00	-0.06	-0.10	-0.16	-0.04	-0.04	-0.07	-0.10
<b>Academic Discipline</b>								
Architecture = 1	-0.01	-0.07						
Arts and Humanities = 1	0.14	0.05	0.07	0.00	-0.07	0.10	0.06	0.05
Business = 1	-0.04	-0.03	0.15	0.14	0.02	-0.01	-0.07	-0.03
Education = 1	0.09	0.09	-0.14	-0.07	-0.21*	-0.16	-0.06	-0.09
Engineering = 1	-0.12	0.10	-0.02	-0.03	0.00	-0.03	-0.05	-0.02
Law = 1	-0.13	-0.28**						
Life Sciences = 1	0.07	0.06	-0.04	-0.02	0.14	0.07	-0.02	-0.01
Medicine and Health Sciences = 1	-0.04	0.08	-0.06	-0.11	-0.12	-0.02	0.09	0.04
Physical sciences and mathematics = 1	-0.01	-0.06	0.01	-0.07	0.28**	0.15	-0.03	-0.09
Social and Behavior sciences = 1	0.01	0.04	0.09	0.15	-0.09	-0.07	0.00	0.04
Other = 1	-0.01	-0.14	-0.14	-0.11	0.13	0.00	0.09	0.09

Note. \*p &lt; .05, \*\*p &lt; .01, \*\*\*p &lt; .001

Table 5-13. Continued

	UI		UF		UGA		OSU	
	General cheating	Relying on others	General cheating	Relying on others	General cheating	Relying on others	General cheating	Relying on others
Time at current institution	0.07	0.01	-0.02	-0.16	-0.13	-0.23*	-0.02	-0.01
Service involving athletics	0.00	0.15	-0.15	-0.03	-0.33**	-0.21*	0.00	-0.02
Sports fandom	-0.32**	-0.23*	-0.11	-0.14	-0.13	-0.09	-0.26**	-0.32***
Attendance at MFB events	-0.19	-0.01	-0.10	0.00	0.00	-0.18	-0.16	-0.20*
Attendance at MBA events	-0.26*	-0.25*	0.04	0.11	-0.30**	-0.34***	-0.14	-0.10
Attendance at WBB events	-0.06	0.10	-0.17	-0.18	-0.03	-0.06	-0.08	-0.08
Contact with student-athletes	-0.23*	0.00	0.04	0.05	-0.10	-0.08	-0.11	-0.14

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-14. Correlations of academic deviance and perceptions of student-athlete status attributes by university

	UI		UF		UGA		OSU	
	General cheating	Relying on others						
<b>Sporting group assigned</b>								
MFB	0.08	0.04	0.23*	0.18	0.20**	0.34***	0.03	0.26**
MBA	0.21	0.09	0.08	0.12	0.02	-0.04	0.05	-0.06
WBB	-0.28**	-0.13	-0.28**	-0.28**	-0.33***	-0.32**	-0.09	-0.21*
<b>Faculty perceptions of student-athlete status attributes</b>								
Estimate % of student-athlete gender								
Male	0.23	0.06	-0.02	-0.10	-0.10	-0.09	0.00	-0.13
Female	0.17	-0.03	-0.02	-0.08	-0.10	-0.19	-0.14	-0.18
Estimate % of student-athlete race								
Black	0.24*	0.15	-0.02	-0.02	0.11	0.29*	0.02	0.24*
White	0.17	0.02	0.17	0.11	0.14	-0.04	-0.06	-0.12
Hispanic	0.23	0.15	-0.09	-0.11	0.09	0.05	0.03	0.04
Asian	0.16	0.19	-0.07	-0.04	0.17	0.06	-0.04	0.01
Other	0.02	-0.21	-0.12	-0.08	0.29	0.11	-0.21	-0.05
Estimate % of student-athlete sport								
MFB	0.00	0.23	-0.22*	-0.08	0.13	0.08	0.10	0.08
MBA	0.02	0.20	-0.20	-0.14	0.17	0.14	0.06	-0.03
WBB	0.07	0.23	-0.23*	-0.13	0.05	0.14	0.06	-0.05

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-15. OLS regression predicting general cheating academic deviance by university

Variable	UI			UF			UGA			OSU		
	b	SE	B	b	SE	B	b	SE	B	b	SE	B
<b>Faculty status attributes</b>												
Race (White = 1)	0.20	0.18	0.11	0.46	0.32	0.16	-0.09	0.20	-0.05	0.07	0.18	0.04
Academic Rank (Lecturer = 1)	-0.33	0.24	-0.15	0.00	0.25	0.00	-0.17	0.16	-0.11	0.17	0.16	0.11
Academic Rank (Associate Professor = 1)	0.31	0.17	0.20	-0.02	0.17	-0.01	0.10	0.16	0.06	0.00	0.14	0.00
Academic Discipline (Education = 1)	0.21	0.27	0.08	-0.16	0.26	-0.07	-0.31	0.21	-0.15	0.02	0.22	0.01
Academic Discipline (Physical sciences and mathematics = 1)	0.11	0.21	0.06	-0.09	0.26	-0.04	0.16	0.25	0.06	0.03	0.21	0.01
Service involving athletics	0.14	0.15	0.11	-0.18	0.15	-0.14	-0.29*	0.14	-0.23	0.20	0.13	0.15
Sports fandom	-0.09	0.05	-0.20	-0.02	0.04	-0.06	0.02	0.05	0.05	-0.07	0.04	-0.19
Attendance at MBA events	-0.13	0.09	-0.17	0.01	0.07	0.02	-0.14	0.08	-0.17	-0.04	0.11	-0.04
Contact with student-athletes	-0.10	0.07	-0.18	0.04	0.07	0.07	-0.01	0.05	-0.02	-0.09	0.06	-0.15
MFB	0.46**	0.16	0.35	0.35*	0.16	0.25	0.36*	0.14	0.28	0.03	0.15	0.02
MBA	0.43*	0.17	0.31	0.28	0.17	0.19	0.20	0.15	0.15	0.11	0.15	0.09
Constant	2.28***	0.31		1.54***	0.41		1.96***	0.30		2.20***	0.32	
R-square		0.34			0.14			0.28			0.09	
df		11			11			11			11	
F		3.13**			0.32			3.11**			0.92	
N		79			94			99			118	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-16. Z-values comparing beta coefficients predicting general cheating by university

	UI v. UF z	UI v. UGA z	UI v. OSU z	UF v. UGA z	UF v. OSU z	UGA v. OSU z
Race	-0.71	1.08	0.51	1.46	1.06	-0.59
AR- Lecturer	-0.95	-0.55	-1.73	0.57	-0.57	-1.50
AR- Associate Professor	0.82	0.90	1.41	-0.51	-0.09	0.47
AD- Education	0.99	1.52	0.55	0.45	-0.53	-1.09
AD- Physical sciences and mathematics	0.60	-0.15	0.27	-0.69	-0.36	0.40
Service involving athletics	1.51	2.10*	-0.30	0.54	-1.91	-2.56*
Sports fandom	-1.09	-1.56	-0.31	-0.62	0.88	1.41
Attendance at MBA events	-1.23	0.08	-0.63	1.41	0.38	-0.74
Contact with student-athletes	-1.41	-1.05	-0.11	0.58	1.41	1.02
MFB	0.49	0.47	1.96*	-0.05	1.46	1.61
MBA	0.62	1.01	1.41	0.35	0.75	0.42

Note. \*p < .05

Table 5-17. OLS regression predicting relying on others academic deviance by university

Variable	UI			UF			UGA			OSU		
	b	SE	B	b	SE	B	b	SE	B	b	SE	B
<b>Faculty status attributes</b>												
Age	0.00	0.01	0.01	0.01	0.01	0.13	-0.01	0.01	-0.09	-0.01	0.01	-0.11
Race (White = 1)	0.44*	0.20	0.23	0.29	0.30	0.10	-0.22	0.26	-0.08	0.14	0.20	0.06
Academic Rank (Full professor = 1)	-0.14	0.20	-0.10	-0.25	0.18	-0.16	0.10	0.20	0.06	0.03	0.19	0.02
Time at current institution	0.01	0.01	0.11	-0.01	0.01	-0.15	-0.02	0.01	-0.21	0.00	0.01	0.00
Service involving athletics	0.14	0.15	0.10	0.04	0.15	0.03	-0.07	0.17	-0.04	0.11	0.15	0.06
Sports Fandom	-0.15*	0.07	-0.29	-0.10	0.05	-0.21	0.01	0.07	0.02	-0.11*	0.05	-0.24
Attendance at MFB events	0.16	0.08	0.27	0.06	0.07	0.10	-0.02	0.06	-0.04	-0.04	0.07	-0.06
Attendance at MBA events	-0.22*	0.11	-0.26	0.04	0.08	0.05	-0.25*	0.12	-0.22	0.04	0.13	0.03
<b>Student-athlete status attributes</b>												
MFB	0.23	0.18	0.16	0.28	0.18	0.18	0.64**	0.19	0.38	0.52**	0.17	0.31
MBA	0.33	0.19	0.22	0.26	0.19	0.16	0.37	0.20	0.20	0.22	0.17	0.13
Constant	2.66***	0.52		2.63***	0.54		3.44***	0.53		3.08***	0.45	
R-square		0.24			0.13			0.27			0.18	
df		10			10			10			10	
F		2.24*			1.32			3.32**			2.40*	
N		84			100			101			124	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-18. Z-values comparing beta coefficients predicting relying on others by university

	UI v. UF	UI v. UGA	UI v. OSU	UF v. UGA	UF v. OSU	UGA v. OSU
	z	z	z	z	z	z
Age	-0.71	0.71	0.71	1.41	1.41	0.00
Race (White = 1)	0.42	2.01*	1.06	1.28	0.42	-1.10
Academic Rank (Full professor = 1)	0.41	-0.85	-0.62	-1.30	-1.07	0.25
Time at current institution	1.41	2.12*	0.71	0.71	-0.71	-1.41
Service involving athletics	0.47	0.93	0.14	0.49	-0.33	-1.02
Sports Fandom	-0.58	-1.62	-0.46	-1.28	0.14	1.39
Attendance at MFB events	0.94	1.80	1.88	0.87	1.01	0.22
Attendance at MBA events	-1.91	0.18	-1.53	2.01*	0.00	-1.64
MFB	-0.20	-1.57	-1.17	-1.38	-0.97	0.47
MBA	0.26	-0.15	0.43	-0.40	0.16	0.57

Note. \*p < .05

Table 5-19. Correlations of academic deviance and faculty status attributes by sporting group

	MFB		MBA		WBB	
	General cheating	Relying on others	General cheating	Relying on others	General cheating	Relying on others
<b>Faculty status attributes</b>						
Age	-0.07	-0.18*	-0.08	-0.16	-0.20*	-0.07
Gender (Male = 1)	0.02	-0.05	-0.05	-0.08	-0.02	0.07
Race (White= 1)	0.07	-0.13	-0.05	0.01	-0.14	0.10
Academic Rank						
Lecturer = 1	-0.14	-0.01	-0.15	-0.07	-0.05	0.07
Assistant Professor = 1	-0.03	0.12	0.05	0.14	0.13	0.04
Associate Professor = 1	0.25**	0.10	0.10	0.12	-0.13	-0.16*
Full Professor = 1	-0.12	-0.19*	0.00	-0.18*	0.02	0.03
Other = 1	0.11	0.04	-0.08	-0.01	0.06	0.04
Tenure status (Tenure = 1; Non-tenure = 0)	0.08	-0.12	0.04	-0.09	-0.06	-0.09
Administrative position (Yes = 1; No = 0)	-0.12	-0.08	-0.01	-0.09	0.03	-0.01
Academic Discipline						
Architecture = 1	.	0.09	-0.02	0.10	0.04	-0.02
Arts and Humanities = 1	0.00	0.10	0.07	-0.09	0.06	0.08
Business = 1	0.03	0.03	0.07	0.17*	-0.03	-0.11
Education = 1	-0.05	0.00	-0.01	0.05	-0.09	-0.10
Engineering = 1	0.00	0.00	-0.29***	-0.15	0.05	0.10
Law = 1	-0.06	-0.15*	-0.00	-0.08	.	.
Life Sciences = 1	-0.01	-0.01	-0.07	-0.04	0.11	0.07
Medicine and Health Sciences = 1	-0.04	-0.09	-0.06	-0.01	-0.06	0.02
Physical sciences and mathematics = 1	-0.08	-0.05	0.02	-0.05	0.07	0.04
Social and Behavior sciences = 1	0.01	0.10	0.09	0.13	-0.13	-0.15
Other = 1	-0.02	-0.17*	0.08	-0.04	0.03	0.09

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-19. Continued

	MFB		MBA		WBB	
	General cheating	Relying on others	General cheating	Relying on others	General cheating	Relying on others
Time at current institution	-0.06	-0.18*	-0.05	-0.15	-0.04	-0.04
Service involving athletics	0.04	0.04	-0.11	0.02	-0.17*	-0.04
Sports fandom	-0.24**	-0.25**	-0.34***	-0.31***	-0.08	-0.06
Attendance at MFB events	-0.16	-0.22**	-0.12	-0.09	-0.09	-0.07
Attendance at MBA events	-0.10	-0.14	-0.04	0.11	-0.20*	-0.16
Attendance at WBB events	-0.05	-0.12	-0.02	-0.03	-0.11	-0.03
Contact with student-athletes	-0.03	0.03	-0.08	-0.12	-0.26***	-0.14

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-20. Correlations of academic deviance and student-athlete status attributes by sporting group

	MFB		MBA		WBB	
	General cheating	Relying on others	General cheating	Relying on others	General cheating	Relying on others
Faculty perceptions of student-athlete status attributes						
Estimate % of student-athlete gender						
Male	0.08	0.00	0.07	-0.02	-0.12	-0.17*
Female	-0.02	-0.13	-0.01	-0.08	-0.11	-0.13
Estimate % of student-athlete race						
Black	0.08	0.17	0.12	0.26**	0.06	0.14
White	-0.03	-0.07	0.05	-0.13	0.11	0.02
Hispanic	0.13	0.09	0.09	0.13	-0.09	-0.14
Asian	0.05	-0.01	0.11	0.16	0.10	0.03
Other	0.06	0.09	-0.21	-0.11	-0.11	-0.09
Estimate % of student-athlete sport						
MFB	0.08	-0.02	0.10	0.21*	-0.06	0.16
MBA	0.02	0.04	0.19*	0.18*	-0.11	-0.06
WBB	-0.03	-0.01	0.04	0.14	0.00	0.01

Table 5-21. Correlations of academic deviance and university status attributes by sporting group

	MFB		MBA		WBB	
	General cheating	Relying on others	General cheating	Relying on others	General cheating	Relying on others
<b>University status attributes</b>						
University						
OSU	-0.18*	-0.04	-0.11	-0.18*	0.03	-0.09
UF	0.13	0.11	-0.08	0.23**	0.09	0.15
UGA	0.02	0.05	-0.15	-0.09	-0.20*	-0.13
UI	0.05	-0.12	0.22*	0.07	0.07	0.08
Region (Midwest = 1; South = 0)	-0.12	-0.13	0.07	-0.11	0.09	-0.02
Undergraduate Student Population	-0.14	-0.05	-0.03	-0.11	0.10	-0.02
Faculty population	-0.01	0.09	-0.04	-0.07	0.10	0.07

Table 5-22. Correlations of academic deviance and university athletic status attributes by sporting group

	MFB		MBA		WBB	
	General cheating	Relying on others	General cheating	Relying on others	General cheating	Relying on others
<b>Athletic status attributes</b>						
Athletic status attributes						
Student-athlete population	-0.18*	-0.03	-0.14	-0.19*	0.01	-0.11
Varsity athletic teams	-0.18*	-0.04	-0.11	-0.18*	0.03	-0.09
NCAA infractions	-0.18*	-0.04	-0.11	-0.18*	0.03	-0.09
Athletic revenue	-0.13	0.05	-0.17	-0.13	0.00	-0.08
Directors cup standing	0.04	-0.12	0.16	0.02	0.00	0.01

Table 5-23. OLS regression predicting general cheating academic deviance by sporting group

Variable	MFB			MBA			WBB		
	b	SE	B	b	SE	B	b	SE	B
<b>Faculty status attributes</b>									
Age	0.00	0.00	-0.03	0.00	0.01	0.04	-0.01	0.00	-0.16
Academic Rank (Associate Professor = 1)	0.38**	0.14	0.23	0.07	0.13	0.05	-0.20	0.12	-0.14
Academic Discipline (Engineering = 1)	0.12	0.19	0.05	-0.68**	0.26	-0.24	-0.03	0.17	-0.02
Service involving athletics	0.13	0.13	0.10	-0.16	0.12	-0.12	-0.06	0.10	-0.05
Sports fandom	-0.06	0.04	-0.14	-0.12**	0.04	-0.30	0.02	0.03	0.07
Attendance at MBA events	-0.08	0.07	-0.10	0.02	0.08	0.03	-0.13*	0.06	-0.19
Contact with student-athletes	-0.01	0.05	-0.02	0.04	0.05	0.07	-0.11*	0.04	-0.22
<b>University status attributes</b>									
UI	0.27	0.16	0.16	0.37*	0.16	0.23	0.08	0.14	0.06
UGA	0.15	0.15	0.10	-0.09	0.15	-0.06	-0.23	0.14	-0.17
UF	0.37*	0.16	0.23	0.22	0.17	0.14	0.07	0.13	0.05
Constant	2.22***	0.35		2.28***	0.31		2.59***	0.30	
R-square		0.16			0.23			0.20	
df		10			10			10	
F		2.31*			3.16**			2.98**	
N		137			116			134	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-24. Z-values comparing beta coefficients by sporting group predicting general cheating

	MFB vs. MBA	MFB vs. WBB	MBA vs. WBB
	z	z	z
Age	0.00	0.00	1.00
Academic Rank (Associate Professor = 1)	1.62	3.15*	1.53
Academic Discipline (Engineering = 1)	2.48*	0.59	-2.09*
Service involving athletics	1.64	1.16	-0.64
Sports fandom	1.06	-1.60	-2.80*
Attendance at MBA events	-0.94	0.54	1.50
Contact with student-athletes	-0.71	1.56	2.34*
UI	-0.44	0.89	1.36
UGA	1.31	1.85	0.68
UF	0.64	1.46	0.70

Note. \*p < .05

Table 5-25. OLS regression predicting relying on others academic deviance by sporting group

Variable	MFB			MBA			WBB		
	b	SE	B	b	SE	B	b	SE	B
<b>Faculty status attributes</b>									
Age	0.00	0.01	-0.02	0.00	0.01	0.05	0.00	0.01	0.05
Academic rank (associate professor = 1)	0.08	0.17	0.04	0.16	0.18	0.09	-0.34	0.18	-0.17
Academic rank (full professor = 1)	-0.16	0.16	-0.10	-0.11	0.23	-0.07	0.02	0.19	0.01
Academic discipline (business = 1)	0.16	0.23	0.06	0.43*	0.22	0.18	-0.49	0.25	-0.17
Academic discipline (other = 1)	-0.24	0.25	-0.08	0.18	0.24	0.06	0.09	0.26	0.03
Time at current institution	0.00	0.01	-0.06	0.00	0.01	-0.05	-0.01	0.01	-0.15
Sports fandom	-0.10*	0.04	-0.21	-0.19***	0.05	-0.38	0.02	0.04	0.05
Attendance at MFB events	-0.07	0.08	-0.07	0.16	0.10	0.16	-0.16*	0.08	-0.17
<b>University</b>									
UI	-0.20	0.18	-0.10	0.09	0.18	0.05	0.34	0.19	0.17
UGA	0.06	0.16	0.04	0.09	0.18	0.05	-0.02	0.18	-0.01
UF	0.23	0.17	0.12	0.25	0.20	0.19	0.49**	0.17	0.29
Constant	3.61***	0.38		3.04***	0.42		2.57***	0.40	
R-square		0.14			0.23			0.16	
df		11			11			11	
F		2.08*			2.96**			2.25*	
N		149			121			138	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 5-26. Z-values comparing beta coefficients by sporting group predicting relying on others

	MFB vs. MBA	MFB vs. WBB	MBA vs. WBB
	z	z	z
Age	0.00	0.00	0.00
Academic rank (associate professor = 1)	-0.32	1.70	1.96*
Academic rank (full professor = 1)	-0.18	-0.72	-0.44
Academic discipline (business = 1)	-0.84	1.91	2.76*
Academic discipline (other = 1)	-1.21	-0.91	0.25
Time at current institution	0.00	0.71	0.71
Sports fandom	1.41	-2.12*	-3.28*
Attendance at MFB events	-1.80	0.80	2.50*
UI	-1.14	-2.06*	-0.96
UGA	-0.12	0.33	0.43
UF	-0.08	-1.08	-0.91

Note. \*p < .05

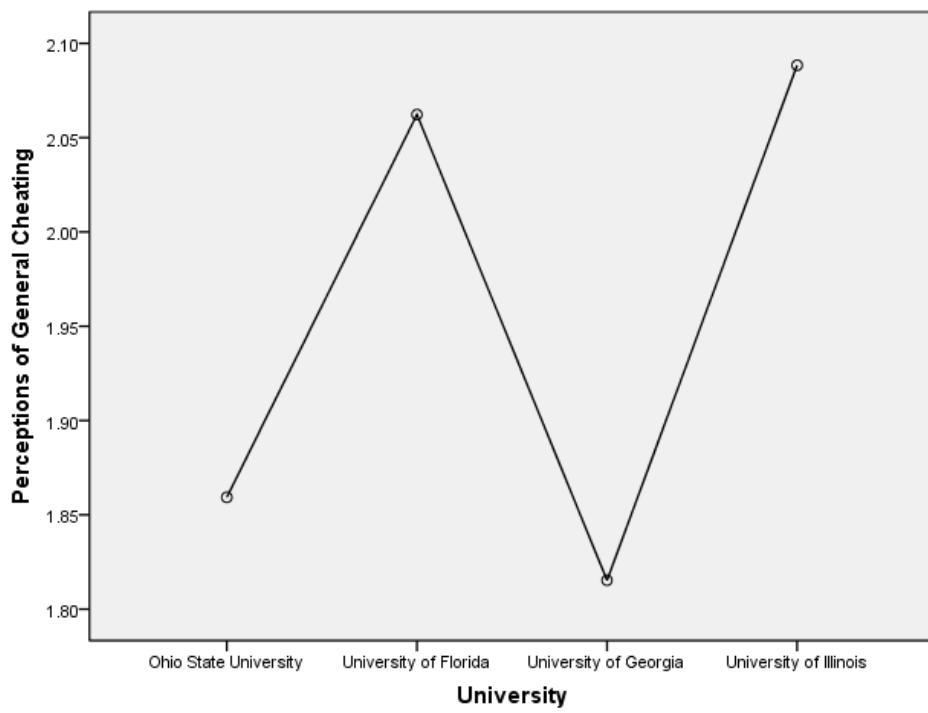


Figure 5-1. Main effects of university for general cheating academic deviance

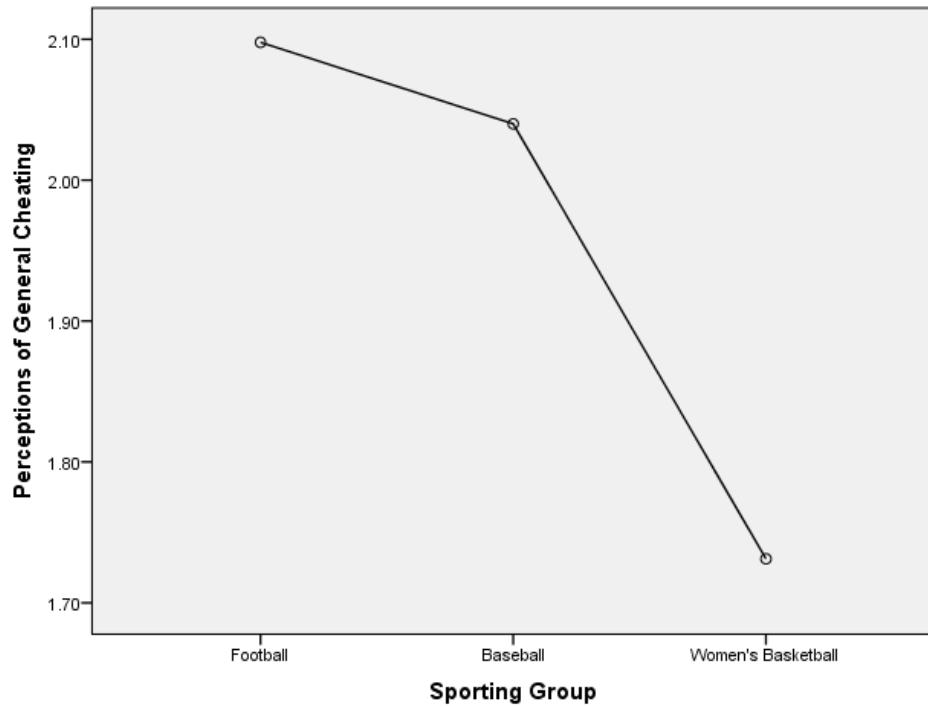


Figure 5-2. Main effects of sporting group for general cheating academic deviance

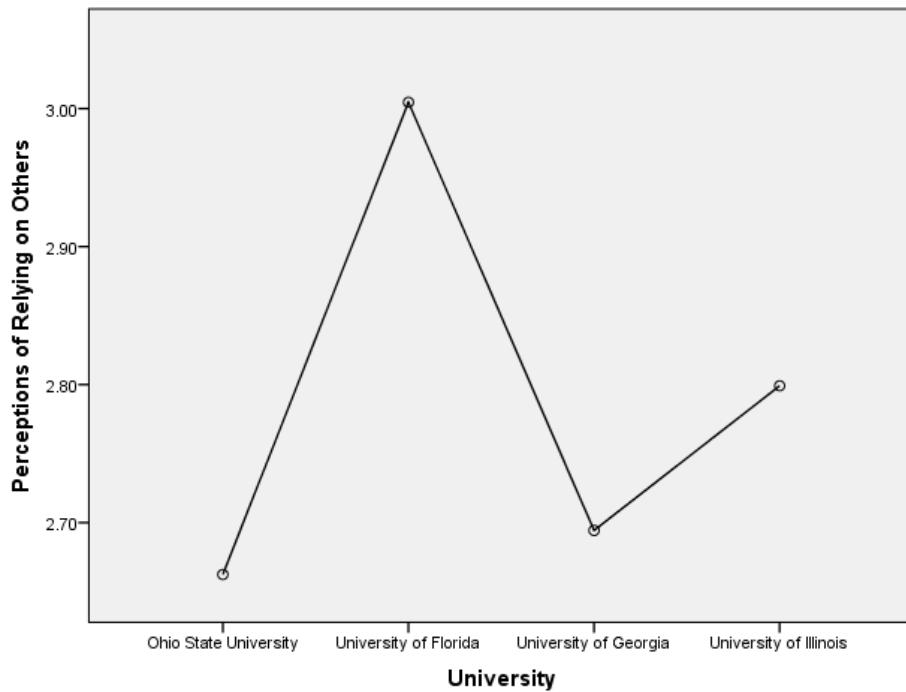


Figure 5-3. Main effect of university for relying on others academic deviance

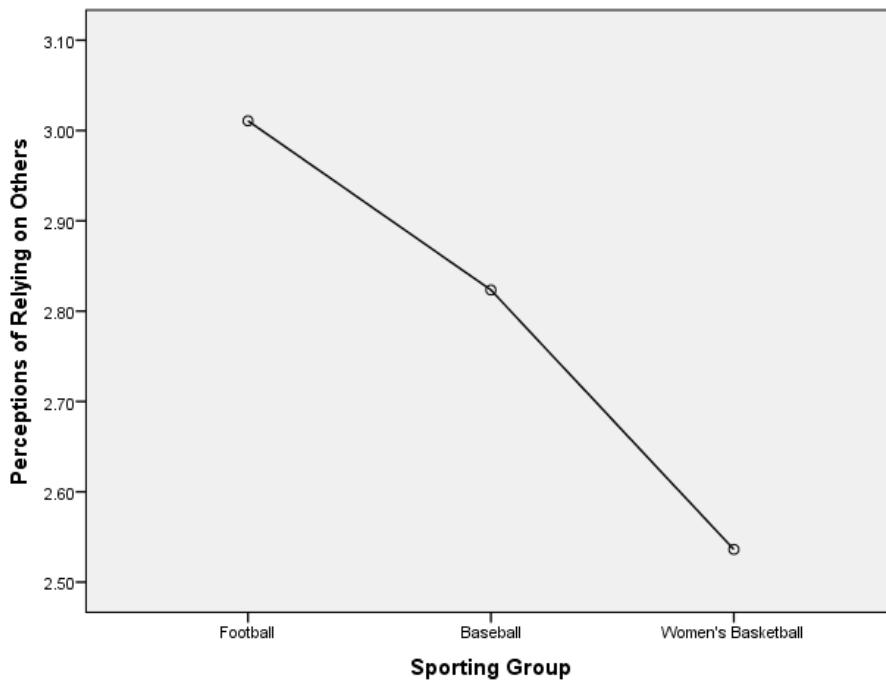


Figure 5-4. Main effect of sport for relying on others academic deviance

## CHAPTER 6

### RESULTS PREDICTING NORMATIVE DEVIANCE

#### **Normative Deviance by University and Sporting Group**

##### **Factorial ANOVA for Criminal Deviance**

A factorial ANOVA was conducted to compare the effect of university and sporting group and the interaction effect between university and sporting group on perceptions of criminal deviance (Table 6-1, 6-2, 6-3, and Figure 6-1). University included four levels: University of Illinois (UI), University of Florida (UF), University of Georgia (UGA), and Ohio State University (OSU) and sporting group consisted of three levels: men's football (MFB), men's baseball (MBA), and women's basketball (WBB). The interaction effect of university and sport was not significant for criminal deviance.

Sporting group was the only effect that was significant ( $F(2, 388) = 30.92, p < .001, \eta^2 = 0.14$ ). Therefore, this indicates that there is a significant difference in perceptions of criminal deviance between MFB ( $M = 1.88, SD = 0.48$ ), MBA ( $M = 1.69, SD = 0.46$ ), and WBB ( $M = 1.39, SD = 0.51$ ). Significant differences using Tukey HSD found faculty believe MFB student-athletes were more likely to commit criminal deviance compared to MBA and WBB student-athletes (Table 6-3). Additionally, faculty believed MBA student-athletes are significantly more likely to commit criminal deviance compared to WBB student-athletes.

##### **Factorial ANOVA for Drinking-Related Deviance**

A factorial ANOVA was conducted to compare the effect of university and sporting group and the interaction effect between university and sporting group on perceptions of drinking-related deviance (Table 6-4, 6-5, and 6-6). University included

four levels (UI, UF, UGA and OSU) and sporting group consisted of three levels (MFB, MBA, and WBB). All effects were significant, including the interaction effect.

The main effect for university yielded an F ratio of  $F(3, 380) = 3.46$ ,  $p < .05$ ,  $\eta^2 = 0.03$ , indicating a significant difference between UI ( $M = 2.86$ ,  $SD = 0.61$ ), UF ( $M = 2.64$ ,  $SD = 0.75$ ), UGA ( $M = 2.63$ ,  $SD = 0.86$ ), and OSU ( $M = 2.62$ ,  $SD = 0.70$ ). However, the post-hoc Tukey HSD test did not find any significant differences between the groups (Table 6-5).

The main effect for sporting group yielded an F ratio of  $F(2, 380) = 35.74$ ,  $p < .001$ ,  $\eta^2 = 0.16$ , indicating a significant difference between MFB ( $M = 2.95$ ,  $SD = 0.71$ ), MBA ( $M = 2.75$ ,  $SD = 0.72$ ), and WBB ( $M = 2.22$ ,  $SD = 0.70$ ). Significant differences using Tukey HSD found faculty believe MFB student-athletes were more likely to commit drinking-related deviance compared to MBA and WBB student-athletes (Table 6-6). Additionally, faculty believed MBA student-athletes specifically are significantly more likely to commit drinking-related deviance compared to WBB student-athletes.

There was also a significant interaction between the two factors,  $F(6, 380) = 2.35$ ,  $p < .05$ ,  $\eta^2 = 0.04$ . The interaction suggests that the effect of sporting group on perceptions of drinking-related deviance is not the same at each university. The interaction plot in Figure 6-2 shows that MBA student-athletes have different perceptions of drinking-related deviance depending on the university. At OSU, UI and UGA, MBA athletes are the team with the second highest perceptions of drinking-

related deviance. However, at UF, MBA athletes have the highest perceptions of drinking-related deviance.<sup>34</sup>

### **Bivariate Relationships for the Entire Sample**

Bivariate correlations were run for the two normative deviance scales (criminal deviance and drinking-related deviance) and the independent variables reflecting individual status attributes of faculty, student-athlete attributes, university attributes, and university athletic attributes (Table 6-7, 6-8, 6-9, and 6-10). Following the correlational analysis, OLS regressions were run for any variable correlated at the bivariate level.

#### **Criminal Deviance**

There were four faculty status attributes that were significantly related to criminal deviance at the bivariate level, which include academic discipline (education), sports fandom, and attendance at MFB and WBB events (Table 6-7). Faculty in education were less likely to perceive student-athletes as participants in criminal deviance ( $r = -0.11$ ,  $p < .05$ ) compared to faculty in other disciplines. Faculty that were bigger fans of their university sports programs were less likely to perceive student-athletes as participants in criminal deviance ( $r = -0.15$ ,  $p < .01$ ). Additionally, faculty that attended more MFB and WBB events were less likely to perceive student-athletes as participants in criminal deviance (MFB:  $r = -0.10$ ,  $p < .05$ ; WBB:  $r = -0.11$ ,  $p < .05$ ).

There were no university status attributes significantly related to criminal deviance at the bivariate level (Table 6-8). However, there were significant relationships between the criminal deviance scale and sporting groups assigned through

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<sup>34</sup> A MANOVA revealed there was not a statistically significant multivariate main effect for university,  $F(6, 730) = 1.75$ ,  $p < .10$ ; Wilk's  $\Lambda = 0.97$ , partial  $\eta^2 = .67$ . There was a statistically significant main effect for sport,  $F(4, 730) = 21.98$ ,  $p < .001$ ; Wilk's  $\Lambda = 0.80$ , partial  $\eta^2 = 1.00$ .

manipulation (Table 6-9). Faculty that were randomly assigned to the MFB sporting group were more likely to predict criminal deviance ( $r = 0.32$ ,  $p < .001$ ). Alternatively, faculty that were randomly assigned the WBB sporting group were less likely to predict criminal deviance ( $r = -0.36$ ,  $p < .001$ ).

There were no university athletic status attributes significantly related to normative deviance at the bivariate level (Table 6-10).

### **Drinking-Related Deviance**

There were eight faculty status attributes significantly relate to drinking-related deviance at the bivariate level, which include age, race, academic rank (assistant professor), academic discipline (education), time at current institution, sports fandom, and attendance at MBA and WBB events (Table 6-7). Older faculty were less likely to perceive drinking-related deviance compared to younger faculty ( $r = -0.16$ ,  $p < .001$ ). White faculty were more likely to perceive student-athlete drinking-related deviance compared to non-white faculty ( $r = 0.14$ ,  $p < .01$ ). Assistant professors were more likely to perceive student-athlete drinking-related deviance compared to faculty of other ranks ( $r = 0.10$ ,  $p < .05$ ). Faculty in education were less likely to perceive student-athletes as participants in drinking-related deviance ( $r = -0.11$ ,  $p < .05$ ) compared to faculty in other disciplines. Faculty that were bigger fans of their university sports programs were less likely to perceive student-athletes as participants in drinking-related deviance ( $r = -0.16$ ,  $p < .01$ ). Additionally, faculty that attended more MBA and WBB events were less likely to perceive student-athletes as participants in drinking-related deviance (MBA:  $r = -0.12$ ,  $p < .05$ ; WBB:  $r = -0.10$ ,  $p < .05$ ).

Only one university status attribute variable was significantly related to the normative deviance scales (Table 6-8). Faculty at UI were more likely to perceive

student athletes as engaged in drinking-related deviance compared to faculty at the three other universities ( $r = 0.13$ ,  $p < .05$ ).

There were significant relationships between the drinking-related deviance scale and sporting groups assigned through manipulation (Table 6-9). Faculty that were randomly assigned to the MFB sporting group were more likely to predict drinking-related deviance compared to those assigned to the other sporting groups ( $r = 0.29$ ,  $p < .001$ ). Alternatively, faculty that were randomly assigned the WBB sporting group were less likely to predict drinking-related deviance compared to those assigned to the other sporting groups ( $r = -0.39$ ,  $p < .001$ ).

Two university athletic status attribute variables were significantly associated with the drinking related deviance scale of normative deviance (Table 6-10). Faculty at institutions with smaller athletic revenues were significantly more likely to believe student-athletes engage in drinking-related deviance ( $r = -0.11$ ,  $p < .05$ ). Also, faculty at universities with higher a Director's cup ranking were more likely to believe student-athletes engage in drinking related deviance ( $r = 0.12$ ,  $p < .05$ ). However, these variables are not added to the regression model because of concerns with multicollinearity. When added to the regression model, both of these variables have tolerance levels are below .20, meaning more than 80% of the variance of these variables is shared with another variable in the model (Allison, 1999). Additionally, both variables have Variance Inflation Factors (VIF) above 5, which is strong evidence for multicollinearity (Allison, 1999).

## **OLS Regression Models for the Entire Sample**

### **Predicting Criminal Deviance**

An OLS regression model was run predicting the criminal deviance scale with academic discipline (education), sports fandom, attendance at MFB and WBB events, UI, UGA, UF, MFB and MBA sporting groups (Table 6-11).

The overall model predicting criminal deviance was significant ( $F = 8.85$ ,  $p < .001$ ,  $R^2 = 0.17$ ). Sports fandom remained significant after controlling for other variables. Faculty that were bigger fans of their university sports program were significantly less likely to perceive student-athletes as criminally deviant ( $b = -0.05$ ,  $p < .05$ ). Additionally, MFB and MBA sporting groups had a positive significant relationship with criminal deviance controlling for other variables, meaning faculty randomly assigned MFB and MBA sporting groups were significant more likely to perceive criminal deviance compared to those randomly assigned to the WBB sporting group (MFB:  $r = 0.46$ ,  $p < .001$ ; MBA:  $r = 0.27$ ,  $p < .001$ ).

### **Predicting Drinking-Related Deviance**

An OLS regression model was run predicting the drinking-related deviance scale with age, race, academic rank (assistant professor), academic discipline (education), time at current institution, sports fandom, attendance at MBA and WBB events, UI, UF, UGA, MFB and MBA sporting groups (Table 6-12).

The overall model predicting drinking-related deviance was significant ( $F = 8.58$ ,  $p < .001$ ,  $R^2 = 0.23$ ). Five independent variables remained significant after controlling for other faculty status attributes, which include: faculty race, sports fandom, UI, MFB and MBA. White faculty were significantly more likely to perceive drinking-related deviance by student-athletes compared to non-white faculty ( $b = 0.33$ ,  $p < .01$ ). Faculty that are

bigger fans of their university sports programs were significantly less likely to perceive student-athletes as drinking-related deviants ( $b = -0.05$ ,  $p < .05$ ). Faculty from UI were significantly more likely to perceive student-athletes as drinking-related deviants compared to faculty at OSU ( $b = 0.25$ ,  $p < .05$ ). Finally, faculty randomly assigned MFB or MBA sporting groups were significant more likely to perceive drinking-related deviance compared to faculty assigned WBB (MFB:  $b = 0.65$ ,  $p < .001$ ; MBA:  $b = 0.50$ ,  $p < .001$ ).

### **Normative Deviance by Individual University**

#### **Bivariate Relationships for Individual Universities**

**University of Illinois.** There was only faculty status attribute significantly related to the criminal deviance scale for UI, which was attendance at MBA events (Table 6-13). Faculty at UI that attended more MBA events were less likely to perceive student-athletes as criminal deviants ( $r = -0.22$ ,  $p < .05$ ). Additionally, there were two student athlete attribute variables significantly related to criminal deviance, WBB sport group and perceptions of Hispanic student-athletes (Table 6-14). UI faculty that were randomly assigned the WBB sporting group were less likely to perceive criminal deviance compared to faculty assigned the other sporting groups ( $r = -0.22$ ,  $p < .05$ ). Additionally, UI faculty that estimated a higher percentage of Hispanic student-athletes on their campus were more likely to believe student-athletes are involved in criminal deviance ( $r = 0.31$ ,  $p < .01$ ).

There were three faculty status attributes significantly related to drinking-related deviance for UI, academic rank (lecturer), sports fandom, and attendance at MBA events (Table 6-13). Lecturers at UI were less likely to perceive student-athletes as involved in drinking-related deviance compared to faculty of other ranks ( $r = -0.22$ ,  $p <$

.05). Additionally, faculty that were larger fans of UI athletics ( $r = -0.25$ ,  $p < .05$ ) and attended more MBA events ( $r = -0.26$ ,  $p < .05$ ) were significantly less likely to perceive drinking-related deviance by student-athletes. Only one student-athlete status attribute was significantly related to drinking-related deviance at the bivariate level for UI (Table 6-14). Similar to the criminal deviance scale, UI faculty that were randomly assigned to the WBB sporting group were less likely to perceive drinking-related deviance compared to faculty assigned the other sporting groups ( $r = -0.25$ ,  $p < .05$ ).

**University of Florida.** There were two faculty status attributes significantly related to criminal deviance at the bivariate level for UF, faculty gender and race (Table 6-13). Male ( $r = 0.25$ ,  $p < .05$ ) and white ( $r = 0.24$ ,  $p < .05$ ) faculty at UF were significantly more likely to perceive that student-athletes engage in normative deviance compared to female and non-white faculty. There were two student-athlete status attributes significantly related to criminal deviance at the bivariate level for UF, which were MFB and WBB sport groups (Table 6-14). UF faculty that were randomly assigned to the MFB sporting group were more likely to perceive criminal deviance compared to faculty assigned the other sporting groups ( $r = 0.45$ ,  $p < .001$ ). Alternatively, UF faculty that were randomly assigned the WBB sporting group were less likely to perceive criminal deviance compared to faculty assigned the other sporting groups ( $r = -0.53$ ,  $p < .001$ ).

There was only one faculty status attribute significantly related to drinking-related deviance at the bivariate level for UF, which was faculty race (Table 6-13). White faculty at UF were significantly more likely to perceive drinking-related deviance by student-athletes compared to non-white faculty ( $r = 0.35$ ,  $p < .001$ ). Additionally, three student-

athlete attributes were significantly related to drinking-related deviance at UF (Table 6-14). UF faculty that were randomly assigned to the MBA sporting group were more likely to perceive drinking-related deviance compared to faculty assigned the other sporting groups ( $r = 0.28$ ,  $p < .01$ ). Alternatively, UF faculty that were assigned the WBB sporting group were less likely to perceive drinking-related deviance compared to faculty assigned the other sporting groups ( $r = -0.42$ ,  $p < .001$ ). Finally, faculty at UF that estimated a larger percentage of black athletes on their campus were less likely to perceive student-athletes as drinking-related deviants ( $r = -0.22$ ,  $p < .05$ ).

**University of Georgia.** There were three faculty status attributes significantly related to criminal deviance at UGA, which included: academic discipline (education), academic discipline (physical sciences and mathematics), and attendance at MBA events (Table 6-13). Faculty in the academic discipline of education at UGA are significantly less likely to perceive student-athletes as criminal deviants compared to faculty in other disciplines ( $r = -0.21$ ,  $p < .05$ ). Alternatively, faculty in physical sciences and mathematics were significantly more likely to perceive student-athletes at criminal deviants compared to faculty in other disciplines ( $r = 0.24$ ,  $p < .05$ ). Last, faculty that attended more MBA events at UGA were significantly less likely to perceive student-athletes as criminal deviants ( $r = -0.25$ ,  $p < .05$ ).

There were also five student-athlete status attributes significantly related to perceptions of criminal deviance for faculty at UGA (Table 6-14). First, UGA faculty that were randomly assigned to the MFB sporting group were more likely to perceive criminal deviance compared to faculty assigned the other sporting groups ( $r = 0.37$ ,  $p < .01$ ). Alternatively, UGA faculty that were randomly assigned to the WBB sporting group

were less likely to perceive criminal deviance compared to faculty assigned the other sporting groups ( $r = -0.48$ ,  $p < .001$ ). Also, higher estimates of both male ( $r = -0.25$ ,  $p < .05$ ) and female ( $r = -0.22$ ,  $p < .05$ ) student-athletes on UGA campus was negatively related to criminal deviance. Also, higher estimates of Asian student-athletes on the UGA campus was significantly related higher perceptions of criminal deviance ( $r = 0.31$ ,  $p < .05$ ).

There were five faculty status attributes significantly related to drinking-related deviance at the bivariate level for UGA (Table 6-13). These included: age, academic discipline (education), time at current institution, service involving athletics, and attendance at MBA events. Older faculty ( $r = -0.24$ ,  $p < .05$ ) and faculty that had been at UGA longer ( $r = -0.20$ ,  $p < .05$ ) were less likely to perceive student-athletes involved in drinking related deviance. Similar to the criminal deviance scale, faculty in the academic discipline of education at UGA were significantly less likely to perceive student-athletes as involved in drinking-related deviance compared to faculty in other disciplines ( $r = -0.22$ ,  $p < .05$ ). Faculty that participated in service involving athletics were significantly less likely to perceive student-athletes being involved in drinking-related deviance compared to faculty that did not participate ( $r = -0.25$ ,  $p < .05$ ). Finally, faculty at UGA that attended more MBA events were significantly less likely to perceive student-athletes as drinking-related deviants ( $r = -0.27$ ,  $p < .01$ ).

There were also four student-athlete status attributes significantly related to drinking-related deviance at UGA (Table 6-14). Similar to the criminal deviance scale, UGA faculty that were randomly assigned to the MFB sporting group were more likely to perceive drinking-related deviance compared to faculty assigned the other sporting

groups ( $r = 0.44$ ,  $p < .001$ ). Alternatively, UGA faculty that were randomly assigned to the WBB sporting group were less likely to perceive criminal deviance compared to faculty assigned the other sporting groups ( $r = -0.40$ ,  $p < .001$ ). Additionally, higher estimates of both black ( $r = 0.22$ ,  $p < .05$ ) and Asian ( $r = 0.28$ ,  $p < .05$ ) student-athletes on UGA campus was positively related to drinking-related deviance.

**Ohio State University.** There was one faculty status attribute significantly related to both criminal and drinking-related deviance at OSU, which was sports fandom (Table 6-13). Faculty that were bigger fans of OSU athletics were less likely to perceive student-athletes as involved in criminal ( $r = -0.28$ ,  $p < .01$ ) and drinking-related deviance ( $r = -0.29$ ,  $p < .01$ ). Additionally, faculty in the discipline of education were significantly less likely to perceive student-athletes as involved in drinking-related deviance compared to faculty in other disciplines ( $r = -0.23$ ,  $p < .05$ ).

There were also two student-athlete status attributes significant at the bivariate level for both normative deviance scales at OSU (Table 6-14). OSU faculty that were randomly assigned to the MFB sporting group were more likely to perceive criminal and drinking-related deviance compared to faculty assigned the other sporting groups (criminal:  $r = 0.19$ ,  $p < .05$ ; drinking-related:  $r = 0.33$ ,  $p < .001$ ). Alternatively, OSU faculty that were randomly assigned to the WBB sporting group were less likely to perceive criminal deviance compared to faculty assigned the other sporting groups (criminal:  $r = -0.21$ ,  $p < .05$ ; drinking-related:  $b = -0.45$ ,  $p < .001$ ).

### **OLS Regression by University and Clogg Coefficient Comparison Test**

**Predicting criminal deviance.** Faculty and student-athlete status attributes that were significantly associated with at least one of the university groups were entered into

OLS regression models to predict criminal deviance<sup>35</sup>. More specifically, OLS regression models were run for each university using gender, race, academic discipline (education and physical sciences and mathematics), sports fandom, attendance at MBA events, and MFB and MBA (Table 6-15).

The overall models for UF, UGA, and OSU were significant (UF:  $F = 6.07$ ,  $p < .001$ ,  $R^2 = 0.36$ ; UGA:  $F = 6.32$ ,  $p < .001$ ,  $R^2 = 0.35$ ; OSU:  $F = 2.10$ ,  $p < .05$ ,  $R^2 = 0.14$ ) (Table 6-15). For OSU, the only variable that remained significant while controlling for other variables was sports fandom (OSU:  $b = -0.09$ ,  $p < .01$ ), where faculty that were larger fans of OSU athletics were less likely to perceive student-athletes as criminal deviants. For UF, the only significant variables after controlling for other faculty status attributes was the manipulation sporting groups of MFB and MBA, where faculty at UF that were assigned MFB and MBA sporting groups were significantly more likely to perceive criminal deviance compared to faculty assigned WBB (MFB:  $b = 0.60$ ,  $p < .001$ ; MBA:  $b = 0.35$ ,  $p < .01$ ). For UGA, academic discipline (physical sciences and mathematics), MFB and MBA were significant predictors of criminal deviance controlling for other variables. Faculty in the discipline of physical sciences and mathematics at UGA were significantly more likely to perceive student-athletes as criminal deviants than faculty in other disciplines ( $b = 0.50$ ,  $p < .05$ ). Additionally, faculty at UGA that were assigned MFB and MBA sporting groups were significantly more likely to perceive criminal deviance compared to faculty assigned WBB (MFB:  $b = 0.64$ ,  $p < .001$ ; MBA:  $b = 0.30$ ,  $p < .05$ ).

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<sup>35</sup> The models did not include the student-athlete status attributes because there was a high frequency of missingness, which results in power issues.

The overall model for UI was not significant ( $F = 1.49$ ,  $p > .05$ ,  $R^2 = 0.14$ ). One variable was still significant after controlling for other variables, which was the MFB sport group. Faculty at UI that were randomly assigned the MFB sporting group were significantly more likely to perceive criminal deviance compared to faculty assigned the WBB sporting group ( $b = 0.26$ ,  $p < .05$ ).

The regression coefficient comparison test developed by Clogg, Petkova, and Haritou (1995) determined there are some significant differences concerning some variables by university group. Table 6-16 reports the z-values associated with each independent variable and university. First, the effect of academic discipline (physical sciences and mathematics) on perceptions of student-athlete criminal deviance is significantly different for UGA compared to UI ( $z = -2.20$ ,  $p < .05$ ). For UGA, the coefficient is significant and positive, meaning faculty in the disciplines of physical sciences and mathematics are more likely to perceive student-athletes as criminally deviant compared to faculty in other disciplines. However, at UI, the coefficient is negative and non-significant. Second, the effect of sports fandom on perceptions of criminal deviance is stronger for OSU compared to UF ( $z = 2.12$ ,  $p < .05$ ). Last, the effect of the MFB manipulation was stronger for UGA and UF compared to UI and OSU.

**Predicting drinking-related deviance.** Faculty and student-athlete status attributes that were significantly associated with at least one of the university groups were entered into OLS regression models to predict drinking-related deviance. More specifically, OLS regression models were run for each university using age, race, academic rank (lecturer), academic discipline (education), time at current institution,

service involving athletics, sports fandom, attendance at MBA events, MFB and MBA<sup>36</sup> (Table 6-17).

The overall model for UI was significant ( $F = 3.31, p < .01, R^2 = 0.32$ ) (Table 6-17). For UI, race, academic rank (lecturer), and MFB remained significant after controlling for other variables. White faculty at UI are significantly more likely to perceive student-athletes as engaging in drinking-related deviance compared to non-white faculty ( $b = 0.47, p < .05$ ). Lecturers at UI were significantly less likely to perceive student-athlete drinking-related deviance compared to non-lecturer faculty ( $b = -0.51, p < .05$ ). Additionally, UI faculty that were randomly assigned to the MFB sporting group were significantly more likely to perceive drinking-related deviance compared to those assigned to the WBB sporting group ( $b = 0.45, p < .01$ ).

For UF, the overall model for was significant ( $F = 3.25, p < .01, R^2 = 0.29$ ) (Table 6-17). Three variables remained significant after controlling for others, which were race, MFB and MBA. White faculty from UF were significantly more likely to perceive drinking-related deviance compared to non-white faculty ( $b = 0.91, p < .01$ ). UF faculty that were randomly assigned to the MFB or MBA sporting groups were significantly more likely to perceive drinking-related deviance compared to those assigned to the WBB sporting group (MFB:  $b = 0.45, p < .01$ ; MBA:  $b = 0.69, p < .001$ ).

For UGA, the overall model for was significant ( $F = 5.25, p < .001, R^2 = 0.37$ ) (Table 6-17). Only one variable remained significant after controlling for others, which was the MFB sporting group. UGA faculty that were randomly assigned to the MFB

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<sup>36</sup> Again, I chose not to include the perception of student-athlete variables because there were many cases of missing data, which decreased the power of the regression analysis.

sporting group were significantly more likely to perceive drinking-related deviance compared to those assigned to the WBB sporting group ( $b = 0.89$ ,  $p < .001$ ).

For OSU, the overall model is also significant ( $F = 4.12$ ,  $p < .001$ ,  $R^2 = 0.14$ ) (Table 6-17). Three variables remained significant after controlling for other variables, which include sports fandom, MFB, and MBA. Faculty at OSU that were bigger fans of the university sports program were significantly less likely to perceive student-athletes as involved in drinking-related deviance ( $b = -0.08$ ,  $p < .05$ ). OSU faculty that were randomly assigned to the MFB or MBA sporting groups were significantly more likely to perceive drinking-related deviance compared to those assigned the WBB sporting group (MFB:  $b = 0.69$ ,  $p < .001$ ; MBA:  $b = 0.52$ ,  $p < .01$ ).

The regression coefficient comparison test developed by Clogg, Petkova, and Haritou (1995) determined there are some significant differences concerning some variables by university group. Table 6-18 reports the z-values associated with each variable and university. The effect of academic rank (lecturer) on perceptions of drinking-related deviance is significantly different for UI compared to UF ( $z = -2.29$ ,  $p < .05$ ). For UI, the coefficient is negative and significant, meaning lecturers were less likely to perceive student-athletes as drinking-related deviants. However, at UF, the coefficient is positive and non-significant. Additionally, the effect of attendance at MBA events on perceptions of drinking-related deviance is significantly different for UI compared to UF ( $z = -2.16$ ,  $p < .05$ ). For UI, the coefficient is negative, meaning faculty that attended more MBA events were less likely to perceive student athletes as drinking-related deviants. However, at UF, the coefficient for attendance at MBA events was positive.

## **Normative Deviance by Student-Athlete Sporting Group**

### **Bivariate Relationships by Sporting Group**

**MFB.** There were two independent variables that were significantly related to the criminal deviance scale at the bivariate level for the MFB subgroup (Tables 6-19, 6-20, 6-21, and 6-22). Both variables were faculty status attributes, which included: academic discipline (physical sciences and mathematics) and sports fandom (Table 6-19). Faculty in the physical sciences and mathematics disciplines were significantly more likely to perceive MFB student-athletes as criminal deviants compared to faculty in other disciplines ( $r = 0.22$ ,  $p < .01$ ). Faculty that are bigger fans of their university sports program were significantly less likely to perceive MFB athletes as criminal deviants ( $r = -0.17$ ,  $p < .05$ ).

There were four independent variables that were significantly related to the drinking-related deviance scale at the bivariate level for the MFB subgroup (Tables 6-19, 6-20, 6-21, and 6-22). All four were faculty status attributes, which include: age, race, time at current institution, and sports fandom (Table 6-19). Older faculty were significantly less likely to perceive MFB student-athletes as involved in drinking-related deviance ( $r = -0.19$ ,  $p < .05$ ). White faculty were significantly more likely to perceive MFB athletes as involved in drinking-related deviance compared to non-white faculty ( $r = 0.17$ ,  $p < .05$ ). Faculty that had been at their institution longer were less likely to perceive MFB student-athletes as involved in drinking-related deviance ( $r = -0.19$ ,  $p < .05$ ). Finally, faculty that were bigger fans of their university sports program were significantly less likely to perceive MFB athletes as involved in drinking-related deviance ( $r = -0.22$ ,  $p < .01$ ).

**MBA.** There was only one independent variable significantly related to criminal deviance at the bivariate level for the MBA subgroup, which was sports fandom (Tables 6-19, 6-20, 6-21, and 6-22). Again, this relationship is negative, where faculty that are bigger fans of their university sports program were significantly less likely to perceive MBA student-athletes involved in criminal deviance ( $r = -0.23$ ,  $p < .05$ ) (Table 6-19).

There were five independent variables related to drinking-related deviance at the bivariate level for the MBA subgroup (Tables 6-19, 6-20, 6-21, and 6-22). These variables include three faculty status attributes (age, time at current institution, and sports fandom), one student-athlete status attribute (percentage of other race student-athletes), and one university status attribute (UGA). Older faculty were significantly less likely to perceive MBA student-athletes as involved in drinking-related deviance ( $r = -0.20$ ,  $p < .05$ ). Faculty that had been at their institution longer were less likely to perceive MBA student-athletes as involved in drinking-related deviance ( $r = -0.23$ ,  $p < .01$ ). Faculty that were bigger fans of their university sports program were significantly less likely to perceive MBA athletes as involved in drinking-related deviance ( $r = -0.28$ ,  $p < .01$ ). Faculty that estimated a higher percentage of student-athletes in the other race category were significantly less likely to believe MBA students were involved in drinking-related deviance ( $r = -0.27$ ,  $p < .05$ ). Finally, faculty at UGA were significantly less likely to perceive MBA students were involved in drinking-related deviance compared to faculty at the three other institutions ( $r = -0.19$ ,  $p < .05$ )

**WBB.** There were five independent variables significantly related to criminal deviance at the bivariate level for the WBB subgroup (Tables 6-19, 6-20, 6-21, and 6-22). There were two faculty status attributes (academic discipline-social and behavioral

sciences and service involving athletics), one student-athlete status attribute (percentage of Asian student-athletes), and two university status attributes (UI and region). Faculty in the social and behavioral sciences are significantly less likely to perceive WBB athletes involved in criminal deviance compared to faculty in other disciplines ( $r = -0.18$ ,  $p < .05$ ). Faculty involved in service to athletics were also significantly less likely to perceive WBB athletes involved in criminal deviance compared to faculty that were not involved in any service to athletics ( $r = -0.17$ ,  $p < .05$ ). Faculty that estimated a higher percentage of Asian student-athletes on their campus were significantly more likely to believe WBB students were involved in criminal deviance ( $r = 0.25$ ,  $p < .05$ ). Faculty from UI are significantly more likely to perceive WBB athletes involved in criminal deviance ( $r = 0.18$ ,  $p < .05$ ). In fact, faculty from the Midwest region or Big 10 conference are significantly more likely to perceive WBB athletes as involved in criminal deviance ( $r = 0.20$ ,  $p < .05$ ).

There were also four variables that were significantly related to alcohol-related deviance for the WBB subgroup (Tables 6-19, 6-20, 6-21, and 6-22). There was one faculty status attribute (academic rank- associate professor), one university status attribute (UI), and two university athletic status attributes (athletic revenue and directors cup standing). Associate professors were significantly less likely to perceive WBB athletes are involved in drinking-related deviance compared to faculty in other ranks ( $r = -0.23$ ,  $p < .01$ ). Faculty from UI were significantly more likely to perceive WBB athletes are involved in drinking-related deviance compared to the other three institutions ( $r = 0.27$ ,  $p < .01$ ). Faculty from universities with less athletic revenue were significantly more likely to perceive WBB student-athletes are involved in alcohol-related deviance ( $r$

= -0.24,  $p < .01$ ). Additionally, faculty from universities with a higher Director's cup ranking (meaning less overall athletic success) were significantly more likely to perceive WBB are involved in alcohol-related deviance ( $r = 0.23$ ,  $p < .05$ ).

### **OLS Regression by University and Clogg Coefficient Comparison Test**

**Predicting criminal deviance.** Independent variables that were significantly associated with at least one of the sporting groups were entered into OLS regression models to predict criminal deviance. More specifically, OLS regression models were run for each sporting group using academic discipline (physical sciences and mathematics and social and behavioral sciences), service involving athletics, sports fandom, UI, UGA, and UF<sup>37</sup> (Table 6-23).

For MFB, the overall model is significant ( $F = 3.61$ ,  $p < .05$ ,  $R^2 = 0.16$ ) (Table 6-19). There are three variables that remain significant after controlling for other variables, which are academic discipline (physical sciences and mathematics), sports fandom, and UF. Faculty in the physical sciences and mathematics disciplines are significantly more likely to perceive MFB athletes as criminal deviants compared to faculty in other disciplines ( $b = 0.51$ ,  $p < .01$ ). Faculty that were bigger fans of their university sports programs were significantly less likely to perceive MFB student-athletes as criminally deviant ( $b = -0.09$ ,  $p < .01$ ). Additionally, faculty at UF are significantly more likely to perceive MFB student-athletes as criminal deviants compared to faculty at OSU ( $b = 0.23$ ,  $p < .05$ ).

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<sup>37</sup> I chose not to include the one significant student athlete status attribute (perceptions of Asian student-athletes) in the regression models because of missing data resulting in power issues. I also did not include region in the regression analyses even though it was significant at the bivariate level because I am included the university dummy variables, which would be redundant.

For MBA, the overall model is not significant ( $F = 1.68$ ,  $p > .10$ ,  $R^2 = 0.10$ ) (Table 6-23). Although the overall model is not significant, there is one independent variable that remains significant controlling for other variables, which is sports fandom. Faculty that are bigger fans of their university sports programs are significantly less likely to perceive MBA students as involved in criminal deviance ( $b = -0.06$ ,  $p < .05$ ).

The overall model is not significant for WBB at the .05 p-value cutoff, but it does have a p-value below .10 ( $F = 2.02$ ,  $p < .10$ ,  $R^2 = 0.10$ ) (Table 6-23). Additionally, none of the individual variables remain significant after controlling for other variables.

The regression coefficient comparison test developed by Clogg, Petkova, and Haritou (1995) determined there are some significant differences concerning some variables by sporting group. Table 6-24 reports the z-values associated with each independent variable. First, the effect of academic discipline (physical sciences and mathematics) was significantly different for MFB compared to WBB ( $z = 2.83$ ,  $p < .05$ ). For MFB, the coefficient was significant and positive, meaning faculty in the disciplines of physical sciences and mathematics were significantly more likely to perceive MFB student-athletes as criminally deviant. However, for WBB, the coefficient was non-significant and negative. Second, the effect of service involving athletics on perceptions of criminal deviance was stronger for WBB than MFB ( $z = 2.51$ ,  $p < .05$ ).

**Predicting drinking-related deviance.** Independent variables that were significantly associated with at least one of the sporting groups were entered into OLS regression models to predict drinking-related deviance<sup>38</sup>. More specifically, OLS

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<sup>38</sup> The models did not include percentage of other race athletes, even though it was significantly related to substance-related deviance at the bivariate level because of a high frequency of missingness and lack of power. Additionally, I did not include the significant university athletic status attributes because they are

regression models were run for each sporting group using age, race, academic rank (associate professor), time at current institution, sports fandom, UI, UGA and UF. Table 6-25 shows OLS regression results predicting drinking-related deviance by sporting group.

For MFB, the overall model is significant ( $F = 3.36$ ,  $p < .01$ ,  $R^2 = 0.17$ ) (Table 6-25). There were two variables that remained significant after controlling for other variables, race and sports fandom. White faculty were significantly more likely to perceive MFB athletes involved in drinking-related deviance compared to non-white faculty ( $b = 0.79$ ,  $p < .01$ ). Additionally, faculty that are bigger fans of their university sports programs were significantly less likely to perceive that MFB athletes were involved in drinking-related deviance ( $b = -0.08$ ,  $p < .05$ ).

For MBA, the overall model is significant ( $F = 2.74$ ,  $p < .01$ ,  $R^2 = 0.16$ ) (Table 6-25). There were two variables that remained significant after controlling for other variables, which were sports fandom and UF. Again, faculty that are bigger fans of their university sports programs were significantly less likely to perceive that MBA athletes are involved in drinking-related deviance ( $b = -0.09$ ,  $p < .05$ ). Additionally, faculty at UF were significantly more likely to perceive drinking-related deviance compared to faculty at OSU ( $b = 0.35$ ,  $p < .05$ ).

The overall model was also significant for the WBB subgroup regression analysis ( $F = 2.96$ ,  $p < .01$ ,  $R^2 = 0.17$ ) (Table 6-25). Two variables remained significant after controlling for other variables, academic rank (associate professor) and UI. Associate

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highly correlated with the university status attributes, which would bring redundancy and multicollinearity issues.

professors were significantly less likely to perceive WBB student-athletes as drinking-related deviants compared to faculty in other ranks ( $b = -0.34$ ,  $p < .05$ ). Additionally, faculty UI are significantly more likely to perceive WBB student-athletes as drinking-related deviants compared to faculty at OSU ( $b = 0.53$ ,  $p < .001$ ).

The regression coefficient comparison test developed by Clogg, Petkova, and Haritou (1995) determined there are some significant differences concerning some variables by sporting group. Table 6-26 reports the z-values associated with each independent variable by sporting group. First, the effect of race on perceptions of substance-related deviance was stronger for MFB compared to MBA ( $z = 2.04$ ,  $p < .05$ ) and WBB ( $z = 2.34$ ,  $p < .05$ ). Second, the effect of academic rank- associate professor-on perceptions of drinking-related deviance was stronger for WBB than MBA ( $z = 2.03$ ,  $p < .05$ ).

Table 6-1. Factorial ANOVA of university and sporting group for criminal deviance

Source	Subjects	df	MS	F	$\eta^2$
Model	18.93	11	1.72	7.16***	0.17
University	0.50	3	0.17	0.69	0.01
Sport	14.88	2	7.44	30.92***	0.14
University*Sport	2.67	6	0.44	1.85	0.03
Residual	93.34	388	0.24		
Total	112.27	399			

Note. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table 6-2. Mean differences and confidence intervals of perceptions of criminal deviance by university

		95% Confidence Interval				
		Mean Difference	SE	p-value	Lower Bound	Upper Bound
Ohio State University	University of Florida	0.01	0.07	0.999	-0.16	0.19
	University of Georgia	-0.01	0.07	0.997	-0.19	0.16
	University of Illinois	-0.08	0.07	0.698	-0.26	0.11
University of Florida	Ohio State University	-0.01	0.07	0.999	-0.19	0.16
	University of Georgia	-0.02	0.07	0.986	-0.20	0.15
	University of Illinois	-0.09	0.07	0.628	-0.27	0.10
University of Georgia	Ohio State University	0.01	0.07	0.997	-0.16	0.19
	University of Florida	0.02	0.07	0.986	-0.15	0.20
	University of Illinois	-0.06	0.07	0.816	-0.25	0.12
University of Illinois	Ohio State University	0.08	0.07	0.698	-0.11	0.26
	University of Florida	0.09	0.07	0.628	-0.10	0.27
	University of Georgia	0.06	0.07	0.816	-0.12	0.25

Table 6-3. Mean differences and confidence intervals of perceptions of criminal deviance by sport

		95% Confidence Interval				
		Mean Difference	SE	p-value	Lower Bound	Upper Bound
Football	Baseball	.19*	0.06	0.004	0.05	0.34
	Women's Basketball	.48*	0.06	0.000	0.34	0.61
Baseball	Football	-.19*	0.06	0.004	-0.34	-0.05
	Women's Basketball	.28*	0.06	0.000	0.14	0.43
Women's Basketball	Football	-.48*	0.06	0.000	-0.61	-0.34
	Baseball	-.28*	0.06	0.000	-0.43	-0.14

Note. \*p < .05

Table 6-4. Factorial ANOVA of university and sporting group for alcohol-related deviance

Source	Subjects	df	MS	F	$\eta^2$
Model	44.61	11	4.06	8.99***	0.21
University	4.68	3	1.56	3.46*	0.03
Sport	32.25	2	16.12	35.74***	0.16
University*Sport	6.37	6	1.06	2.35*	0.04
Residual	171.41	380	0.45		
Total	216.01	391			

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-5. Mean differences and confidence intervals of perceptions of drinking-related deviance by university

		95% Confidence Interval				
		Mean Difference	SE	p-value	Lower Bound	Upper Bound
Ohio State University	University of Florida	-0.02	0.09	0.996	-0.26	0.22
	University of Georgia	-0.01	0.09	0.999	-0.25	0.22
	University of Illinois	-0.24	0.10	0.064	-0.49	0.01

Table 6-5. Continued

		Mean Difference	SE	p-value	95% Confidence Interval	
					Lower Bound	Upper Bound
University of Florida	Ohio State University	0.02	0.09	0.996	-0.22	0.26
	University of Georgia	0.01	0.10	1.000	-0.24	0.25
	University of Illinois	-0.22	0.10	0.122	-0.48	0.04
University of Georgia	Ohio State University	0.01	0.09	0.999	-0.22	0.25
	University of Florida	-0.01	0.10	1.000	-0.25	0.24
	University of Illinois	-0.23	0.10	0.099	-0.48	0.03
University of Illinois	Ohio State University	0.24	0.10	0.064	-0.01	0.49
	University of Florida	0.22	0.10	0.122	-0.04	0.48
	University of Georgia	0.23	0.10	0.099	-0.03	0.48

Table 6-6. Mean differences and confidence intervals of perceptions of drinking-related deviance by sport

		Mean Difference	SE	p-value	95% Confidence Interval	
					Lower Bound	Upper Bound
Football	Baseball	.20*	0.08	0.043	0.01	0.39
	Women's Basketball	.70*	0.08	0.000	0.51	0.89
Baseball	Football	-.20*	0.08	0.043	-0.39	-0.01
	Women's Basketball	.50*	0.09	0.000	0.30	0.70
Women's Basketball	Football	-.70*	0.08	0.000	-0.89	-0.51
	Baseball	-.50*	0.09	0.000	-0.70	-0.30

Note. \*p &lt; .05

Table 6-7. Correlations of normative deviance and faculty status attributes

	Criminal deviance	Drinking-related deviance
<b>Faculty status attributes</b>		
Age	-0.02	-0.16***
Gender (Male = 1; Female = 0)	0.05	0.00
Race (White = 1; Non-white = 0)	0.07	0.14**
Academic Rank		
Lecturer = 1	-0.06	-0.07
Assistant Professor = 1	0.01	0.10*
Associate Professor = 1	0.00	0.02
Full Professor = 1	0.03	-0.05
Other = 1	-0.01	0.00
Tenure status (Tenure = 1; Non-tenure = 0)	0.02	-0.04
Administrative position (Yes = 1; No = 0)	-0.06	0.02
Academic Discipline		
Architecture = 1	0.04	.
Arts and Humanities = 1	0.06	0.00
Business = 1	-0.01	0.06
Education = 1	-0.11*	-0.11*
Engineering = 1	-0.06	-0.04
Law = 1	0.00	-0.04
Life Sciences = 1	0.04	0.02
Medicine and Health Sciences = 1	-0.02	0.00
Physical sciences and mathematics = 1	0.08	-0.01
Social and Behavior sciences = 1	-0.06	0.05
Other = 1	0.04	0.02
Time at current institution	0.05	-0.12*
Service involving athletics	-0.08	-0.04
Sports fandom	-0.15**	-0.16**
Attendance at MFB events	-0.10*	-0.10
Attendance at MBA events	-0.09	-0.12*
Attendance at WBB events	-0.11*	-0.10*
Contact with student-athletes	-0.05	-0.01

Table 6-8. Correlations of normative deviance and university status attributes

	Criminal deviance	Drinking-related deviance
University status attributes		
University		
OSU	-0.02	-0.05
UF	-0.03	-0.03
UGA	0.00	-0.04
UI	0.06	0.13*
Region (Midwest = 1; South = 0)	0.03	0.06
Undergraduate Student Population	-0.01	-0.02
Faculty population	-0.05	-0.08

Table 6-9. Correlations of normative deviance variables and student-athlete status attributes

	Criminal deviance	Drinking related deviance
Sporting group assigned		
MFB	0.32***	0.29***
MBA	0.04	0.09
WBB	-0.36***	-0.39***
Faculty perception of student-athlete attributes		
Estimate % of student-athlete gender		
Male	-0.06	-0.01
Female	-0.05	-0.01
Estimate % of student-athlete race		
Black	0.02	0.07
White	0.00	0.02
Hispanic	0.06	-0.03
Asian	0.11	0.09
Other	-0.11	-0.13
Estimate % of student-athlete sport		
MFB	0.01	0.04
MBA	0.00	-0.03
WBB	0.01	-0.03

Table 6-10. Correlations of normative deviance and athletic status attributes

	Criminal deviance	Drinking-related deviance
<b>Athletic status attributes</b>		
Student-athlete population	-0.03	-0.06
Varsity athletic teams	-0.02	-0.05
NCAA infractions	-0.02	-0.05
Athletic revenue	-0.05	-0.11*
Directors cup standing	0.06	0.12*

Table 6-11. OLS regression predicting criminal deviance for the entire sample

Variable	b	SE	B
<b>Faculty status attributes</b>			
Academic discipline (education)	-0.14	0.09	-0.07
Sports fandom	-0.05*	0.02	-0.14
Attendance at MFB events	0.00	0.02	-0.01
Attendance at WBB events	-0.03	0.04	-0.04
<b>University status attributes</b>			
UI	0.02	0.07	0.02
UGA	-0.02	0.07	-0.02
UF	0.02	0.07	0.02
<b>Student-athlete status attributes</b>			
MFB	0.46***	0.06	0.41
MBA	0.27***	0.06	0.23
Constant	1.67***	0.10	
R-square		0.17	
df		9	
F		8.85***	
N		394	

Table 6-12. OLS regression models predicting drinking-related deviance for the entire sample

Variable	b	SE	B
<b>Faculty status attributes</b>			
Age	-0.01	0.00	-0.11
Race (White = 1)	0.33**	0.11	0.14
Academic rank (Assistant professor = 1)	0.01	0.10	0.00
Academic discipline (Education = 1)	-0.20	0.13	-0.07
Sports fandom	-0.05*	0.02	-0.10
Time at current institution	0.00	0.01	-0.03
Attendance at MBA events	-0.09	0.05	-0.09
Attendance at WBB events	0.00	0.05	0.00
<b>University status attributes</b>			
UI	0.25*	0.10	0.14
UGA	0.02	0.09	0.01
UF	0.18	0.10	0.11
<b>Student-athlete status attributes</b>			
MFB	0.65***	0.08	0.42
MBA	0.50***	0.09	0.31
Constant	2.60***	0.25	
R-square		0.23	
df		13	
F		8.58***	
N		379	

Table 6-13. Correlations of normative deviance and faculty status attributes by university

	UI Criminal deviance	UF Drinking related deviance	UGA Criminal deviance	OSU Drinking related deviance
	UI Drinking related deviance	UF Criminal deviance	UGA Drinking related deviance	OSU Criminal deviance
<b>Faculty status attributes</b>				
Age	0.02	-0.01	0.06	-0.14
Gender (Male = 1; Female = 0)	-0.13	-0.13	0.25*	0.15
Race (White = 1; Non-white = 0)	0.00	0.20	0.24*	0.35***
<b>Academic Rank</b>				
Lecturer = 1	-0.14	-0.22*	-0.13	-0.09
Assistant Professor = 1	0.14	0.12	-0.04	0.12
Associate Professor = 1	0.08	0.14	0.00	0.05
Full Professor = 1	-0.13	-0.11	0.09	-0.10
Other = 1	0.03	0.02	0.07	0.05
Tenure status	-0.06	0.01	0.03	-0.14
Administrative position	-0.16	0.07	-0.03	-0.07
<b>Academic Discipline</b>				
Architecture = 1	0.07			0.04
Arts and Humanities = 1	0.02	0.19	0.11	0.01
Business = 1	-0.11	0.00	0.05	0.16
Education = 1	0.03	0.07	-0.08	-0.08
Engineering = 1	0.03	-0.07	-0.07	-0.09
Law = 1	-0.08	-0.20		
Life Sciences = 1	0.04	0.05	0.11	0.00
Medicine and Health Sciences = 1	0.13	0.06	0.05	-0.03
Physical sciences and mathematics = 1	-0.02	-0.20	0.11	0.00
Social and Behavior sciences = 1	-0.12	0.05	-0.16	0.01
Other = 1	0.11	-0.04	-0.07	-0.03

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-13. Continued

	UI		UF		UGA		OSU	
	Criminal devianc e	Drinking related devianc e						
Time at current institution	0.09	0.02	0.05	-0.15	0.15	-0.20*	0.06	0.02
Service involving athletics	-0.12	0.15	-0.15	-0.13	-0.18	-0.25*	0.03	0.06
Sports fandom	-0.15	-0.25*	0.02	-0.13	-0.11	0.06	-0.28**	-0.29**
Attendance at MFB events	-0.12	-0.12	-0.09	-0.06	-0.04	-0.02	-0.15	-0.16
Attendance at MBA events	-0.22*	-0.26*	0.14	0.09	-0.25*	-0.27**	-0.13	-0.17
Attendance at WBB events	-0.08	0.12	-0.13	-0.14	-0.07	-0.09	-0.11	-0.12
Contact with student-athletes	-0.15	-0.01	0.03	0.06	-0.01	0.03	-0.02	-0.10

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-14. Correlations of normative deviance and student-athlete status attributes by university

	UI		UF		UGA		OSU	
	Criminal deviance	Drinking related deviance						
<b>Sporting group assigned</b>								
MFB	0.13	0.16	0.45***	0.18	0.37**	0.44***	0.19*	0.33***
MBA	0.09	0.08	0.11	0.28**	0.12	-0.07	0.02	0.09
WBB	-0.22*	-0.25*	-0.53***	-0.42***	-0.48***	-0.40***	-0.21*	-0.45***
<b>Faculty perceptions of student-athlete status attributes</b>								
Estimate % of student-athlete gender								
Male	0.03	0.15	-0.04	-0.13	-0.25*	0.02	-0.01	0.01
Female	-0.06	0.10	-0.02	-0.05	-0.22*	-0.09	0.02	0.04
Estimate % of student-athlete race								
Black	0.07	0.18	-0.12	-0.22*	0.19	0.22*	-0.04	0.15
White	0.03	0.02	0.09	0.13	0.12	-0.01	0.03	0.00
Hispanic	0.31**	0.21	0.10	-0.19	0.09	0.11	-0.03	0.01
Asian	0.21	0.12	0.16	-0.06	0.31*	0.28*	-0.14	0.12
Other	0.01	-0.18	-0.04	-0.02	-0.03	0.03	-0.23	-0.24
Estimate % of student-athlete sport								
MFB	-0.06	-0.02	-0.07	-0.11	0.03	0.03	-0.05	0.02
MBA	0.07	-0.02	-0.02	-0.19	0.06	0.08	-0.09	-0.03
WBB	0.19	0.04	-0.03	-0.14	-0.05	-0.05	-0.10	-0.03

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-15. OLS regression predicting criminal deviance by university

Variable	UI			UF			UGA			OSU		
	b	SE	B	b	SE	B	b	SE	B	b	SE	B
<b>Faculty status attributes</b>												
Gender (Male = 1; Female = 0)	-0.09	0.10	-0.10	0.18	0.10	0.17	0.06	0.08	0.07	0.08	0.09	0.09
Race (White = 1; Non-white = 0)	-0.02	0.14	0.01	0.31	0.20	0.14	0.02	0.16	0.01	-0.01	0.17	-0.01
Academic Discipline (Education = 1)	0.09	0.21	0.05	0.02	0.17	0.01	-0.28	0.19	-0.13	-0.17	0.20	-0.08
Academic Discipline (Physical sciences and mathematics = 1)	-0.06	0.17	-0.04	0.16	0.21	0.07	0.50*	0.19	0.23	0.19	0.19	0.10
Sports fandom	-0.03	0.04	-0.09	0.00	0.03	-0.01	-0.04	0.04	-0.10	-0.09**	0.03	-0.28
Attendance at MBA events	-0.12	0.07	-0.21	0.03	0.05	0.06	-0.06	0.07	-0.07	-0.02	0.10	-0.02
<b>Student-athlete status attributes</b>												
MFB	0.26*	0.12	0.29	0.60***	0.10	0.56	0.64***	0.12	0.56	0.23	0.14	0.19
MBA	0.21	0.13	0.21	0.35**	0.12	0.30	0.30*	0.13	0.24	0.11	0.14	0.09
Constant	1.87***	0.21		0.92***	0.24		1.49***	0.24		1.90***	0.25	
R-square		0.14			0.36			0.35			0.14	
df		8			8			8			8	
F		1.49			6.07***			6.32***			2.10*	
N		84			94			102			109	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-16. Z-values comparing beta coefficients predicting criminal deviance by university

	UI v. UF	UI v. UGA	UI v. OSU	UF v. UGA	UF v. OSU	UGA v. OSU
	z	z	z	z	z	z
Gender (Male = 1; Female = 0)	-1.91	-1.17	-1.26	0.94	0.74	-0.17
Race (White = 1; Non-white = 0)	-1.35	-0.19	-0.05	1.13	1.22	0.13
Academic Discipline (Education = 1)	0.26	1.31	0.90	1.18	0.72	-0.40
Academic Discipline (Physical sciences and mathematics = 1)	-0.81	-2.20*	-0.98	-1.20	-0.11	1.15
Sports fandom	-0.35	0.18	1.20	0.80	2.12*	1.00
Attendance at MBA events	-1.74	-0.61	-0.82	1.05	0.45	-0.33
MFB	-2.18*	-2.24*	0.16	-0.26	2.15*	2.22*
MBA	-0.79	-0.49	0.52	0.28	1.30	0.99

Note. \*p < .05

Table 6-17. OLS regression predicting drinking-related deviance by university

Variable	UI			UF			UGA			OSU		
	b	SE	B	b	SE	B	b	SE	B	b	SE	B
<b>Faculty status attributes</b>												
Age	-0.01	0.01	-0.09	0.00	0.01	-0.05	-0.02	0.01	-0.24	0.00	0.01	-0.06
Race (White = 1; Non-white = 0)	0.47*	0.18	0.25	0.91**	0.33	0.28	0.15	0.25	0.05	0.17	0.19	0.08
Academic Rank (Lecturer = 1)	-0.51*	0.23	-0.24	0.25	0.24	0.11	-0.13	0.20	-0.06	0.06	0.18	0.03
Academic Discipline (Education = 1)	0.15	0.25	0.06	-0.26	0.26	-0.10	-0.17	0.31	-0.05	-0.21	0.23	-0.08
Time at current institution	0.01	0.01	0.15	-0.01	0.01	-0.13	-0.01	0.01	-0.09	0.00	0.01	0.01
Service involving athletics	0.23	0.12	0.19	-0.11	0.15	-0.07	-0.17	0.17	-0.09	0.17	0.14	0.11
Sports fandom	-0.09	0.05	-0.22	-0.09	0.05	-0.19	0.06	0.06	0.09	-0.08*	0.04	-0.21
Attendance at MBA events	-0.15	0.08	-0.20	0.08	0.07	0.11	-0.17	0.12	-0.14	-0.10	0.11	-0.09
<b>Student-athlete status attributes</b>												
MFB	0.45**	0.15	0.36	0.45**	0.16	0.29	0.89***	0.19	0.51	0.69***	0.18	0.46
MBA	0.28	0.15	0.22	0.69***	0.18	0.41	0.38	0.20	0.20	0.52**	0.16	0.37
Constant	2.81***	0.43		2.10***	0.54		3.07***	0.51		2.63***	0.39	
R-square		0.32			0.29			0.37			0.30	
df		10			10			10			10	
F		3.31**			3.25**			5.25***			4.12***	
N		82			91			99			105	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-18. Z-values comparing beta coefficients predicting drinking-related deviance by university

	UI v. UF z	UI v. UGA z	UI v. OSU z	UF v. UGA z	UF v. OSU z	UGA v. OSU z
Age	-0.71	0.71	-0.71	1.41	0.00	-1.41
Race (White = 1; Non-white = 0)	-1.17	1.04	1.15	1.84	1.94	-0.06
Academic Rank (Lecturer = 1)	-2.29*	-1.25	-1.95	1.22	0.63	-0.71
Academic Discipline (Education = 1)	1.14	0.80	1.06	-0.22	-0.14	0.10
Time at current institution	1.41	1.41	0.71	0.00	-0.71	-0.71
Service involving athletics	1.77	1.92	0.33	0.26	-1.36	-1.54
Sports fandom	0.00	-1.92	-0.16	-1.92	-0.16	1.94
Attendance at MBA events	-2.16*	0.14	-0.37	1.80	1.38	-0.43
MFB	0.00	-1.82	-1.02	-1.77	-1.00	0.76
MBA	-1.75	-0.40	-1.09	1.25	0.71	-0.55

Note. \*p < .05

Table 6-19. Correlations of normative deviance and faculty status attributes by sporting group

	MFB		MBA		WBB	
	Criminal deviance	Drinking-related deviance	Criminal deviance	Drinking-related deviance	Criminal deviance	Drinking-related deviance
<b>Faculty status attributes</b>						
Age	0.15	-0.19*	-0.11	-0.20*	-0.12	-0.13
Gender (Male = 1; Female = 0)	0.03	-0.11	-0.01	-0.02	0.14	0.14
Race (White= 1)	0.13	0.17*	-0.07	0.13	0.09	0.12
<b>Academic Rank</b>						
Lecturer = 1	-0.08	-0.10	-0.13	-0.14	-0.01	0.01
Assistant Professor = 1	-0.07	0.14	0.13	0.16	-0.01	0.05
Associate Professor = 1	0.02	0.12	0.08	0.11	-0.12	-0.23**
Full Professor = 1	0.06	-0.13	-0.07	-0.12	0.12	0.12
Other = 1	0.08	0.01	-0.13	-0.08	-0.04	0.06
Tenure status (Tenure = 1; Non-tenure = 0)	0.07	-0.06	-0.03	-0.04	0.02	-0.07
Administrative position (Yes = 1; No = 0)	-0.03	0.04	-0.15	-0.02	0.03	0.12
<b>Academic Discipline</b>						
Architecture = 1	0.00	.	.	.	0.10	.
Arts and Humanities = 1	0.07	0.07	0.07	-0.03	0.09	-0.03
Business = 1	0.06	0.11	-0.05	0.08	-0.06	0.00
Education = 1	-0.02	-0.03	-0.03	-0.04	-0.11	-0.11
Engineering = 1	-0.07	-0.07	-0.12	-0.16	-0.02	0.06
Law = 1	-0.10	-0.09	0.06	-0.09	.	.
Life Sciences = 1	-0.01	-0.03	-0.08	-0.07	0.14	0.09
Medicine and Health Sciences = 1	-0.05	-0.06	-0.03	0.02	0.02	0.04
Physical sciences and mathematics = 1	0.22**	0.01	0.08	0.00	0.06	-0.03
Social and Behavior sciences = 1	-0.11	0.05	0.03	0.11	-0.18*	-0.04
Other = 1	0.01	-0.06	0.03	0.08	0.06	0.05

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-19. Continued

	MFB		MBA		WBB	
	Criminal deviance	Drinking-related deviance	Criminal deviance	Drinking-related deviance	Criminal deviance	Drinking-related deviance
Time at current institution	0.14	-0.19*	-0.11	-0.23**	0.05	-0.03
Service involving athletics	0.05	-0.09	-0.03	0.04	-0.17*	0.04
Sports fandom	-0.17*	-0.22**	-0.23*	-0.28**	-0.10	0.02
Attendance at MFB events	-0.13	-0.13	-0.13	-0.12	-0.05	0.02
Attendance at MBA events	-0.13	-0.16	-0.02	-0.06	-0.10	-0.10
Attendance at WBB events	0.00	-0.04	-0.08	-0.10	-0.14	-0.06
Contact with student-athletes	0.01	0.13	-0.05	-0.09	-0.13	-0.09

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-20. Correlations of normative deviance and student-athlete status attributes by sporting group

	MFB		MBA		WBB	
	Criminal deviance	Drinking related deviance	Criminal deviance	Drinking related deviance	Criminal deviance	Drinking related deviance
<b>Student-athlete status attributes</b>						
Gender						
Male	-0.10	0.04	0.03	0.07	-0.09	-0.07
Female	-0.12	-0.06	0.02	0.06	-0.05	0.01
Race						
Black	0.13	0.16	0.01	0.07	-0.04	0.01
White	-0.02	-0.04	0.04	0.18	0.06	0.03
Hispanic	0.05	-0.02	0.10	0.00	-0.01	-0.13
Asian	0.03	0.11	0.12	0.04	0.25*	0.16
Other	0.00	0.15	-0.23	-0.27*	-0.01	-0.20
Sport						
MFB	0.10	0.04	0.02	0.00	-0.01	0.16
MBA	0.03	-0.01	0.13	0.06	-0.05	-0.07
WBB	0.09	-0.08	0.06	0.04	0.02	0.04

Table 6-21. Correlations of normative deviance and university status attributes by sporting group

	MFB		MBA		WBB	
	Criminal deviance	Drinking related deviance	Criminal deviance	Drinking related deviance	Criminal deviance	Drinking related deviance
University status attributes						
University						
OSU	-0.09	-0.03	-0.04	-0.08	0.07	-0.13
UF	0.09	-0.11	0.04	0.16	-0.12	0.00
UGA	0.09	0.12	-0.09	-0.19*	-0.11	-0.13
UI	-0.09	0.02	0.10	0.12	0.18*	0.27**
Region (Midwest = 1; South = 0)	-0.16	-0.02	0.04	0.03	0.20*	0.11
Undergraduate Student Population	-0.011	-0.07	0.00	0.01	0.10	-0.05
Faculty population	0.04	-0.12	-0.01	0.07	-0.10	-0.12

Table 6-22. Correlations of normative deviance and university athletic status attributes by sporting group

	MFB		MBA		WBB	
	Criminal deviance	Alcohol-related deviance	Criminal deviance	Alcohol-related deviance	Criminal deviance	Alcohol-related deviance
Athletic status attributes						
Student-athlete population						
Student-athlete population	-0.08	-0.02	-0.06	-0.10	0.04	-0.17
Varsity athletic teams	-0.09	-0.03	-0.04	-0.08	0.07	-0.13
NCAA infractions	-0.09	-0.03	-0.04	-0.08	0.07	-0.13
Athletic revenue	0.00	-0.05	-0.07	-0.09	-0.07	-0.24**
Directors cup standing	-0.07	0.07	0.07	0.05	0.16	0.23*

Table 6-23. OLS regression predicting criminal deviance by sporting group

Variable	MFB			MBA			WBB		
	b	SE	B	b	SE	B	b	SE	B
<b>Faculty status attributes</b>									
Academic discipline (physical sciences and mathematics)	0.51**	0.16	0.25	0.21	0.14	0.14	-0.15	0.17	-0.08
Academic discipline (social and behavioral sciences)	-0.17	0.10	-0.14	-0.10	0.11	-0.08	-0.21	0.13	-0.14
Service involving athletics	0.14	0.09	0.14	-0.07	0.09	-0.07	-0.18	0.09	-0.17
Sports fandom	-0.09**	0.03	-0.26	-0.06*	0.03	-0.21	-0.02	0.03	-0.07
<b>University status attributes</b>									
UI	-0.01	0.11	-0.01	0.11	0.12	0.10	0.13	0.14	0.10
UGA	0.21	0.11	0.20	-0.04	0.11	-0.03	-0.11	0.13	-0.09
UF	0.23*	0.12	0.20	0.10	0.12	0.09	-0.10	0.12	-0.08
Constant	2.07***	0.14		1.94***	0.15		1.66***	0.16	
R-square		0.16			0.10			0.10	
df		7			7			7	
F		3.61**			1.68			2.02	
N		140			120			132	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-24. Z-values comparing beta coefficients predicting criminal deviance by sporting group

	MFB vs. MBA z	MFB vs. WBB z	MBA vs. WBB z
Academic discipline (physical sciences and mathematics)	1.41	2.83*	1.63
Academic discipline (social and behavior sciences)	-0.47	0.24	0.65
Service involving athletics	1.65	2.51*	0.86
Sports fandom	-0.71	-1.65	-0.94
UI	-0.74	-0.79	-0.11
UGA	1.61	1.88	0.41
UF	0.77	1.94	1.18

Note. \* $p < .05$

Table 6-25. OLS regression predicting drinking-related deviance by sporting group

Variable	MFB			MBA			WBB		
	b	SE	B	b	SE	B	b	SE	B
<b>Faculty status attributes</b>									
Age	-0.01	0.01	-0.15	0.00	0.01	0.02	-0.01	0.01	-0.15
Race (white = 1)	0.79**	0.22	0.30	0.21	0.18	0.10	0.11	0.19	0.05
Academic rank (associate professor = 1)	0.06	0.14	0.04	0.09	0.15	0.06	-0.34*	0.15	-0.23
Time at current institution	-0.01	0.01	-0.09	-0.01	0.01	-0.19	0.00	0.01	0.02
Sports fandom	-0.08*	0.04	-0.18	-0.09*	0.04	-0.20	0.02	0.04	0.04
<b>University status attributes</b>									
UI	0.06	0.16	0.04	0.18	0.16	0.11	0.53***	0.19	0.31
UGA	0.18	0.14	0.13	-0.09	0.16	-0.06	-0.07	0.18	-0.04
UF	-0.07	0.15	-0.05	0.35*	0.18	0.20	0.18	0.17	0.12
Constant	2.99***	0.35		2.97***	0.42		2.48***	0.41	
R-square		0.17			0.16			0.17	
df		8			8			8	
F		3.36**			2.74**			2.96**	
N		139			121			122	

Note. \*p < .05, \*\*p < .01, \*\*\*p < .001

Table 6-26. Z-values comparing beta coefficients predicting drinking-related deviance by sporting group

	MFB vs. MBA	MFB vs. WBB	MBA vs. WBB
	z	z	z
Age	-0.71	0.00	0.71
Race (white = 1)	2.04*	2.34*	0.38
Academic rank (associate professor = 1)	-0.15	1.95	2.03*
Time at current institution	0.00	-0.71	-0.71
Sports fandom	0.18	-1.77	-1.94
UI	-0.53	-1.89	-1.41
UGA	1.27	1.10	-0.08
UF	-1.79	-1.10	0.69

Note. \*p < .05

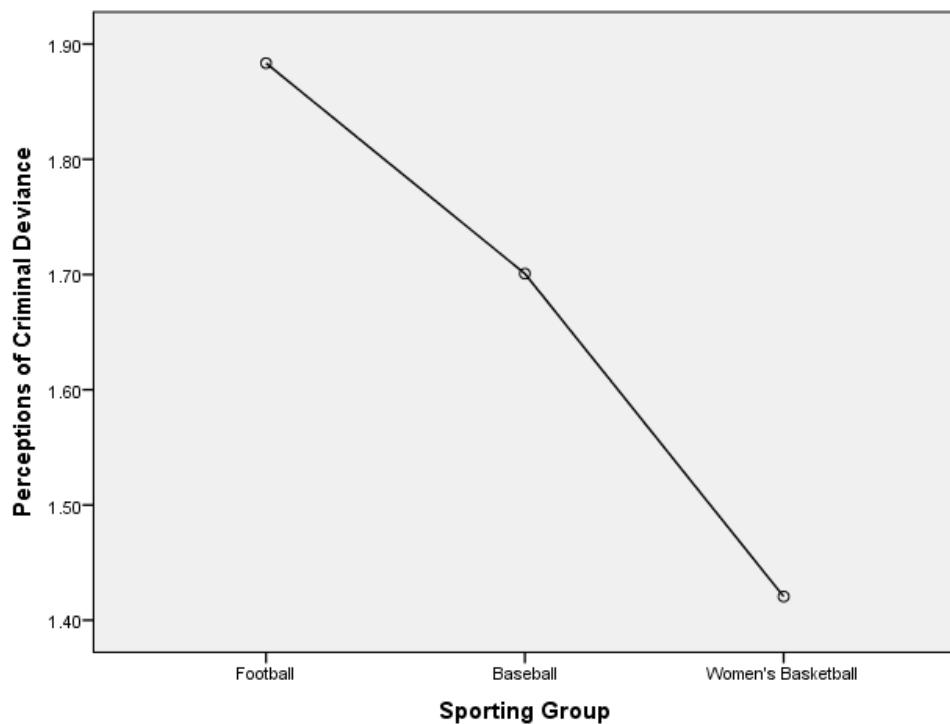


Figure 6-1. Main effect of sport for criminal deviance

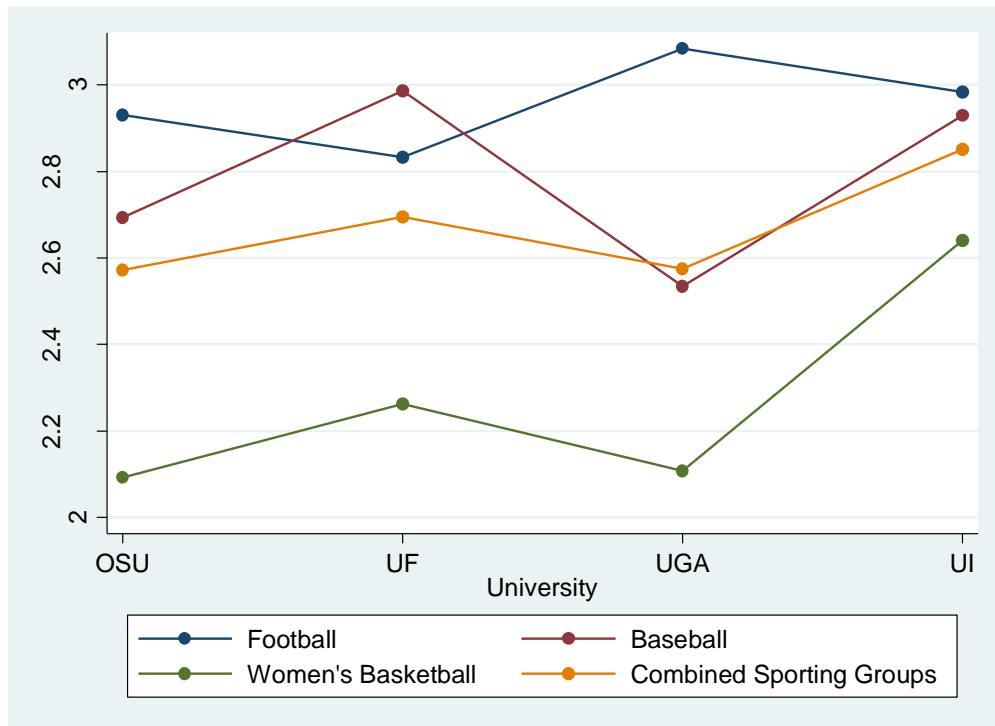


Figure 6-2. Interaction effect of university and sport for alcohol-related deviance

## CHAPTER 7 DISCUSSION

This research examined how individual and university status attributes as well as characteristics of perceived athletes (e.g., gender, race, and sport) affect faculty perceptions of both academic and normative deviance. Tables 7-1, 7-2, and 7-3 summarize the overall findings of this study. Using data from an online survey from faculty at four institutions, results suggest that faculty perceptions of student-athlete academic and normative deviance is low overall. However, some group differences show important and statistically significant relationships. The following highlights the key findings and discusses implications for theory and practice.

### **Revisiting the Hypotheses**

#### **Intergroup Contact**

When looking at results for the entire sample, the variable that was consistently a predictor for all four deviance scales was sports fandom. Faculty who were bigger fans of their university sports programs were significantly less likely to perceive both academic and normative deviance by student-athletes. This shows support for the intergroup contact hypothesis, where the more contact different groups of people have with each other the less prejudice and better social relations there will be between the groups (Allport, 1954). Faculty that are fans have opportunity to see student-athletes in a positive light through their sport, which lessens the perception of student-athlete deviance.

Although faculty generally reported low levels of fandom, another possible explanation for fandom being a consistent predictor of lower perceptions of academic and normative deviance may be the idea of sport hero worship. This is where fans are

loyal followers of individual athletes based on the positive marketing of the athlete (Schwarz, 1973; Crepeau, 1981). The sports industry (i.e., NCAA or the individual universities) markets athletes to identify with fans and increase their brand (L'Etang, 2006). According to Schwarz (1973), through marketing and public relations of the sports industry, the athlete becomes a symbol of success for the group in which they belong to. However, this success is only based on their performance "in the game" and not in other areas of life, like the classroom or the community. Therefore, sport fans tend to place athletes on a pedestal, which may lead them to think athletes are less deviant, compared to someone who is not a consumer or fan of athletics.

There were also some university and sport differences for the effect of fandom on the deviance variables. Sports fandom had a stronger positive effect in explaining perceptions of academic deviance for the two male sports compared to women's basketball. This difference between the sporting groups is not surprising because women's basketball is a female and non-revenue producing sport at each of the universities and has the least fan support and media attention generally of the three groups (Adams & Tuggle, 2004). Therefore, faculty could be fans of some of the university sports programs, but not really women's basketball or other non-revenue producing sports. Additionally, fans of men's football and baseball could be very different from fans of women's basketball, in terms of their commitment and identity salience. Lavarie and Arnett (2000) argue that sport fan salient identities are an important factor in explaining fan-related behavior, like attendance and involvement at games. For faculty, this may also extend to fan behavior in the classroom. Therefore, a faculty member that is a committed fan of the football team may not perceive academic

deviance among football players in their courses because they feel connected to the team. However, for a women's basketball player in their course, the faculty member may not feel any attachment because they don't identify with the women's basketball team.

It could also be that women's basketball athletes don't stand out as much as athletes from the other two males sports. For example, one faculty member emailed me after taking the survey saying, "I typically do not know in what sports students participate. I am given a list of student athletes that doesn't specify sports played. I only know what sport a student plays if I recognize their name from my knowledge of the different teams."

Additionally, sports fandom had a stronger effect on explaining perceptions of criminal deviance for faculty at Ohio State compared to University of Florida. Again, it could be that faculty at OSU are more connected and identify with their university sports teams compared to faculty at UF. OSU consistently rates high on the college football fan index and even has a marketing campaign called "the best fans in the land" (Harris, 2016). With these high levels of fandom, perhaps faculty are more likely to worship athletes, which may lead them to think their student-athletes are less deviant, compared to faculty at UF. Alternatively, faculty at UF may not be as connected to their university sports program due to some high-profile incidents of crime. One example is, Aaron Hernandez, the former Gator Football All-American, who was convicted of first degree murder and sentenced to life in prison without parole (Thompson & Romero, 2015). Once the news of Hernandez being suspected for murder broke, there were also several reports of Hernandez being investigated for crimes that occurred during his time

at UF (Thompson & Romero, 2015). Additionally, an ESPN report claimed from 2009 to 2014 that Florida had the most athletes as crime suspects and repeat offenders compared to 10 other major football and men's basketball programs (Lavigne, 2015a). Faculty at UF could read these reports and it impact their perceptions of criminal deviance, regardless of their fandom.

There were also other variables significantly related to deviance that supports the intergroup contact hypothesis (Allport, 1954). First, more attendance at men's baseball events was negatively related to perceptions of general cheating for the entire sample. Therefore, faculty who attended more men's baseball events in the last year were less likely to perceive student-athletes as general cheaters. Again, the intergroup contact hypothesis could be one explanation for this relationships, where faculty who watched student-athletes at their sporting events, were able to see student-athletes in a positive light, which decreases misconceptions about them. Adding to that explanation for this relationship is that baseball has a different eligibility system than other college sports. That is, college baseball players, have the opportunity to play professionally right out of high school, where athletes in other sports (football and basketball) do not have that option. If faculty are aware of this difference, it may lead faculty to believe that baseball players are more serious students that want to complete their degree, because they chose to come to college rather than play professionally right out of high school (Billings, 2012). Therefore, faculty who attend their baseball events, might be reminded of the fact that these students chose college over the professional route when they think of these student-athletes.

It is important to note that there were some university differences with the relationship between attendance at baseball events and deviance. Attendance at men's baseball events was an important predictor of perceptions that student-athletes rely on others in terms of academic deviance at UGA and drinking-related deviance at UI, where the more faculty attended men's baseball events, the less likely they were to believe the student-athletes were deviant. Both of these relationships at UGA and UI were significantly different from UF, which had a positive but non-significant relationship with deviance and attendance. One reason for this difference may be that in the last year before the survey was administered, UF had two baseball players arrested for trespassing and climbing a crane on a construction site late at night, which was widely publicized (Thompson, 2015). Faculty at UF may have remembered this event, which may have led them to perceive more deviance by baseball student-athletes compared to faculty at UI and UGA.

Another variable that is related to the academic deviance scale of general cheating that could be explained by the intergroup hypothesis is participation in service involving athletics. Service had a bigger effect explaining perceptions of general cheating at UGA compared to UI and OSU. Therefore, my hypothesis that faculty involved in service to athletics will have lower perceptions of student-athlete deviance than faculty not involved in service to athletics was true for faculty at UGA talking about general cheating only. Therefore, UGA may have some faculty service programming that is making a difference in perceptions of academic deviance among their student-athletes. When looking at the text responses that faculty specified for service, no faculty at UGA listed filling out academic progress reports as their service. However, it was the

second highest response from the other three universities. Perhaps filling out reports on student-athletes draws faculty attention to the negative performance in the class, which may lead them to think they are more likely to commit academic deviance.

Although none of the academic rank variables remained significant in overall models for deviance, it was an important predictor by university and sporting group. I hypothesized that faculty with higher academic ranks (associate professors and full professors) would have lower perceptions of deviance than faculty of lower ranks (lecturers and assistant professors). This hypothesis was not supported for one university, UI. Faculty at UI who were lecturers were significantly less likely to perceive drinking-related deviance among athletes compared to faculty who were not. The hypothesis was somewhat supported by sporting group. Associate professors were less likely to perceive drinking-related deviance for WBB athletes compared to MBA student-athletes. Alternatively, associate professors were more likely to perceive general cheating for men's football compared to women's basketball. Therefore, rank did not matter as much as the sporting group, which in this case was a female group versus a male group. That is, for associate professors by sporting group, women were perceived to be less deviant than men.

Academic discipline is another variable that was important by university that supports the intergroup contact hypothesis. I hypothesized that faculty affiliated with STEM disciplines would have increased perceptions of student-athlete deviance compared to faculty in other disciplines. Student-athletes are more likely to be overrepresented in non-STEM majors (Fountain & Finley, 2009). Therefore, faculty in the STEM disciplines would have less intergroup contact increasing their perceptions of

deviance. This hypothesis was supported only at UGA, where faculty in the disciplines of physical sciences and math were more likely to perceive student-athlete criminal deviance compared to faculty in other disciplines.

### **Sporting Group**

Faculty were also significantly less likely to perceive women's basketball student-athletes as deviant compared to men's football and baseball student-athletes, which supports one of my hypotheses. This was found for each of the overall sample models predicting both academic and normative deviance. Again, women's basketball is a non-revenue producing sport that receives the least fan support and media attention of the three groups (Adams & Tuggle, 2004). These results support other academic research, where faculty hold more prejudicial attitudes towards male athletes compared to female athletes (Engstrom et al., 1995). Additionally, an undisputed fact in criminology is that males commit more crime than females, and women's basketball is a female sport (Lauritsen et al., 2009). Added to that, is the public perception that most crime is committed by black males, not females (Drummond, 1990; Barlow, 1998; Russell, 2002). Therefore, these results are similar to the reality of deviance in general as well as perceptions more broadly. Specifically, males are seen as more deviant than females. In addition, the racial distribution of men's football is more diverse generally than baseball, which could explain the greater perceptions of deviance among this group (Billings, 2012).

The men's football manipulation also had a stronger effect for certain universities depending on the type of deviance. First, the effect of the MFB manipulation on perceptions of general cheating was stronger for UI compared to OSU. Second, this effect was stronger on criminal deviance for UGA and UF compared to UI and OSU.

There may be some contextual factors at the universities that I am unaware of affecting this relationship. SEC football is routinely called out in the media for arrest data, which may explain why for UGA and UF, faculty perceive men's football as more criminally deviant compared to faculty at the Big Ten schools of OSU and UI (Cooper, 2015; Lavigne, 2015b). Faculty may see or hear about these articles, impacting their perceptions of student-athlete deviance. For example, one faculty member at UI emailed me after taking the survey saying "Our football team is pretty bad on the field; but the student-athletes have a very high graduation rate and almost never get into trouble that finds its way to the news or social media. As I was thinking about your questions, my main conclusion is that our football players are basically regular students here (which may explain why we don't perform well on Saturday). Personally, I'll take our team which still looks like a group of amateurs. We embarrassed ourselves last Saturday in the game, but I'm grateful that our players [do not] embarrass us as a school."

Additionally, contact with student-athletes was also found to matter more in predicting perceptions of general cheating for women's basketball compared to men's baseball. That is, faculty that reported they had more interaction with student-athletes generally, were less likely to perceive WBB athletes as general cheaters. However, for the MBA subgroup, this relationship was positive and non-significant. Therefore, faculty that indicated having more interaction with student-athletes seem to have fewer perceptions of deviance for the female sporting group compared to a male sporting group. In other words, even for those with more contact with student-athletes, faculty still perceive male student-athletes are more deviant than female ones.

There is also an effect of gender in the sport seen in how the academic discipline of faculty explains student-athlete deviance. First, faculty in business were significantly more likely to perceive MBA student-athletes as reliant on others in academic settings compared to faculty in other disciplines. However, for the WBB subgroup, this relationship was negative and non-significant. Second, the faculty in the physical sciences and mathematics disciplines were significantly more likely to perceive MFB student-athletes as criminally deviant compared to faculty in other disciplines. Again, the WBB subgroup the coefficient for this variable was negative and non-significant. Both of these could be considered STEM disciplines, which fits with the intergroup hypothesis that faculty in these majors may have negative perceptions of student-athletes because they have less contact. However, again, there are differences by sporting group, where the male group has more negative perceptions than the female group.<sup>39</sup>

### **Dumb Jock**

Another interesting finding for the entire sample was that white faculty and those who estimated a higher percentage of black student-athletes on their campuses were significantly more likely to perceive student-athletes as reliant on others to commit academic deviance. Therefore, faculty may have created a coding scheme or “symbolic assailant” schema for the dumb jock stereotype, which generally focuses on black student-athletes (Skolnick, 1993). This finding is supportive of the possibility of an implicit racial bias, which is when a person stereotypes or judges another race outside

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<sup>39</sup> There is an additional sporting effect seen in how the academic discipline of faculty impacts perceptions of student-athlete deviance that does not support this hypothesis. Faculty in the engineering discipline were significantly less likely to perceive MBA general cheating compared to faculty in other disciplines. The effect of engineering discipline mattered more in explaining perceptions of general cheating for MBA compared to both MFB and WBB.

of conscious awareness or control (Banaji & Greenwald, 2016). Therefore, even if faculty say white and non-white students are equally good students, it is possible that they unintentionally associate needing to rely on others academically with non-white students. In this case, it was white faculty and those that have perceptions of student-athletes generally as black, that were more likely to perceive student-athletes as reliant on others. The education literature shows similar findings to this, where minority students are more at risk for negative expectations and implicit prejudiced attitudes by teachers compared to white students (van den Bergh et al., 2010). Additionally, this research claims these negative teacher expectancy effects contribute to poor student performance (van den Bergh et al., 2010). That is, creating a self-fulfilling prophecy or stereotype threat. Implicit race biases are concerning because several studies have found them to contribute to the perpetuation of discrimination (McConnell & Leibold, 2001; Bertrand & Malainathan, 2004; Green et al., 2007). Although this research did not examine the effect of a stereotype threat for student-athletes, it does imply that faculty may have detrimental stereotypes about specific student-athlete groups.

The dumb jock stereotype of student-athletes was also more substantial at certain universities compared to others. More specifically, faculty at UF were significantly more likely to perceive student-athletes as both general cheaters and reliant on others than faculty at OSU. Faculty at UI were also significantly more likely to perceive student-athlete general cheating compared to faculty at OSU. A possible explanation for this difference may be that OSU's student-athlete population is much larger than both UF and UI, so OSU faculty have the opportunity to meet more student-athletes there. Another possible explanation is that OSU hosts faculty appreciation

events through their Student-Athlete Advisory Board (SAAB), also referred to as SAAC at other universities, where UI and UF do not have similar events (SAAB and SASSO Host 2014 Staff Appreciation Dinner, 2014). There may also be other unmeasured variables that could account for this difference.

### **Race of Faculty**

Another interesting finding was that the race of faculty mattered in predicting perceptions of deviance. This was already discussed above in terms of implicit bias for the entire sample. However, there were also some differences by university and sporting group. First, the effect of being a white faculty member mattered more in explaining perceptions that student-athletes rely on others at UI compared to UGA. Additionally, the effect of being a white faculty member mattered more in predicting perceptions of drinking-related deviance for MFB compared to MBA and WBB. Other studies predicting prejudicial attitudes toward student-athletes have found that white faculty members are more negative about student-athletes compared to non-white faculty members (Comeaux, 2011). A possible explanation presented for this relationship by Comeaux (2011) is that non-white faculty are more understanding of student-athletes and the athletic subculture, whereas white faculty are not. The next section discusses the patterns of non-response on the outcome measure, which may have impacted the results by university.

### **Non-Response Patterns**

Finally, there were interesting findings of non-response patterns for the academic and normative deviance items. There was strong evidence of a social desirability bias for respondents that selected “prefer not to answer” or did not respond to items at all. In general, faculty that had more fandom, involvement and experience with athletics were

more likely to respond to the deviance items. Alternatively, faculty who had less fandom, involvement and experience were less likely to respond to the deviance items. Additionally, several faculty reached out to me after completing the survey explaining they selected the “prefer not to answer” option because of their discomfort with the deviance items. Although these findings show there may be a flaw in the design of the study, I believe social desirability bias would be an issue regardless of the design because of the sensitivity of questions, asking about deviant behavior, and the group of students I was asking about, student-athletes. Tourangeau and Yan (2007) talk about how error that arises from sensitive topics in surveys is most often a deliberate process by respondents rather than design flaws. The authors also claim that social desirability is contextual, meaning having to do with the situation of the respondent and the privacy offered by revealing sensitive information. One response I received from a respondent was, “Student athletes have a very poor record of performance in my courses, and I am not willing to speak freely on the subject for fear of reprisal.” This shows that for this person, the context of the survey was not perceived as safe. This could be because I am employed by the athletic association at UF, and a subject could identify me as such. For example, one respondent looked me up on LinkedIn and messaged me that he participated in my survey. My LinkedIn profile shows that I currently work for the athletic association, which could have made respondents feel unsafe taking part in my survey or answering items truthfully.

In addition, the survey respondents were faculty, meaning that they were likely cognizant of scientific methods as well as the importance of treating students fairly (Smith, 1990), and possibly therefore more careful about responses than someone in

the general public might be. Still, I believe more research needs to be done on this topic to increase more candid responses.

### **Limitations**

Although the current study is a step forward in understanding the how deviant labels form for student-athletes on college campuses, the study has several limitations.

First, data were gathered using an online survey. While internet surveys provide flexibility, timeliness, convenience, and a low cost of administration, there are also weaknesses to their use (Evans & Mathur, 2005). First, internet surveys could easily be perceived as junk mail to respondents, which may be an explanation for why the response rate for this survey was low. Second, respondents may have had concerns about their privacy, even though responses were anonymous. For example, one participant emailed me to clarify before taking the survey, “if you are going to ask questions about department, that information coupled with information about the university (which I presume you know based on the sampling frame) and basic demographics (age, sex) would enable fairly easy identification of participants. Have you considered what level of aggregation of the findings you report would be necessary to prevent this?” Faculty may have been concerned about their response anonymity and either not responded truthfully or participate in the survey at all. Finally, the survey had many items with forced response options. Respondents may not feel like their attitudes and perceptions of student-athletes were accurately reflected by these answer options. Future research on this topic should consider interviewing faculty to get their responses to these issues and questions.

Another limitation is the low number of grouping variables sampled, which only included four universities. I was not able to use aggregate data, like university status

attribute variables, in the regression models because of multicollinearity issues. For example, the athletic revenue variable was highly correlated with the individual university variables. This is because all faculty at each university have the same level of athletic revenue, so there is very strong linear relationship between the variables. This is common issue in aggregate data (Allison, 1999). In addition, because the number of groups were so small, I could not use hierarchical methods to account for aggregate data, which most require at least 35 groups (Bryk & Raudenbush, 1992). Additionally, the NCAA presented research at the most recent Faculty Athletics Representative Association (FARA) Conference on perceptions of college sports amongst faculty and staff, college affinity, students, and general population and found that faculty and staff had the lowest perceptions regarding the opportunities provided for student-athletes, prioritization of student-athlete well-being, commitment to academics, commitment to fairness, and overall opinion of the NCAA (Dunham & Williams, 2016). Although this research did not look at deviance specifically, it does show that faculty perceptions of student-athletes and the NCAA are a concern across the nation and need to be improved.

The number of sporting groups asked about is another limitation of the survey. Faculty were randomly assigned only one of three sporting groups about which to answer questions. This approach was used to prevent any ordering effects of asking about more than one and to keep the survey length reasonable. However, some faculty indicated to me in email after taking the survey that they wanted to comment on other student-athlete groups and were concerned about the one they were randomly assigned

because they didn't have many opinions on that group. By only including three groups in the study, there may be different results for other sporting groups that I am missing.

Some other limitations of the study have to do with the outcome variable. First, the outcome variables had low means and variances, which resulted in a floor effect, where it was hard to find differences between groups. In addition, for the outcome measure of deviance, I did not include a "don't know" answer option for respondents. The only option available was "prefer not to answer." For example, one faculty member emailed me after taking the survey saying "I answered a whole slew of questions near the survey's end as "prefer not to answer" -- but only because there was no "don't know" option. I do not know enough student athletes to have the vaguest idea about their morals or their behavior." This may explain some of the reason for the high percentage of missingness for the dependent variables items. Participants may have selected a "don't know" answer option if that was present rather than not answering at all. This may have made the data more valid if they did not actually know, but also may have made it harder to analyze the construct of interest by essentially increasing missing data.

Finally, a possible limitation of the study was my affiliation with University of Florida's athletic association. Throughout the data collection process there were several indications from faculty and other staff that they had looked up my status with the athletic department. For example, my supervisor at the athletic department contacted me about the purpose of my study, because a Senior Women's Administrator at one of the other institutions reached out to him with "concerns about my survey." These events show that there was some stress felt by faculty and administrator in athletics about the topic of my study, which I believe show the importance of studying the topic. However,

other faculty may have felt concern with my affiliation in athletics and chose not to participate due to their concerns.

### **Implications for Theory**

This study is couched in the labeling perspective. However, I only focused on one aspect of the theory, which was the differential enforcement/status characteristics hypothesis. According to labeling perspective theorists, it is crucial to understand the creation of the label to understand deviance (Becker, 1963). The results of this study show that there are status attributes of people (in this case faculty) that matter in the labeling process of student-athletes as deviants. Tittle (1980) argues that social characteristics should be the most important factor in determining the outcomes of deviant labels, more important than the actual rule breaking.

The status attributes that were most consistently related to perceptions of deviance can be explained by the idea of intergroup contact in social psychology, which is the more contact different groups of people have with each other the less prejudice and better social relations there will be between the groups (Allport, 1954). As applied to this study, opportunities for faculty and student-athletes to have more contact (i.e., fandom, attendance at sporting events, and participating in service involving athletics) lowered faculty's perceptions of student-athlete deviance. However, the labeling perspective does not account for "positive aspects" of societal perceptions (Gibbs, 1966, p. 50). The core of the labeling perspective is that negative aspects of societal perceptions lead to more negative behavior. Although this study did not examine the effect of these perceptions on student-athletes' behavior, it did find for this sample there are aspects that decrease perceptions of deviance by faculty. Therefore, labeling may

not be the best perspective to explain the relationship between perceptions and behavior.

Instead, other social psychological frameworks may better explain faculty perceptions of student-athlete deviance, like the intergroup contact hypothesis or attitude accessibility. Intergroup contact has to do with increasing contact between groups to foster positive attitudes (Allport, 1954). However, faculty may not always have direct contact with student-athletes, but still have attitudes about them based on other experiences. Attitude accessibility is the ease with which an attitude is activated from memory when seeing or hearing about an object (Fazio, 1995). In this case, the object would be student-athletes. It may be that attitudes about certain student-athlete groups come to mind faster than other student-athlete groups, which influences faculty attitudes. That is, stereotypes about groups may come to mind first. Therefore, more research should be done using social cognitive attitude frameworks to explain perceptions of student-athletes.

Although status attributes are influential and may have some effect on labeling outcomes, they are not the only factors that attribute to a deviant label (Bernstein et al., 1977). There may be other factors that were not accounted for in this study. One factor that may have had an effect on perceptions of deviance is actual student-athlete deviance. Perhaps faculty have these perceptions of student-athlete deviance because that is a reflection of their actual deviance at their university. The media is another important source of images of deviance that is not accounted for in this study and could influence faculty labels of student-athlete deviance either positively or negatively

(Hawkins & Tiedeman, 1975). Therefore, this research could be expanded by examining how these factors impact perceptions of deviance.

With a better understanding of how the label is formed, this research could be expanded to explore the deviance amplification hypothesis or stereotype threat for student-athletes. Again, a “stereotype threat” is where student-athletes can feel a negative stereotype and conform to it (Steele, 1997). Therefore, “the person becomes the thing he is described as being” (Tannenbaum, 1938, p. 19-20). This study shows for this sample that faculty have more negative perceptions towards men’s football and the least negative perceptions towards women’s basketball. Future research should examine whether student-athletes generally feel these labels from faculty and if that impacts their academic performance. Additionally, this research should examine differences in stereotype threat between male and female student-athlete groups.

### **Implications for Practice**

The findings from the current study emphasize the importance of increasing contact between faculty and student-athletes, as well as finding ways to expand the knowledge base and general contextual knowledge of student-athletes among faculty. Again, variables that were associated with the intergroup contact hypotheses seemed to have the biggest effect in perceptions of deviance. Specifically, fandom was the most consistent predictor of perceptions of deviance, where fans had fewer negative perceptions. Therefore, athletic departments should work to promote fandom among faculty to improve the relationship with their student-athletes. Activities that promote fandom in college football include tailgating, but could also include free tickets to games, “meet the team” nights, etc. (Koch & Wann, 2013)

Research in social psychology also shows support for decategorization, recategorization, and subcategorization as ways to reduce intergroup conflict (Brewer, 1996). Decategorization is the idea of creating interactions that are personal or individualized rather than interactions where people are category-based members of a group as a way to decrease outgroup biases (Brewer & Miller, 1984). This means creating opportunities for student-athletes to connect with faculty members on an individual basis, not as a member of their sport team. There are programming efforts at certain universities that may be making a difference in perceptions of student-athlete deviance because the student-athletes are only being presented to faculty as part of their athletic team, instead of as individuals. For example, faculty at UF, OSU, and UI indicated filling out progress reports as a form of service. However, no faculty at UGA listed that as a form of service. Faculty at UGA also had lower perceptions of general cheating compared to the other groups. It may be that activities where athletes are singled out from other students and presented as a member of the outgroup make them stick out to faculty thereby creating negative perceptions. Perhaps, athletic departments should find ways to minimize singling out athletes from the normal student population. For example, one faculty indicated in an open response question in the survey about their interactions with athletes that “I know that I have athletes because we receive requests from their counselors about their progress, but none of these students have seen me directly.” A decategorization technique could be for student-athletes to meet with faculty as their own person, rather than as just an athlete.

A second technique to improve intergroup relations is recategorization, which involves enhancing the salience of a common team identity between the two groups to

improve intergroup contact (Brewer, 1996). For the present study, that could include both faculty and student-athletes being seen as members of the overall university community. For example, this might include talking about faculty and student-athletes at UF as all part of the “Gator Nation” and how the two can work together to make the university a better place. A major goal at UF is to become one of the top 10 public research universities in the country (Ordway, 2014). Graduation rates of student-athletes is one variable that is used to rank universities for the US News Best Colleges (Morse, Brooks, & Mason, 2016). Therefore, athletic departments and faculty can work together to achieve this goal as success for the Gator Nation as a whole.

Finally, subcategorization is the idea of creating positive and cooperative experiences through distinct social identities to improve attitudes towards the outgroup as a whole (Hewstone & Brown, 1986). This is achieved by highlighting the distinct roles each group has to work towards a common goal. For example, the common goal faculty and student-athletes share is education, but the roles each group has are different to obtain that goal. The role of faculty is to teach and the role of student-athletes is to learn. Therefore, it may be beneficial to create opportunities for student-athletes to show faculty their role as learners. Activities that may promote the student role of the student-athlete to faculty could be studying abroad, service-learning activities, and getting involved with faculty research.

## **Conclusion**

This study finds that faculty have the most negative perceptions of deviance among men’s football student-athletes and the least negative perceptions about women’s basketball student-athletes. In addition, the more familiarity or closeness

faculty have with student-athletes the less likely they are to have negative perceptions.

Below is a summary of major findings:

- Sport and university matter for perceptions of academic deviance
- Sport matters for perceptions of criminal deviance. There is an interaction effect between sport and university in predicting perceptions of drinking-related deviance.
- Multivariate analyses show similar results for the sample as whole. Sports fandom is a consistent predictor for all deviance scales for the entire sample, where the bigger fans faculty were of their university sports programs the less deviance they perceived student-athletes engage in. Attendance at MBA events is a predictor of general cheating for the entire sample, where faculty that attended more MBA events were less likely to perceive student-athlete general cheating. Faculty were less likely to perceive WBB as deviants compared to the male sports. Faculty at UF were significantly more likely to perceive student-athletes as academic deviants compared to OSU. Faculty at UI were significantly more likely to perceive student-athletes as general cheaters and drinking-related deviants compared to faculty at OSU.
- Race matters, too. White faculty were more likely to perceive student-athlete relying on others and drinking-related deviance compared to non-white faculty. White faculty and those who estimated a higher percentage of black and male student-athletes on their campuses were more likely to perceive student-athletes as reliant on others.
- Sometimes university location matters in the strength of relationships. At UI, being white mattered more in predicting perceptions of relying on others compared to faculty at UGA. Being a lecturer mattered more in predicting drinking-related deviance compared to UF. Finally, MFB student-athletes matter more in predicting perceptions of general cheating compared to faculty at OSU. At UF, MFB student-athletes matter more in predicting perceptions of criminal deviance compared to UI and OSU. At OSU, sports fandom was important predictor of criminal deviance compared to UF. Some intergroup contact variables stuck out more at UGA compared to the other universities. Service involving athletes mattered more in predicting general cheating compared to both OSU and UI. Going to more MBA events also matter more in predicting perceptions of relying on others compared to faculty at UF. Being in the discipline of physical sciences and math mattered more at UGA compared to UI. Finally, MFB student-athletes mattered more to UGA faculty in perceptions compared to those from the big ten schools.
- Sometimes sport matters in strength of relationships. For faculty randomly assigned to the MFB group, sports fandom, being an associate professor, in the discipline of physical sciences and math, and being a white faculty mattered

more compared to those randomly assigned the WBB group. Being a white faculty was also more important in predicting perceptions of drinking for MFB compared to MBA. For faculty assigned to the MBA group, sports fandom, being in the discipline of engineering and business mattered more compared to those assigned to WBB. Engineering was also a more important predictor compared to faculty assigned to MFB. Contact with student athletes and being an associate professor mattered more compared to MBA.

Table 7-1. Summary of results for the entire sample

Variable	General cheating	Relying on others	Criminal deviance	Drinking-related deviance
Faculty status attributes				
Age	NS	NS		NS
Race (White)		+		+
Academic Rank (Lecturer)	NS			
Academic Rank (Assistant Professor)		NS		NS
Academic Rank (Full Professor)		NS		
Tenure status (Tenure)		NS		
Time at current institution		NS		NS
Academic discipline (Education)			NS	NS
Service involving athletics	NS			
Sports fandom	-	-	-	-
Attendance at MFB events	NS	NS	NS	
Attendance at MBA events	-			NS
Attendance at WBB events			NS	NS
Contact with student-athletes	NS			
University status attributes				
UI	+	NS	NS	+
UGA	NS	NS	NS	NS
UF	+	+	NS	NS
Perceptions of student-athlete attributes				
Gender (Female)		-		
Race (Black)		+		
Student-athlete status attributes				
MFB	+	+	+	+
MBA	+	+	+	+

Note. NS = not significant

Table 7-2. Summary of results by university

Variable	General cheating				Relying on others				Criminal deviance				Drinking-related deviance			
	UI	UF	UGA	OSU	UI	UF	UGA	OSU	UI	UF	UGA	OSU	UI	UF	UGA	OSU
<b>Faculty status attributes</b>																
Age					NS	NS	NS	NS					NS	NS	NS	NS
Gender (Male)									NS	NS	NS	NS				
Race (White)	NS	NS	NS	NS	+	NS	NS	NS	NS	NS	NS	NS	+	+	NS	NS
Academic Rank (Lecturer)	NS	NS	NS	NS									-	NS	NS	NS
Academic Rank (Associate professor)	NS	NS	NS	NS												
Academic Rank (Full professor)					NS	NS	NS	NS								
Academic Discipline (Education)	NS	NS	NS	NS					NS	NS	NS	NS	NS	NS	NS	NS
Academic Discipline (Physical sciences and math)	NS	NS	NS	NS					NS	NS	+	NS				
Time at current institution					NS	NS	NS	NS					NS	NS	NS	NS
Service involving athletics	NS	NS	-	NS	NS	NS	NS	NS					NS	NS	NS	NS
Sports fandom	NS	NS	NS	NS	-	NS	NS	-	NS	NS	NS	-	NS	NS	NS	-
Attendance at MFB events					NS	NS	NS	NS								
Attendance at MBA events	NS	NS	NS	NS	-	NS	-	NS	NS	NS	NS	NS	NS	NS	NS	NS
Contact with student-athletes	NS	NS	NS	NS												
<b>Student-athlete status attributes</b>																
MFB	+	+	+	NS	NS	NS	+	+	+	+	+	NS	+	+	+	+
MBA	+	NS	NS	NS	NS	NS	NS	NS	NS	+	+	NS	NS	+	NS	+

Note. NS = not significant

Table 7-3. Summary of results by sport

Variable	General cheating			Relying on others			Criminal deviance			Drinking-related deviance		
	MFB	MBA	WBB	MFB	MBA	WBB	MFB	MBA	WBB	MFB	MBA	WBB
<b>Faculty status attributes</b>												
Age	NS	NS	NS	NS	NS	NS				NS	NS	NS
Race (White)										+	NS	NS
Academic Rank (Associate professor)	+	NS	NS	NS	NS	NS				NS	NS	-
Academic Rank (Full professor)				NS	NS	NS						
Academic Discipline (Business)				NS	+	NS						
Academic Discipline (Physical sciences and math)								+	NS	NS		
Academic Discipline (Social and behavioral sciences)								NS	NS	NS		
Academic Discipline (Engineering)	NS	-	NS									
Academic Discipline (Other)				NS	NS	NS						
Time at current institution				NS	NS	NS				NS	NS	NS
Service involving athletics	NS	NS	NS				NS	NS	NS			
Sports fandom	NS	-	NS	-	-	NS	-	-	NS	-	-	NS
Attendance at MFB events				NS	NS	-						
Attendance at MBA events	NS	NS	-									
Contact with student-athletes	NS	NS	-									
<b>University status attributes</b>												
UI	NS	+	NS	NS	NS	NS	NS	NS	NS	NS	NS	+
UGA	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
UF	+	NS	NS	NS	NS	+	+	NS	NS	NS	+	NS

Note. NS = not significant

## APPENDIX A EMAIL TEMPLATES

### **Introduction Email Template**

Subject: Dissertation Survey about Student-Athletes

September 14, 2016

Dear Faculty Member,

My name is Ashley Kuhn and I am a doctoral student of Criminology & Law at the University of Florida. To complete my dissertation, I am undertaking a study of faculty perceptions of student-athletes at NCAA Division I institutions.

As part of that study, you have been selected to participate in a survey of faculty to discern those attitudes; it is my hope that you will agree to be part of this study. In the next 5-7 days, you will be sent an email with a website link to that survey. The survey is composed of 35 opinion-based questions. It should take 10-15 minutes to complete the survey. Participation in this study is voluntary and all responses will be kept anonymous.

Results of the survey should be available in the spring of 2017. It is my hope that institutions and perhaps the NCAA itself will be able to utilize these results to better understand the voice of faculty in regards to student-athletes.

Thank you again for your time. Again, I will be sending another email within a week with the link to the survey.

Sincerely,

Ashley Kuhn  
Ph.D. Candidate  
Department of Sociology and Criminology & Law  
University of Florida

## **Survey Link Email Template**

Subject: Dissertation Survey about Student-Athletes

September 21, 2016

Dear Faculty Member:

My name is Ashley Kuhn and I am a doctoral student at the University of Florida. I recently sent you an introductory letter inviting you to be a part of my dissertation study on the faculty members' perceptions of student-athletes at Division I institutions. As mentioned before, your participation in the study is voluntary and all information you submit will be kept confidential.

Your participation will involve completing a 35-question opinion survey. Completion of the survey should take no more than 10-15 minutes.

Please click the link below to go to the survey:

[Link]

Your opinions in this survey are quite valuable. It is my hope that the results will be utilized by institutions as well as the NCAA to better understand the voice of faculty in the role and governance of intercollegiate athletics.

I greatly appreciate your time. If you would like to see the results of the study, you may contact me at the email address below.

Sincerely,

Ashley Kuhn  
Ph.D. Candidate  
Department of Sociology and Criminology & Law  
University of Florida

## **Follow Up Email Template**

Subject: Dissertation Survey about Student-Athletes

October 5, 2016

Dear Faculty Member:

Hello again. I recently sent you an introductory email inviting you to be a part of my dissertation study on the faculty members' perceptions of student-athletes at Division I institutions. If you have already completed the survey, please ignore this message; I have no way of tracking the identity of those who have already participated.

Your opinions in this survey are quite valuable and I hope you take a few minutes to complete the survey. Completion of the survey should take no more than 10-15 minutes.

If you have not done so yet, you may go to the following link to complete the survey:

[Link]

Many thanks for your time and opinions!

Sincerely,

Ashley Kuhn  
Ph.D. Candidate  
Department of Sociology and Criminology & Law  
University of Florida

APPENDIX B  
IRB PROTOCOL

## **UFIRB 02 – Social & Behavioral Research**

### **Protocol Submission Form**

**THIS FORM MUST BE TYPED.** **DO NOT STAPLE.** Send this form and the supporting documents to IRB02, PO Box 112250, Gainesville, FL 32611. Should you have questions about completing this form, call 352-392-0433.

<b>Title of Protocol:</b> Faculty Perceptions of Student-Athletes			
<b>Principal Investigator:</b>	Kuhn	Ashley	<b>UFID #:</b>
	(Last Name)	(First Name)	
<b>Degree / Title:</b>	MA/Doctoral Student	<b>Mailing Address:</b> (If on campus provide PO Box address):	<b>Email:</b>
<b>Department:</b>	Sociology & Criminology and Law		<b>Telephone #:</b>
<b>Co-Investigator(s): Coordinator: Research Asst.:</b>			<b>UFID#:</b>
	(Last Name)	(First Name)	
<b>Degree/TITLE</b>		<b>Mailing Address:</b> (If on campus provide PO Box address):	<b>Email:</b>
<b>Department:</b>			<b>Telephone #:</b>
<b>Supervisor (If PI is student):</b>	Lane	Jodi	<b>UFID#:</b>
	(Last Name)	(First Name)	
<b>Degree / Title:</b>	PhD/Professor	<b>Mailing Address:</b> (If on campus provide PO Box address):	<b>Email:</b>
<b>Department:</b>	Sociology & Criminology and Law		<b>Telephone #:</b>
<b>Dates of Proposed Research:</b>	April 2016-August 2017		
<b>Source of Funding</b> (A copy of the grant proposal must be submitted with this protocol if funding is involved): <b>NOTE:</b> If your study has current or pending funding, AND your research involves comparison of different kinds	None		

<p><i>of treatment or interventions for behavior, cognition or mental health, you must submit the Clinical Trial Assessment Form.</i></p>					
<p><b>Describe the Scientific Purpose of the Study:</b>  This study is examining faculty's feelings and opinions about student-athletes at NCAA Division I institutions. Specifically, we are exploring whether faculty and university-level attributes impact perceptions of student-athlete normative and academic deviance.</p>					
<p><b>Describe the Research Methodology in Non-Technical Language:</b> (<i>Explain what will be done with or to the research participant.</i>)  The sampling frame includes a list of all faculty listed on department websites at the four institutions selected (University of Florida, University of Georgia, Ohio State University, and University of Illinois). Only faculty listed on university departments' websites with an available email address will be contacted to participate in the study.</p>					
<p>Faculty participants will be sent the series of emails discussed in the recruitment section (see Appendix A). Participants will be provided a link to a confidential on-line Qualtrics survey. Upon opening the email, participants will be brought to an informed consent screen that they read and sign electronically (see Appendix B). Following that, participants will be taken to the questionnaire (see Appendix C), which takes no more than 20 minutes to complete.</p>					
<p><b>Describe the Data You Will Collect:</b> (<i>what are you collecting, where will it be stored, how will it be stored</i>)  The data will be collected using the Qualtrics website. It will be exported from Qualtrics and stored on the researchers locked personal computer for analysis. There will be no identifying information gathered from participants.</p>	<p><b>Please List all Locations Where the Research Will Take Place:</b> (<i>if doing an on-line survey then just state "on-line survey"</i>)  The on-line survey will be sent to faculty at four institutions of higher education. These include University of Florida, University of Georgia, Ohio State University, and University of Illinois.</p>				
<p><b>Describe Potential Benefits:</b>  There are no benefits to participating.</p>					
<p><b>Describe Potential Risks:</b> (<i>If risk of physical, psychological or economic harm may be involved, describe the steps taken to protect participant.</i>)  There is no more than minimal risk in participating.</p>					
<p><b>Describe How Participant(s) Will Be Recruited:</b> (<i>flyers, email solicitation, social media websites, etc.</i>)  Recruitment of participants will follow the guidelines of Dillman, Smyth, and Christian (2009) for Internet surveys. First, the researcher will send an introduction recruitment email to the sample of faculty at the four institutions. This email will introduce the researcher, inform faculty members about the study, and participation is voluntary and confidential. This email will also let them know that the link to the survey will be provided in an additional email one week later (See Appendix A-1 for the Introduction Email Template).   One week after the Introduction Email, the researcher will send a Survey Link Email to the sample of faculty at the four institutions. This email will remind the faculty about the study and provide the link to a confidential online survey through <a href="http://www.qualtrics.com">www.qualtrics.com</a> (See Appendix A-2 for the Survey Link Email Template).   Approximately two weeks after the Survey Link Email is sent, a Follow Up Email will be sent to all faculty reminding them to take the survey if they have not. If participants have taken the survey, they are asked to ignore the message. This message's content varies from previous messages, but will still provide a link to the survey for their convenience (See Appendix A-3 for the Follow Up Email Template).</p>					
<b>Maximum Number of Participants (to)</b>	<b>9,000</b>	<b>Age Range of Participants:</b>	<b>18 and over</b>	<b>Amount of Compensation/ course credit:</b>	<b>None</b>

<b>be approached with consent)</b>					
<b>Describe the Informed Consent Process.</b> ( <i>How will informed consent be obtained? Attach a copy of the Informed Consent Document</i> )					
After the participant has signed up for the study, the informed consent document will be shown on screen (attached in Appendix B) and they give their consent by clicking “next” and continuing with the study. There is no penalty for choosing not to participate.					
<b>(SIGNATURE SECTION)</b>					
<b>Principal Investigator(s) Signature:</b>				<b>Date:</b>	
<b>Co-Investigator(s) Signature(s):</b>				<b>Date:</b>	
<b>Supervisor's Signature:</b>				<b>Date:</b>	
<b>Department Chair Signature:</b>				<b>Date:</b>	

## APPENDIX C INFORMED CONSENT

### **Informed Consent** **Title: Faculty Perceptions of Student-Athletes**

Please read this consent document carefully before you decided to participate in the study.

**Purpose of the research study:**

We are working on a research project that hopes to scientifically examine faculty's feelings and opinions about student-athletes at NCAA Division I institutions.

**What you will be asked to do in the study:**

If you decide to participate in the research study, you will be asked to answer a series of questions about your background characteristics, university climate, contact and perceptions of student-athletes on your campus.

**Time required:**

It should take no more than 20 minutes to complete the survey, but it could be longer depending on your pace.

**Benefits:**

There are no known benefits to you.

**Compensation:**

There is no payment or compensation for participating in this study.

**Risks and confidentiality:**

Taking part in this study creates little risk for you. Researchers will not receive any identifying information; so your responses will be anonymous. Only the researchers will have access to the information we collect online. There is a minimal risk that security of any online data may be breached, but since no identifying information will be collected, and the online host (Qualtrics) uses several forms of encryption other protections, it is unlikely that a security breach of the online data will result in any adverse consequence for you. It is not anticipated that talking about issues related to student-athletes at your institution will cause any psychological or emotional discomfort. However, you do not have to answer any questions you do not feel comfortable answering (i.e., you can skip any question if you do not want to answer it) or you can stop the survey at any time.

**Voluntary Participation:**

You do not have to answer the questions. Your participation is completely voluntary. Nothing negative will happen if you do not want to join this study.

**Right to withdraw from the study:**

You have the right to leave the study and stop the survey at any time. You also can choose to answer some questions and not answer other questions.

**Whom to contact if you have questions about the study:**

Ashley Price Kuhn, Ph.D. Student, Department of Sociology and Criminology & Law

Jodi Lane, Ph.D., Professor, Department of Sociology and Criminology & Law

**Whom to contact about your rights as a research participant in this study:**

UFIRB Office, Box 112250, University of Florida, Gainesville, FL 32611-2250,  
telephone- (352) 392-0433

**Agreement:**

I have read this consent form. I voluntary AGREE to answer the questions for this study  
(knowing that I can cease participation at any time without penalty).

Agree

Disagree

## APPENDIX D

### ONLINE SURVEY INSTRUMENT

First, I would like to know some background information about you. Please answer the following demographic questions.

1. What is your age?

Enter age (in years) below

---

2. What is your sex? Please select one of the answer options.

1 Male

2 Female

3 Other (Specify if you wish)

---

4 Prefer not to answer

3. Which of the following comes closest to describing your racial/ethnic identity? Please select one of the answer options.

1 Black/African American

2 White/Caucasian

3 Latino/Hispanic

4 Asian/Pacific Islander

5 Mixed race/Biracial (Please specify below)

---

6 Other (Please specify below)

---

4. What university are you affiliated with? Please select one from the drop down list.

1 Ohio State University

2 University of Florida

3 University of Georgia

4 University of Illinois

5. What is your academic rank? Please select one of the answer options.

1 Lecturer

2 Assistant Professor

3 Associate Professor

4 Full Professor

5 Other (Please specify below)

---

9 NA

6. What is your tenure status? Please select one of the answer options.

1 Tenured

2 Not yet tenured

3 Not in tenure track

9 NA

7. Do you hold an administrative position? Please select one of the answer options.

1 No

2 Yes, Department/Program Head

3 Yes, Assistant Dean

4 Yes, Associate Dean

5 Other (Please specify below)

8. What is your academic discipline? Please select one of the answer options.

- 1 Architecture
- 2 Arts and Humanities
- 3 Business
- 4 Education
- 5 Engineering
- 6 Law
- 7 Life Sciences
- 8 Medicine and Health Sciences
- 9 Physical Sciences and Mathematics
- 10 Social and Behavioral Sciences
- 11 Other (Please specify below)

99 NA

9. What undergraduate majors does your discipline serve?

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10. How many years have you been at your current institution? Please enter years in box below.

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11. Have you ever participated in service that involves athletics?

- 1 Yes
- 2 No

12. [If yes selected for Q11] Please explain the service you participated in that involves athletics.

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13. Have you ever served in an institutional governance role with responsibilities for intercollegiate athletics?

- 1 Yes
- 2 No

14. [If yes selected for Q13] Which of the following institutional governance roles did you have with responsibilities for intercollegiate athletics? (Please check all that apply)

- 1 Faculty Athletic Representative
- 2 Campus Advisory Board
- 3 Institution's NCAA Certification Team
- 4 Other (Please specify below)

---

15. Please indicate how strongly you agree with the following statements.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree

I consider myself to be a (Gator/Buckeye/Bulldog/Illi ni) fan	1	2	3	4	5	6	7
My friends see me as a (Gator/Buckeye/Bulldog/Illi ni) fan	1	2	3	4	5	6	7
I believe that following (Gator/Buckeye/Bulldog/Illi ni) sports is the most enjoyable form of entertainment	1	2	3	4	5	6	7

16. How often have you attended the following (Gator/Buckeye/Bulldog/Illini) sporting events in the 2015-2016 academic year?

	Never	Rarely	Sometimes	Often	Very Often
Men's football	1	2	3	4	5
Men's baseball	1	2	3	4	5
Women's basketball	1	2	3	4	5

17. Are there any other (Gator/Buckeye/Bulldog/Illini) sporting events that you have gone to in the 2015-2016 academic year?

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18. How often did you interact with student-athletes on your campus during the 2015-2016 academic year?

	Never	Rarely	Sometimes	Often	Very Often	NA
Student-athletes are in your courses	1	2	3	4	5	9
Student-athletes communicate with you by email or in person	1	2	3	4	5	9
Student-athletes interact with you during class sessions	1	2	3	4	5	9

19. Have you had any other interaction with student-athletes on your campus during the 2015-2016 academic year? Please explain.

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The next few questions ask you to **estimate** based on your experience. Please answer even if you are unsure.

20. In the current academic year and to the best of your knowledge, what percentage of students in your undergraduate courses are student-athletes? \_\_\_\_

In the current academic year, please give your best guess based on your experience. Please answer even if you are unsure.

21. Please **estimate** the percentage of student-athletes on your campus who are male and female:  
Male \_\_\_\_\_ Female \_\_\_\_\_ Prefer not to answer \_\_\_\_\_

22. Please **estimate** the percentage of student-athletes on your campus who are in each of the following racial categories:

Black/African American \_\_\_\_\_

White/Caucasian \_\_\_\_\_

Latino/Hispanic \_\_\_\_\_

Asian/Pacific Islander \_\_\_\_\_

Other \_\_\_\_\_

Prefer not to answer \_\_\_\_\_

23. Please **estimate** the percentage of student-athletes on your campus who participate in (Qualtrics will randomly assign sport group)

Men's Football \_\_\_\_\_

Women's Basketball \_\_\_\_\_

Men's Baseball \_\_\_\_\_

Prefer not to answer \_\_\_\_\_

24. What is your best guess of the percentage of (Qualtrics will randomly assign sport groups- Men's football, women's basketball, men's baseball) student-athletes that graduate on your campus?

\_\_\_\_\_

25. Do you know of any NCAA violations for your institution?

- a. Yes
- b. No

26. [If yes to Question 25] What NCAA violations has your institution received? Please describe what happened below.

\_\_\_\_\_

27. Were you a varsity student-athlete in college?

- a. Yes
- b. No

28. [If yes to Question 27] Please specify the varsity sport you participated in?

29. Please indicate how strongly you agree with the following statements about student-athletes on your campus.

	Not at all	Slightly	Moderately	Very much	Don't Know
Student-athletes are motivated to earn their degrees	1	2	3	4	9
Missed class time due to athletic obligations detracts from the quality of student-athletes' learning in my classes	1	2	3	4	9
Student-athletes are more burdened than other students on my campus by demands of their out-of-class time	1	2	3	4	9
Student-athletes are <u>not</u> prepared academically to keep pace with other students in my classes	1	2	3	4	9

30. Do you have any other comments about student-athletes on your campus?

\_\_\_\_\_

31. Using your best estimate, I would like you to indicate how often you think in the last year (**MEN'S FOOTBALL/MEN'S BASEBALL/WOMEN'S BASKETBALL**) student-athletes on your campus have engaged in following behaviors...

	Never	Rarely	Sometimes	Often	All of the time	Prefer not to answer
Copied from other students	1	2	3	4	5	9
Passed answers to other students during a test	1	2	3	4	5	9
Used prohibited notes	1	2	3	4	5	9
Obtained the test questions illegally	1	2	3	4	5	9
Used unauthorized electronic equipment on a test or assignment	1	2	3	4	5	9
Copied others' assignments	1	2	3	4	5	9
Worked on assignment with others when asked for individual work	1	2	3	4	5	9
Got extra help on an assignment from a tutor	1	2	3	4	5	9
Provided a paper or assignment for another student	1	2	3	4	5	9
Gave forbidden help to others on their assignments	1	2	3	4	5	9
Did less of their share of work in group project	1	2	3	4	5	9
Copied materials without citing them	1	2	3	4	5	9
Falsified athletic travel letters to postpone exams or assignments	1	2	3	4	5	9

32. Using your best estimate, I would like you to indicate how often you think in the last year (**MEN'S FOOTBALL/MEN'S BASEBALL/WOMEN'S BASKETBALL**) student-athletes on your campus have engaged in following behaviors...

	Never	Rarely	Sometimes	Often	All of the time	Prefer not to answer
Purposely damaged or destroyed property belonging to others?	1	2	3	4	5	9
Stolen (or tried to steal) something worth more than \$50?	1	2	3	4	5	9
Thrown objects (such as rocks, bottles, etc.) at cars or people?	1	2	3	4	5	9
Lied about their age to gain entrance or to purchase something: for example, lying about their age to buy liquor?	1	2	3	4	5	9
Drank alcohol?	1	2	3	4	5	9

Drank more than 5 alcoholic drinks at once?	1	2	3	4	5	9
Stolen (or tried to steal) things worth \$50 or less?	1	2	3	4	5	9
Had sexual relations with a person other than their significant other?	1	2	3	4	5	9
Been involved in a group fight?	1	2	3	4	5	9
Sold marijuana or hashish ("pot", "grass", "hash")?	1	2	3	4	5	9
Used marijuana or hashish ("pot", "grass", "hash")?	1	2	3	4	5	9
Stolen money or other things from their friends, neighbors, or roommates?	1	2	3	4	5	9
Taken money or gifts from alumni	1	2	3	4	5	9
Hit (or threatened to hit) other people?	1	2	3	4	5	9
Been loud, rowdy, or unruly in a public place (disorderly conduct)?	1	2	3	4	5	9
Sold harsh drugs such as heroin, cocaine, and LSD?	1	2	3	4	5	9
Used hard drugs such as heroin, cocaine, and LSD?	1	2	3	4	5	9
Bought or provided liquor for a minor?	1	2	3	4	5	9
Had (or tried to have) sexual relations with someone against their will?	1	2	3	4	5	9
Avoided paying for such things as movies, clothing, and food?	1	2	3	4	5	9
Been drunk in a public place?	1	2	3	4	5	9
Broken into a building or vehicle (or tried to break in) to steal something or just look around?	1	2	3	4	5	9

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## BIOGRAPHICAL SKETCH

Ashley Price Kuhn is originally from Naples, Florida. She graduated with a Bachelor of Science degree in psychology and Bachelor of Arts degree in criminology from the University of Florida in 2010. She also earned a Master of Arts (2012) and Ph.D. (2017) in criminology from the University of Florida.