

**NAVAL POSTGRADUATE SCHOOL  
Monterey, California**



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**THE EQUITY OF PUNISHMENT IN THE NAVAL  
ACADEMY CONDUCT SYSTEM:  
A STATISTICAL ANALYSIS**

by

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June 2002

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ACADEMY CONDUCT SYSTEM:  
A STATISTICAL ANALYSIS**

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## **ABSTRACT**

This thesis examines the equity of punishment awarded by the Naval Academy's Administrative Conduct System utilizing 7,704 conduct cases from the graduating classes of 1998 to 2001. Based on equity theory, the consistency of punishment is analyzed in terms of demerits awarded to athletes, minorities, women, and different midshipmen classes. A multiple linear regression model is used to identify statistically significant subgroups, while controlling for level of offense and whether or not a secondary offense was included with the primary offense. Statistically significant subgroups in order of precedence are all classes, women, and minorities. Furthermore, the regression results are compared to survey questions regarding midshipmen's perceptions of the Conduct System to determine if congruency exists between the perceptions and the statistics. Results of this study are used to create awareness to disparities in the awarding of punishment and to make recommendations for further studies.

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## I. INTRODUCTION

*It is when equals have or are assigned unequal shares, or people who are not equal, equal shares that quarrels and complaints break out.  
(Aristotle)*

### A. BACKGROUND

In 1990 a board, chaired by Admiral J. M. Boorda, investigated the Honor and Conduct systems of the Naval Academy. Among its noteworthy findings, the board cited existing Academy surveys indicating that midshipmen perceived that women, ethnic minorities, varsity athletes, and different classes received disparate treatment and inconsistent punishment under the Naval Academy's Administrative Conduct System (Conduct System or ACS).

Although the board's research did not support this in their own investigation, members believed that even the smallest perception of inequity on this issue could seriously degrade the equal opportunity climate within the Brigade (Boorda, 1990, P.21). This misperception was exacerbated by the fact that there was no formal dissemination of the Conduct System adjudication results to the Brigade to dispel misconceptions. In order to confront the reality behind midshipmen perspectives, the board recommended formalizing a requirement to analyze the results of actions taken under the Conduct System for possible disparate treatment and suggested that results be widely disseminated to the Brigade (Boorda, 1990, p. 22).

Eleven years later the Naval Academy's Values Survey still echoes the perceptions of those midshipmen Admiral Boorda encountered. Additionally, headlines in prominent local newspapers read, "Plebe retention high, but survey finds discontent with punishment systems"(Sullivan, 2000). Are the perceptions of the midshipmen about the ACS misperceptions, or are they symptomatic of a flawed system? Though this thesis is motivated by the perceptions of the midshipmen toward the Conduct System, it primarily seeks to statistically address conduct offense cases in terms of the consistency of punishments awarded.

## **B. OBJECTIVES**

This thesis does not critique the Conduct System in whole. The purpose of this study is narrower; it serves to analyze whether there is statistical evidence of inconsistent punishments administered under the Naval Academy Administrative Conduct System, and whether midshipmen perceptions of administration of the system are in line with statistical evidence.

## **C. RESEARCH QUESTIONS**

This research paper statistically examines case data to determine whether they support the null hypotheses that there is no inconsistency of punishment across time or among subgroups. The specific questions addressed are:

1. Are the punishments administered through the Naval Academy's Conduct System consistently related to the intensity of the charged offense (a) across time and (b) independent of athletic status, minority status, gender, and class?

2. Are midshipmen perceptions of the Conduct System congruent with the statistical analysis?

**D. SCOPE, LIMITATIONS, ASSUMPTIONS**

The construct of consistency is central and critical for this study. Consistency is here defined in terms of equity theory. Equity theory states that consistency with regard to punishment does not always imply that the same offense will receive the same punishment every time, but rather that the punishment is in line with expectations. If the punishment deviates from expectations, either by seeming excessive (harsh) or insufficient (lenient), a perception of inequity is likely to occur. Therefore, consistency is fundamental to the perception of fairness.

This study cannot examine data relating to all possible reasons that may contribute to midshipmen perceptions of the Conduct System. However, this study does speak toward the perceptions formed by midshipmen who may observe how many demerits are awarded relative to the sub-groups identified in the first research question (athletes, minorities, females, and all four classes).

This thesis statistically analyzes the case data for evidence of inconsistency. Additionally, the statistical results will be related to midshipmen surveyed perceptions of the Conduct System.

Data are drawn for Naval Academy midshipmen from the classes of 1998 through 2001. To date, this represents all the classes that have completed all four years coupled with conduct case data that have been archived in the USNA Midshipmen Information System (MIDS). This database is

unique in that it spans a time period in which the Conduct System underwent a transformation. Prior to 1998 offenses were categorized by a level series (1000 to 6000) system, which went from least to most serious. After 1998 offense levels were simplified to either Minor or Major.

The 1998 transformation of the Conduct System, presented in Chapter IV, is the only contextual factor considered in this study. Other contextual factors, for instance, the turnover of leadership within the faculty and Brigade may or may not lead to philosophical differences in how conduct is enforced and punishment is awarded. Some discussion of contextual factors is offered in the Discussion section after the results are presented.

A primary limitation of this thesis is the exclusive use of demerits as the measure of punishment by the Conduct System. Demerits were chosen because they are the sole punishment measure used in calculating a midshipman's Conduct Grade. Furthermore, using a single measure of punishment avoided issues of weighting and other statistical and data problems. Additional forms of punishment include Restriction, Tours, Extra Duty, Loss of Privileges, Loss of Leave, and Conduct Probation.

The focus on demerits is a limitation because these additional punishments are used together, often in addition to demerits. Therefore, it is sensible to assume that they too affect the perceptions of punishment administered by the Conduct System. How much each form of punishment weighs into midshipmen perceptions is not examined by this study and is an obvious direction for further research. However, it seems likely that consistency in the

administration of demerits would support an assumption and perception of consistency across other forms of punishment. Conversely, if this thesis indicates inconsistencies in the awarding of demerits, it serves as a warning in that the other forms of punishment will also be suspected of the same.

Secondary limitations include the fact that there is no analysis of what midshipmen consider "lenient" or "harsh" relative to the definition of consistency used in this study. Additionally, there is not a variable for repeat offenders. Repeat offenders, although present in the data, are not included as a specific variable in the statistical model. Both limitations are discussed in the interpretation of results.

#### **E. ORGANIZATION OF STUDY**

This study is divided into five chapters. Chapter II begins with a brief overview of the ACS then concludes by discussing applicable theories and related studies of the primary variables of the research question. Chapter III presents the data sets and methodology used for the statistical analysis. Chapter IV reviews the findings of the data analysis. Finally, Chapter V provides a research discussion, conclusions, recommendations, and it makes suggestions for further research.

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## **II. LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

### **A. INTRODUCTION**

This chapter contains five primary parts. The first provides a basic overview of the Administrative Conduct System (ACS). The second discusses the theoretical concepts of consistency and how they relate to the Conduct System, punishment and rewards, and the organization. The third discusses the relationship between athletes and academia, and the fourth defines the class structure at the Academy. The fifth section discusses the theoretical concepts of the organizational treatment of women and minorities in organizational disciplinary systems, and organizational culture. The final section summarizes the chapter.

### **B. THE NAVAL ACADEMY ADMINISTRATIVE CONDUCT SYSTEM**

The primary instruction that promulgates the Naval Academy's regulations on conduct is the Administrative Conduct Manual, Commandant of Midshipmen Instruction 1610.2B. This instruction states that the nature of the:

Administrative Conduct System is to provide disciplinary measures more serious than the non-punitive administrative corrective measures (oral/written counseling or reprimands, etc.), but less serious than trial by court martial. (Commandant of Midshipmen, 2000, p. 1)

This is a midshipmen oriented disciplinary system, which has some similarity to the Uniform Code of Military Justice, and is in place to develop leadership skills of midshipmen, while concurrently maintaining good order and discipline at the Academy.

#### **1. ACS Design and Execution**

When it is reported that an offense against the ACS is suspected, the administrative process involves two possible steps. The first step is an inquiry into the alleged misconduct, which, after an investigation, may include a hearing conducted by an Adjudicating Authority. This Adjudicating Authority determines whether and to what extent a midshipman should be punished (Commandant of Midshipmen, 2000, p. 1). Adjudicating Authorities, who are designated by the Commandant of Midshipmen, exercise personal discretion in evaluating each case. During the investigation and deliberations they are to consider the nature of the offense, the record of the midshipman, the need for good order and discipline, and the effect of the Conduct System on the midshipman. The effect on the midshipman can vary from rehabilitation to consequences affecting his or her overall conduct standing. Additionally, if the cases of two or more midshipmen involved in the same incident are heard by different Adjudicating Authorities, the Adjudicating Authorities should attempt to maintain the level of consistency of punishment that is also in keeping with good order and discipline among members of the Brigade (Commandant of Midshipmen, 2000, p. 2-11).

The second step occurs in those cases in which the Adjudicating Authority has determined that a major offense has occurred and recommends that the Commandant of Midshipmen review the case (Commandant of Midshipmen, 2000, p. 1). The Commandant has a broad range of options that extend from dismissal of the case to recommending discharge from the Academy. The latter requires the approval of the Superintendent and ultimately the Secretary of the Navy.

Officers, noncommissioned officers, midshipmen, and civilians may report midshipmen whom they suspect committed any offense covered in the ACS manual (Commandant of Midshipmen, 2000, p. 2-3). When a midshipman is accused of committing an offense, it is first assigned a numeric delinquency code, which defines a specific conduct offense. Descriptions of offenses and the maximum punishment that may be awarded for such are delineated in the ACS manual. For example, a midshipman who is misbehaving while in a formation may be charged under section 09, "Standards and Behaviors" subsection 16: "Improper conduct in ranks." This conduct offense would be written up as 0916. Additionally, the offense would be categorized by the seriousness of the offense, ranging from the least consequential (Minor Offense) to the most serious (Major Offense). The example provided would be considered a Minor Offense per the ACS manual with a maximum punishment of 5-10 demerits.

While charging an offense the following applies:

If more than one offense has allegedly been committed by the same midshipman, where such as to form one course of misconduct, such offenses

will normally be considered as one event, from which one punishment will be awarded. The most serious charge will be used as the primary offense; all others will be listed as secondary. Punishments awarded for multiple offense cases may not exceed the maximum allowed for the primary offense. (Commandant of Midshipmen, 2000, p.2-3)

The conduct case then enters one of the two steps of inquiry previously discussed. Overall, cases are handled at the lowest level deemed appropriate by both the midshipmen and staff chain of commands via the Commandant's delegations. Minor Offenses are to be used as tools for the Company Officers to train midshipmen, primarily First Class, in conduct standards and procedures they will encounter in a career of military service (Commandant of Midshipmen, 2000, p. 1-2). If upon the completion of the adjudication process a punishment is deemed necessary, specific allowable punishments for each offense are also delineated in the ACS manual, chapter 2.

## **2. Conduct Standing**

In addition to a conduct case having a possible punishment attached, a farther-reaching consequence is its effect on the midshipman's overall conduct standing. The conduct standing is based solely on Demerits. A grade is assigned, which accounts for the accumulation of all conduct adjudications during a specific semester. Demerits are numerical points awarded (punishment) by an Adjudicating Authority when the midshipman was found to have committed the offense.

This conduct standing and grade, which has a semester, annual, and career cumulative measure, has two primary consequences. The first is that it is weighted in the individual midshipman's class standing, which is Order of Merit. Order of Merit is significant in determining midshipman's service assignment options upon graduation. The second is that the cumulative effect can lead to an unsatisfactory conduct status. For example, although a minor offense by itself may not have serious consequences, the summation of demerits accumulated by multiple independent incidents may have major consequences, which ultimately could include discharge from the Academy.

**C. CONSISTENCY IN THE CONDUCT SYSTEM, PUNISHMENT AND REWARDS, AND ORGANIZATIONAL CULTURE.**

In Admiral Boorda's 1990 review of the Conduct System, he cited lack of feedback and dissemination of information on the disposition of conduct cases as one cause for cynical attitudes and perceptions of the Conduct System. Boorda stated:

When midshipmen are charged with a serious conduct offense, members of the Brigade follow the processing of the offense very closely, using results that are tough but fair as validation of their own conduct as well as that of the Conduct System. Conversely, when they perceive that another midshipmen has unjustly escaped punishment or has been punished unfairly, they question the entire Conduct System as well as their own values. (Boorda, 1990, p. 20)

According to surveys conducted with Boorda's study and even more recently, this notion is compounded if the case in question involves one or any combination of the following midshipmen demographics: female, minority (non-Caucasian), athlete, and graduating class.

Consistency with regard to punishment does not always imply that the same offense will receive the same punishment every time, but if the punishment deviates from expectations, either by seeming excessive (harsh) or insufficient (lenient), a perception of inequity may occur. Therefore consistency of punishment is fundamental to a rational system and to the perception of fairness. A review of numerous theories of consistency (Kerr, 1979; Kerr, 1997; Kerr, 1995; Folger, Sheppard, & Buttram; and Young, 1994) in relation to organizational cultures and perceptions reveals that equity is the common thread. In the context of a justice system, like the Academy's Administrative Conduct System, equity has almost an entirely subjective element based on an interpretation of experienced reality.

Equity is interpreted in terms of cultural and intra-organizational norms and values (Kerr, 1997, p. viii). The preponderance of the facts and circumstances that surround conduct cases at the Naval Academy vary, but an equitable outcome is most likely to be perceived only if it conforms to those norms and values. For example, it may be perceived as equitable, or fair, for a Plebe and 1/C midshipman to receive a different measure of punishment for the same offense. Steven Kerr (1997) reiterates this idea in his conclusions about equity, which states, "We shall

consider equity to mean that a person's rewards are at least related to his or her performance" (p. vii). If the expectation of a 4/C Plebe's performance is low due to his or her inexperience, the punishment may be minimal. In contrast, the 1/C midshipman is expected to perform at a higher level and therefore is punished more severely because he or she should have known better than to commit such an offense in the first place. Of course, depending on the true norms and values at the Naval Academy the reverse or totally different scenario is also possible.

In a system of discipline and justice, information sharing is crucial and can be equated to visibility. In the absence of information, people share inaccurate data that reveal inequities that really don't exist (Kerr, 1997, p. xiii). The phrase, "One's perception is one's reality," rings true when applied to several thousand midshipmen and their ability to spread information. Admiral Boorda (1990) referred to this phenomenon as the "Rumor Mill." Steven Kerr (1997) says equitable and efficient rewards must, at a minimum, be visible to those who receive them, and to those affected by the consequences. Applied to the Academy's Conduct System, the "reward" Kerr speaks of is punishment for an offense, which must be visible to the offender and the entire Brigade.

Efficiency, as related to the Conduct System, is conceptualized not in terms of past performance, but in terms of future performance: how it pays forward. If the primary goal of the Academy's Conduct System is to instill in midshipmen the self-discipline necessary to meet the challenges they will encounter in a career of military

service, then efficiency should be defined by the Conduct System's ability to deter future aberrant behavior. There are specific indicators that are contrary to this concept. To highlight just one example, there are midshipmen who wear black N's on their letter sweaters like a badge of honor, a sort of counter-culture. These midshipmen are openly held in esteem by the Brigade, folk heroes, not for their prowess on athletic fields or in the classrooms, but for surviving the most punishments dealt out by the Conduct System, often barely evading being discharged. According to Kerr (1975), this behavior is indicative of a system, or culture, that is dysfunctional in that behaviors that are rewarded are those the rewarder is trying to discourage; conversely, the behavior he desires is not being rewarded at all.

The culture of an organization, particularly a military one, is an amalgam of values, customs, traditions, and philosophical underpinnings that, over time, has created a shared institutional ethos (Ulmer, Collins, & Jacobs, 2000, p. XVIII). Closely linked to military culture, and much easier to assess directly, is organizational climate, which is essentially how members of an organization feel about the organization. The perceptions about the system of rewards and punishments, along with other important factors, influence an organization's climate. Climate ultimately determines how individuals feel about the quality of the institution as a whole (Ulmer, Collins, & Jacobs, 2000, p. XVIII). It may be this fact that explains the cynical attitude of some midshipmen toward the ACS.

#### D. ATHLETICS VS. ACADEMIA

When equity is framed in the context of a justice system, the notion of equality is commonly included with it. In Folger, Sheppard, and Buttram's (1995) essay, "Equity, Equality, and Need; Three Faces of Social Justice," they state that relative equality of distribution validates people's feelings of full-fledged membership in a cohesive unit, whereas inequality can fractionate the organization. In this study, the cohesive unit is the entire Brigade of midshipmen. In the context of the Conduct System, "equality of distribution" implies equality of punishment across the entire Brigade within the cultural norms and values. To go a step further, if there is a perception of inequality (i.e., inconsistency of punishment in the context of cultural norms and values) with respect to how subgroups are treated, then attributions of privilege or prejudice may be attributed as reasons to perceived disparities in treatments. In essence, this is what is meant by, "fractionate the organization," and athletes are just one sub-group on which to focus during this study.

The relationship between athletes and academia has become a utilitarian one for many universities, both public and private. Bailey and Littleton (1991) state that even the few institutions whose academic emphases either predate the dramatic evolution of college sports, as does the Naval Academy's, or in some other way have avoided an overt relationship, feel the pressure of those forces that can lead to an academic-athletic imbalance and thus to abuses. There is, of course, a range of ethical and illegal abuses.

In this study the concern is only with the abuse of preferential ACS treatment of athletes relative to non-athletes.

Of the many forces that are in reality or perception apt to favor preferential treatment for athletes, the primary one is economics. Bailey and Littleton (1991) state that there is an undeniable appeal and entertainment power of sports. This power is used to strengthen the institution's ties with numerous constituencies and to affect directly or indirectly its base of financial support. But to some extent this type of justification, economic and social rather than academic, tends to emphasize further the tenuous and separatist relationship that athletics in large-scale operations seem to have with the institution's central mission (Bailey & Littleton, 1991, p. 36).

Although the Naval Academy has not historically seen the extreme abuses its civilian counterparts have, it has not escaped the ethical disruption that lies latent in the separated athletic subculture. During the time period covered by this study there have been numerous conduct cases, at both minor and major levels, that have involved key athletes in key sports, including the football team's starting quarterback. The visibility of such a case is magnified by the visibility of the athletic program, thus making it one of those cases that Admiral Boorda (1990) says will be followed closely by the Brigade of midshipmen. The consequences of such a case influence the perceptions about the Naval Academy, both internally and externally. Bailey and Littleton (1991) remark that the management of

these stresses, which are often competing, must be balanced to protect the viability of the program and the climate of the institution.

#### **E. THE FOUR CLASS SYSTEM**

This section explains the Naval Academy's four-class system and briefly discusses how it relates to the Conduct System. There is no literature regarding the relationship between class and the Conduct System. The perspectives generated for this review were obtained by multiple discussions with Naval Academy personnel that work directly or closely with the Conduct System.

The Naval Academy's class system, not to be mistaken for graduating class, is a rank and development system associated with the year midshipmen are in relative to the four-year system that regular civilian universities use. Midshipmen in their first year, equivalent to Freshmen, are called Plebes or Fourth-Class (4/C) Midshipmen, Sophomores are Third-Class (3/C) Midshipmen, Juniors are Second-Class (2/C) Midshipmen, and Seniors are First-Class (1/C) Midshipmen.

This distinction of class is not just a marker for which year the midshipmen are currently in, but is a system of rank and professional development. According to Waypoints (2001), the four-year system is designed to prepare midshipmen to accept the lifelong challenge of leadership, both military and civilian. The system incrementally provides skills and experiences that build upon each other and take midshipmen from the role of follower to the role of leader.

In relation to the Conduct System the four-class system emphasizes accountability for the highest standards of conduct at every level. This emphasis starts with individual behavior at the 4/C year and matures into accountability for, and development of, the conduct of one's juniors by the 1/C year. From this class system standpoint there are many potential perspectives for achieving equity. Three possible sets of perspectives that could be derived as possible Conduct System associations to class are discussed.

The first perspective for applying equity differentiates punishment according to the inputs of experience, maturity, and level of indoctrination. Thus, when a 4/C midshipman commits a conduct offense, he or she is given the benefit of the doubt due to inexperience and either is not reported at all, but just counseled, or, if reported, is possibly given a lighter punishment. However, being an upper-class midshipman comes with the expectation that one should know better and is not setting a good example for the lower classes. Under this perspective it is probable that the higher the midshipman's class, the greater the likelihood of being reported and being more harshly punished.

The second perspective is just the opposite of the first. Plebes, and 3/C midshipmen, would be reported and punished to the maximum limits of possible demerits the offense warrants in an effort to teach the lesson of accountability for their actions early. Upper-class midshipmen would be less likely to be reported by their

peers, but when they are, they are punished at a lower end of the range of possible demerits.

The third perspective is that the Conduct System would treat all conduct offenses equally in terms of consequences, and there would be no distinctions with regard to a midshipman's rank. In the purest sense, this means that the punishment for misconduct would be purely objective, and based solely on the merits of the offense.

#### **F. GENDER AND MINORITIES**

This section examines the theoretical concepts that account for the current treatment of women and minorities in organizations in terms of the cultural issues in the context of integration.

According to John Bodnar (1999), just as the military is a microcosm of American society, so the Naval Academy is a microcosm of military society. And just as society, both American and military, has struggled with integration along gender and racial lines, so has the Naval Academy. It has only been three generations since virtually all naval officers were upper middle-class white Christian males; today's Navy is an aggregation of diverse races, colors, creeds, and gender (Bodnar, 1999, p. 289). Along with the demographic changes that have occurred in the naval officer corps, there has been a change in the military culture. This change, or the evolution of integration by stages, is at a slow but continuous pace, hindered by the constant coexistence of two generations at the Naval Academy.

The two specific generations at the Naval Academy are the current midshipmen and the senior leadership, which

represents up to twenty-five years of separation (Bodnar, 1999, p. 290). Additionally, Bodnar (1999) states that different values and political beliefs of young people formed during youth stay with them for the remainder of their lives. Imbedded in these values and beliefs are the ideas of gender roles and minority integration. In a related quote, Albert Einstein said, "Common sense is the collection of prejudices acquired by the age of 18." Bodnar is not implying that the differences in values between generations are opposed, just that they are different to varying degrees based on the experiences and perceptions of each generation. This difference may lead to a propensity for a clash of values and an exceedingly slow change in any real outlook toward any gender or minority related issue (Bodnar, 1999). This study examines the current treatment of gender and minority status as manifested in the Naval Academy's Conduct System as just one measure of integration.

Out of the most noteworthy and applicable papers found to support this study's premise was that of Jana L. Pershing (2001), "Gender Disparities In Enforcing The Honor Concept At The U.S. Naval Academy." Although her study primarily focuses on gender, she also includes minority and athletic status to support her findings. Despite the fact that the Naval Academy's Honor System is separate from the Conduct System, their peer oriented disciplinary principles and administrations are not poles apart from each other. On the whole, the midshipmen do have more control over the Honor System than the Conduct System. Admiral Boorda (1990) tied them together by citing them both as examples of mechanisms essential to the successful accomplishment of

the Academy's mission to instill values and behavior of the highest ideals.

Like other literature that focuses on gender and minority treatment within organizations, Pershing too uses the lens of integration to set the context of her study. Although there are also parallels to how women and minorities are treated in statistically white male dominated institutions, Pershing highlights the fact that there is still a difference in treatment of women and treatment of minorities because of their different role identities. For example a woman's role in society is much different than a male minority's role, and although some issues related to integration are shared, there also are differences. There are still differences in the leadership positions available to women (e.g. combat positions) that not only fail to create a climate in which men and women are seen as equals but actually may exacerbate conflicts (Pershing, 2001, p. 420). Combat related position is just one example of a role a minority male would not share with a female.

Regarding the presence of women and minorities as a relatively small group, Pershing (2001) cites Rosabeth Kanter's landmark study on integration into large male-dominated corporations to provide insight into the unique status of women and minorities in the military given their presence, as Kanter would describe it, as "a token population" (p. 420). Likewise, Durning (1978) concluded that the "numerical rarity" of women at the Naval Academy was a contributing factor to the high-ranking problems of over-visibility and negative male attitudes.

To summarize Pershing's study, she found that polarization affects the enforcement of the Honor System to the disfavor of women and to a lesser extent, minorities. In addition, Pershing (2001) also draws parallels between gender, minority, and athletic status using the notion of enhanced visibility and peer loyalty to elucidate disparate over-representative treatment and the perceptions of these being sub-performing groups. Thus, compared to representation in terms of percentage of graduating class makeup, their representation in honor offenses is higher, or over-representative, than that of white males. These findings are not unique to the military either; a recent report issued by the American Bar Association (2001) found that girls are punished more harshly than boys for minor criminal behavior. The irony of Pershing's findings is that, according to the Naval Academy's Values Survey, there is a perception among the majority of midshipmen that all subgroups discussed in this thesis are treated fairly or with a favorable bias.

Literatures on minority groups in military organizations are substantial. From literature as far back as 1973 by Charles Moskos to a GAO report of 1993 the findings are similar. While researchers find a greater degree of racial equality in the military than any other areas of American life, nevertheless there still exists inequity and disparity for minorities (Moskos, 1973). In fact, Moskos (1973) states that the more military the environment, the more egalitarian the racial relations. Of the many conditions that Moskos concludes will override racial differences, the one germane to the Naval Academy is the similarities in socio-educational backgrounds.

Twenty years after the report by Moskos, the GAO (1993) report on gender and racial disparities at the Naval Academy echoed his thoughts. The GAO used statistical significance tests and a rule of thumb test based on comparisons of subgroup percentages to assess the significance of gender and racial disparities. The report showed that both women and minorities did not fare as well as men with regard to class standing, academic, physical education, military performance, and attrition rates (GAO, 1993, p. 2). Specific to conduct, the report found that both female and minority 4/C midshipmen were convicted of conduct offenses at a higher rate than white 4/C midshipmen (GAO, 1993, pp. 26 & 46).

#### **G. CHAPTER SUMMARY**

This chapter has provided a basic understanding of the Naval Academy's Administrative Conduct System. Additionally, the variables identified by the research question have been examined in the context of the Conduct System or related disciplinary systems. Athletes espouse a value to an academic institution that may transcend academia; because of this their conduct becomes highly visible and scrutinized. The four-class system at the Naval Academy, though it is the scheme by which midshipmen are groomed into officers, it is also a measure of expectations of behavior over time. Gender and minority issues, though with their differences, encompass the challenges of integration that are evident in predominantly and historically white male dominated institutions.

The intention of this literature review was to provide insight into areas that have already been examined on the

often interrelated topics discussed above. These insights were specifically chosen to be useful in providing some additional insight in this analysis. The following chapter (Chapter III) extends the previous discussion by relating the data collected for this study to the variables discussed in this literature review.

### **III. DATA AND METHODOLOGY**

#### **A. INTRODUCTION**

This chapter explains the principal data sources, variables, and statistical methods used in this study.

#### **B. DESCRIPTION OF DATA**

Data for this thesis were obtained through the United States Naval Academy (USNA) Institutional Research Center (IRC). The primary database was the USNA Midshipmen Information System, also known as MIDS. MIDS is an administrative software system that faculty, staff, and midshipmen use to enter and retrieve information from the USNA corporate database. MIDS was implemented at the Academy in 1999 and all prior data were merged into it. Multiple Ad Hoc Queries were performed to draw from MIDS all conduct associated information producing recorded conduct offenses from the classes of 1998-2005, which covers academic years 1995-2002. This initially produced 17,216 individual conduct offense cases.

Specific demographic data on gender, ethnicity, and athletic status also were drawn from MIDS. In order to complete missing demographic data created by MIDS, the Admissions database, also accessible by IRC, was used for gender and ethnicity data. The MIDS and Admissions data were merged using midshipmen MIDS identification numbers and social security numbers as the merge criteria.

From the initial sample of 17,216 cases, 7,704 were analyzed. The 9,512 cases were excluded for four reasons according to the following sequence of operations. First,

for case data to be used in conduct calculations they had to be affirmatively validated in the VALIDATE conduct attribute of MIDS by the Conduct Officer. Cases that were not validated were excluded. Second, cases that were still under investigation or had missing data in the STATUS attribute were excluded. The first and second criteria account for 533 of the excluded cases. Third, the graduating classes 2002-2005 did not have complete data for all four midshipmen years, and therefore they were excluded. This accounted for 7,681 excluded cases. The remaining graduating classes of 1998-2001 were homogeneous in that each had complete data for all four midshipmen classes. Finally, cases that were dismissed and therefore were not subjected to an Adjudicating Authority's awarding of punishment were excluded, accounting for the last 1,298 cases.

The survey results from the USNA Values Survey were obtained through IRC. This survey polls 1/C, 2/C, and 3/C midshipmen on numerous issues of which those regarding the Conduct System were selected for this study.

### **1. Dependent Variable**

PUNISH is the dependent variable for the regression model. PUNISH is measured in terms of the demerits awarded by an Adjudicating Authority as punishment for a given offense. Demerits were chosen as the single measure of punishment for this study because they affect the conduct status of midshipmen. A midshipman's semester conduct grade is based solely upon his/her demerit level for a particular semester (Commandant of Midshipmen, 2000, p. 4-3). The distribution of PUNISH is shown in Table 1.

Demerits for either major or minor offenses are awarded in accordance with guidelines set forth in the "Table of Maximum Demerits" in Appendix A of the Conduct Manual (Commandant of Midshipmen, 2000, p. 4-3).

**Table 1. Frequency of PUNISH**

		Number of Demerits Awarded		
		Frequency	Percent	Cumulative Percent
Valid	0	876	11.4	11.4
	5	1887	24.5	35.9
	10	1708	22.2	58.0
	15	260	3.4	61.4
	20	998	13.0	74.4
	25	109	1.4	75.8
	30	49	.6	76.4
	35	561	7.3	83.7
	45	1	.0	83.7
	50	748	9.7	93.4
	55	1	.0	93.4
	60	47	.6	94.0
	65	17	.2	94.3
	70	4	.1	94.3
	75	167	2.2	96.5
	80	6	.1	96.6
	90	16	.2	96.8
	95	7	.1	96.9
	100	242	3.1	100.0
	Total	7704	100.0	

The 11.4 percent of the cases for which zero demerits are awarded represent cases when other forms of punishment may have been awarded instead of demerits, or no punishment at all was awarded.

## **2. Independent Variables**

The Independent Variables were chosen and limited by areas of interest identified in previous studies, as discussed in Chapter 2, and the USNA Values Survey.

### **a. Athletic Status**

Athletic Status (ATHLETE) is characterized by the Naval Academy as a midshipman who has participated in a varsity sport and was a varsity letter winner in that sport. The variable ATHLETE was coded as 0 for Non-Athlete and 1 for Athlete.

### **b. Minority Status**

Minority Status was determined by ethnic codes entered into the admissions database. Two sets of variables were coded. First, due to the relatively small representation of individual minority groups, all individuals that did not fall into the majority group (Caucasian or Non-Minority) were combined into a single group (Non-Caucasian or Minority). This variable is called MINORITY and was coded by 0 for Caucasian and 1 for Non-Caucasian. Of the 1,909 minorities in this data population, 297 were also female.

After preliminary regression analysis Minority Status was further broken down into minority groups and recoded into separate variables; Caucasian (CA=1), African-American (AF=1), Hispanic and Puerto Rican (HI\_PU=1), Native Hawaiian/American and Pacific Islander (NH\_NA=1), Asian-American and Filipino (AS\_FI=1) and Other or Missing (OT\_MI=1). In each recoded variable all others were coded with a 0 (Others =0). Table 2 shows the distribution of

the aforementioned variables, with 0.1 percent lost to rounding.

**Table 2. Frequency of Minority Groups**

	FREQUENCY	PERCENT	CUMULATIVE PERCENT
African-American	772	10.0	10.0
Hispanic & Puerto Rican	700	9.1	19.1
Asian-American & Filipino	312	4.0	23.1
Native American/Hawaiian & Pacific Islander	91	1.2	24.3
Others & Missing	34	0.4	24.7
Caucasian	5795	75.2	99.9

An additional analysis of MINORITY required the recoding of MINORITY to reflect possible integration with ATHLETE. The Frequency of MINORITY-ATHLETE (MINATH) presented in Table 3 represents this recoding.

**Table 3. Frequency of MINORITY-ATHLETE**

Minority-Athlete				
		Frequency	Percent	Cumulative Percent
Valid	All Others	7352	95.4	95.4
	Minority Athlete	352	4.6	100.0
	Total	7704	100.0	

**c. Gender**

GENDER was created to separate males from females. This variable also was drawn from admissions data. GENDER was coded as 0 for male and 1 for female.

Post Hoc analysis of GENDER required the recoding of GENDER to reflect possible integration with other

independent variables, specifically MINORITY and ATHLETE. The Frequencies, Table 4, represents this recoding.

**Table 4. Frequency of GENDER Integrations**

**Female-Athlete**

		Frequency	Percent	Cumulative Percent
Valid	All Others	7417	96.3	96.3
	Female Athlete	287	3.7	100.0
	Total	7704	100.0	

**Female-Minority-Athlete**

		Frequency	Percent	Cumulative Percent
Valid	All Others	7665	99.5	99.5
	Female Minority Athlete	39	.5	100.0
	Total	7704	100.0	

**Female-Minority**

		Frequency	Percent	Cumulative Percent
Valid	All Others	7407	96.1	96.1
	Female Minority	297	3.9	100.0
	Total	7704	100.0	

**d. Class**

The variable CLASS was categorized in accordance with the four-class system and coded as follows: CLASS1 (1=1/C Midshipmen, 0=All Others), CLASS2 (1=2/C Midshipmen, 0=All Others), CLASS3 (1=3/C Midshipmen, 0=All Others), and CLASS4 (1=4/C Midshipmen, 0=All Others). Table 5 shows a Frequency distribution of CLASS1-4.

**Table 5. Frequency of CLASS**

		Class		
		Frequency	Percent	Cumulative Percent
Valid	1/C Midshipmen	3305	42.9	42.9
	2/C Midshipmen	2113	27.4	70.3
	3/C Midshipmen	1411	18.3	88.6
	4/C Midshipmen	875	11.4	100.0
	Total	7704	100.0	

**e. Level of Offense**

Level of Offense (LEVOFF) divides the seriousness of the offense into two categories: Minor, coded with 0, and Major, coded with 1. When an offense is reported it is given a four-digit code (OFFECODE) specific to that offense, which carries a label of either being a Major or Minor offense. Demerits are administered based on this four-digit code using the "Table of Maximum Demerits." Table 6 shows the Frequency of LEVOFF.

**Table 6. Frequency of LEVOFF**

		Level of Offense		
		Frequency	Percent	Cumulative Percent
Valid	Minor	6353	82.5	82.5
	Major	1351	17.5	100.0
	Total	7704	100.0	

To further break down LEVOFF, OFFECODE, a variable that lists each specific offense code in each case, was recoded into four different variables (CAT1\_OFF through CAT4\_OFF) according to the maximum number of demerits that can be awarded totally to that code. Each new variable is code with a 1 for offenses within the

demerit range of that category and with a 0 for all others. Table 7 shows a frequency distribution of this recode.

**Table 7. Frequency of CAT1\_OFF through CAT4\_OFF**

	Frequency	Percent	Cumulative Percent
Cat 1 Demerits 00-10	1702	22.1	22.1
Cat 2 Demerits 10-20	1173	15.2	37.3
Cat 3 Demerits 20-35	3183	41.3	78.6
Cat 4 Demerits 35-100	1646	21.4	100.0

***f. Number of Secondary Offenses Considered with Primary Case***

The number of secondary offenses (SCNDOFF) considered with the primary case is essential to this analysis due to the increased likelihood that a case with secondary offenses may yield a higher punishment within the range applicable to the offense. SCNDOFF is coded as 0 when no secondary offense is included with the primary case and 1 if one or more secondary offenses are included. Table 8 shows a Frequency check of SCNDOFF.

**Table 8. Frequency of SCNDOFF**

**Number of Secondary Offenses Considered with Primary Case**

	Frequency	Percent	Cumulative Percent
Valid 0	6597	85.6	85.6
1	868	11.3	96.9
2	169	2.2	99.1
3	55	.7	99.8
4	14	.2	100.0
7	1	.0	100.0
Total	7704	100.0	

### **g. Summary of Variables**

Table 9 lists each variable and its description. Each dichotomous variable's coding is included in the description. Each variable's mean for the 7,704 cases used for the analysis also is listed.

### **3. USNA Values Survey**

The USNA Values Survey is given to 3/C, 2/C, and 1/C midshipmen at the beginning of each year to gain their perspective and insight on a wide variety of midshipmen issues. It is not given to 4/C midshipmen because at the beginning of the year they only have their Plebe Summer experiences to draw from, which is insufficient to complete the survey. This survey includes a section on the Conduct System where questions regarding consistency and biases are asked. The results of this survey are compared with the statistical analysis to determine whether or not they are congruent.

### **C. RESEARCH DESIGN**

This thesis analyzes the consistency of punishment as measured by demerits awarded (PUNISH) to determine the likelihood that one or more groups represented by the independent variables are punished disparately. The specification for the initial regression model is:

$$\text{PUNISH} = \beta_0 + b_1 \text{ATHLETE} + b_2 \text{MINORITY} + \beta_3 \text{GENDER} + b_4 \text{CLASS2} + b_5 \text{CLASS3} + b_6 \text{CLASS4} + b_7 \text{LEVOFF} + b_8 \text{SCNDOFF}$$

CLASS1 was excluded.

Following the analysis of the initial model, revised models were developed based on the statistically significant variables of the initial model.

**Table 9. Summary of Variables**

<b>VARIABLE</b>	<b>DESCRIPTION</b>	<b>MEAN</b>
PUNISH	Dependent Variable: 0-100 Demerits awarded by increments of 5	20.15
ATHLETE	1=Athlete (Varsity Letter Winner), 0=Non-Athlete	.24
MINORITY	1=Minority (Non-Caucasian), 0=Non-Minority (Caucasian)	.25
MINATH	1=Minority-Athlete, 0=All Others	.04
CA	1=Caucasian, 0=All Others	.75
AF	1=African-American, 0=All Others	.10
HI_PU	1=Hispanic & Puerto Rican, 0=All Others	.09
NH_NA	1=Native American/Hawaiian & Pacific Islander, 0=All Others	.01
AS_FI	1=Asian American & Filipino, 0=All Others	.04
OT_MI	1=Other & Missing, 0=All Others There was no missing attributes	.004
GENDER	1=Female, 0=Male	.13
FEMATH	1=Female-Athlete, 0=All Others	.037
FMMINATH	1=Female-Minority-Athlete, 0=All Others	.005
FEMMIN	1=Female-Minority, 0=All Others	.038
CLASS1	1=1/C Midshipmen, 0=All Others	.43
CLASS2	1=2/C Midshipmen, 0=All Others	.27
CLASS3	1=3/C Midshipmen, 0=All Others	.18
CLASS4	1=4/C Midshipmen, 0=All Others	.11
LEVOFF	1=Major Level Offense, 0=Minor Level Offense	.18
CAT I_OFF	1=Category I Level Offense (00-10 Demerits) 0=All Others	.22
CAT II_OFF	1=Category II Level Offense (10-20 Demerits) 0=All Others	.15
CAT III_OFF	1=Category III Level Offense (20-35 Demerits) 0=All Others	.41
CAT IV_OFF	1=Category IV Level Offense (35-100 Demerits) 0=All Others	.21
SCNDOFF	1= One or more Secondary Offenses included with primary offense case, 0=No Secondary Offenses	.14

**D. INITIAL EXPECTATIONS**

The goal of this analysis was to test the following null hypothesis:

*There is no inconsistency of punishment across time or between subgroups.*

The testing of this null hypothesis was based on the statistical significance for each independent variable in the model evaluated at the 0.05 level. Due to the large sample size the statistical power of the analysis is high and very small differences might prove significant.

The expected signs of the coefficient are listed below in Table 10. A positive sign (+) indicates the predicted value for the number of demerits awarded (PUNISH) is hypothesized to increase when the value of the independent variable increases. A negative sign (-) means that the predicted value of PUNISH decreases when the value of the independent variable increases. A question mark (?) means there is no clear expectation.

**Table 10. Expected Signs of Independent Variables**

INDEPENDENT VARIABLE	EXPECTED SIGN
ATHLETE	-
MINORITY	+
GENDER	+
CLASS2	?
CLASS3	?
CLASS4	?
LEVOFF	+
SCNDOFF	+

Expected signs were derived logically from insights gained in the Literature Review (Chapter II). First, the discussion of athletes and their relationship with academia leads to an expectation of leniency, which would be represented by a negative coefficient, or fewer demerits. For minorities and women, all things being equal, a positive coefficient is expected, to represent that they are likely to be punished with more demerits than Caucasian men. In regards to class, there are multiple perspectives that could explain how different classes are punished, and therefore no clear expectation exists. Finally, though it does not require a regression to show that level of offenses and secondary offenses will have positive coefficients, they are demonstrating relative weight within the entire model compared to the demographics. Additionally, correlations run on all the variables are used in examining zero order relationships (refer to Appendix A).

#### **E. CHAPTER SUMMARY**

The final data file used for this analysis contains 7,704 midshipmen conduct cases from the classes 1998 through 2001 that were subjectively awarded punishment by an Adjudicating Authority. There are no missing data. The variables are analyzed using a multiple linear regression model in which statistical significance coupled with coefficient sign is the basis for analysis, discussion and conclusions.

## **IV. DATA ANALYSIS**

### **A. INTRODUCTION**

This chapter presents the results of the multiple linear regression analysis and the results of the USNA Values Survey. The statistical analysis also is interpreted and compared with the surveyed perceptions. Overall, by answering the research questions this analysis reveals which sub-groups, represented by the independent variables, are punished inconsistently with demerits.

### **B. STATISTICAL RESULTS**

This section begins by presenting univariate descriptive statistics that support some of the ideas discussed in Chapter II. However, univariate results can be deceptive; therefore, a series of multiple linear regressions are presented.

#### **1. Descriptive and Crosstab Analysis**

Pershing (2001) assumes a specific group's representation by violation cases reported under the Honor System should not exceed their representation in the Brigade of Midshipmen. If it does, this may indicate inconsistent or, as she declares, "disparate" treatment of the particular group in question. For example, in her study, in 1993 women comprised 8.4 percent of the Brigade but accounted for 18.2 percent of the Honor Violation cases. According to Pershing (1990) this indicates the presence of possible inconsistent treatment.

By taking the numbers and percentages of athletes, females, and minorities conduct cases and comparing them to Brigade numbers and percentages, this study connects the Pershing study logic with the Conduct System. For the purpose of establishing a benchmark for determining a Brigade average, the graduate demographics for the graduating classes of 1998-2001 were provided by the USNA IRC. This information is represented in Table 11, which compares athlete, female, and minority graduate totals (with percent of associated class) with conduct case totals (with percent of conduct cases for that class). Additionally, Table 12 presents the Descriptive Statistics on all variables discussed in this thesis and Appendix F presents Crosstabulations and Chi-Squares of all four subgroups in relation to LEVOFF and SECNDOFF.

**Table 11: Graduating Class and Conduct Statistics by Athlete, Female, and Minority Status**

Grad Yr	#Athletes/ % Of Grad Yr	#Athlete Cases/% of all Cases	#Females/ % Of Grad Yr	#Female Cases/% of all Cases	#Minorities/ % Of Grad Yr	#Minority Cases/% of all Cases
1998	360/39.0	241/22.5	139/15.1	136/12.7	172/18.6	317/29.6
1999	315/35.5	331/24.8	134/15.1	149/11.2	165/18.6	358/26.9
2000	233/24.6	664/26.6	133/14.0	402/16.1	159/16.8	478/19.1
2001	204/22.1	589/21.0	153/16.6	345/12.3	176/19.1	756/27.0
<b>Total</b>	<b>1112/30.2</b>	<b>1825/23.7</b>	<b>559/15.2</b>	<b>1032/13.4</b>	<b>672/18.3</b>	<b>1909/24.8</b>

**Table 12. Descriptives of Variables**

**Descriptive Statistics**

	Mean	Std. Deviation
Number of Demerits Awarded	20.15	23.00
Athletic Status	.24	.43
Minority Status	.25	.43
African-American	.10	.30
Hispanic & Puerto Rican	9.09E-02	.29
Asian-American & Filipino	4.05E-02	.20
Native American/Hawaiin & Pacific Islander	1.18E-02	.11
Caucasian	.75	.43
Other & Missing	4.41E-03	6.63E-02
Minority-Athlete	4.57E-02	.21
Gender	.13	.34
Female-Athlete	3.73E-02	.19
Female-Minority-Athlete	5.06E-03	7.10E-02
Female-Minority	3.86E-02	.19
1/C Midshipmen	.43	.49
2/C Midshipmen	.27	.45
3/C Midshipmen	.18	.39
4/C Midshipmen	.11	.32
Level of Offense	.18	.38
Category 1 Offenses: 00-10 Demerits Maximum	.22	.41
Category 2 Offenses: 10-20 Demerits Maximum	.15	.36
Category 3 Offenses: 20-35 Demerits Maximum	.41	.49
Category 4 Offenses: 35-100 Demerits Maximum	.21	.41
Secondary Offense	.14	.35

**a. ATHLETE**

According to IRC, athletes, as defined by this study, averaged 30.2 percent of the graduating classes between 1998 and 2001. During the same period of time athletes accounted for 23.7 percent of the conduct cases used for this study. The result of a Chi-Square test (Chi-Square = 155.163; d.f. = 1; critical value = 12.706) using athlete's Brigade graduate representation (30.2%) to determine the expected frequency of cases is significant. This suggests that there is a relationship between athletes and the frequency of offenses, with respect to LEVOFF, that may be inconsistent and may contribute to a bias that favors athletes.

**b. MINORITY**

IRC data indicate that minorities made up 18.3 percent of the graduating classes between 1998 and 2001. Minorities as a whole have represented 24.8 percent of the conduct cases used for this study for the same class years. This exceeds their representation by 6.5 percent and may be indicative of inconsistent treatment.

Further study would be required to definitively determine whether or not this initial sign of inconsistency is due to the propensity for minorities to actually commit offenses at higher rates. Bias exists if they are being reported/targeted at higher rates, possibly because of their visibility, compared to non-minorities but in fact commit no more offenses. The result of a Chi-Square computation using minority's Brigade graduate representation (18.3%) to determine the expected frequency

of cases is significant with a value of 217.145 (d.f. = 1; critical value = 12.706). This suggests that there is a relationship between minorities and the frequency of offenses that may be inconsistent and may contribute to a bias that is against minorities.

**c. GENDER**

According to IRC, females averaged 15.2 percent of the graduating classes between 1998 and 2001. During the same period of time females accounted for 13.4 percent of the conduct cases used in this study. The result of a Chi-Square computation using female's Brigade graduate representation (15.2%) to determine the expected frequency of cases is significant with a value of 26.610 (d.f. = 1; critical value = 12.706). Though not as significant as the athlete subgroup, this suggests that there is a relationship between females and the frequency of offenses that may be inconsistent and may contribute to a bias that favors females. In the results of both gender and athlete it may in fact be that they commit fewer offenses.

**d. CLASS**

The Descriptive Statistics for class reveals two possible scenarios. First, as a midshipman progresses up the ranks (4/C to 1/), he or she commits more conduct offenses. Second, as a midshipman progresses up the ranks he or she is more likely to be reported. Which scenario is most accurate is not indicated by the descriptive results. To gain insight as to how conduct cases are distributed across the four-class system in relation to their graduating class, refer to Table 13.

**Table 13. Crosstabulation of CLASS by Graduation Class**

**Class \* Graduation Class Crosstabulation**

Count		Graduation Class				Total
		1998	1999	2000	2001	
Class	1/C Midshipmen	382	542	1352	1029	3305
	2/C Midshipmen	182	356	620	955	2113
	3/C Midshipmen	257	210	363	581	1411
	4/C Midshipmen	251	224	163	237	875
Total		1072	1332	2498	2802	7704

There are two distinct and important factors to understand and recognize by Table 13. The first is to understand that the Academic Year 1998 is the only year in this study that includes all graduating classes during the same year. In 1998 the 1/C midshipmen were the graduating class, and the 4/C were that of graduating class of 2001. During this time it is evident that 4/C midshipmen account for a substantially fewer number of cases than 3/C through 1/C midshipmen. The 1/C midshipmen account for the most cases during 1998, and in fact for all years they are represented in this study.

The second factor to be noted is a large change in the number of cases from year to year starting with Academic Year 1998, with the largest being between the years of 1999 and 2000. Numerous inquiries were made to the USNA IRC and the Conduct Office to explain this growth in adjudicated cases. Three speculations were professionally surmised.

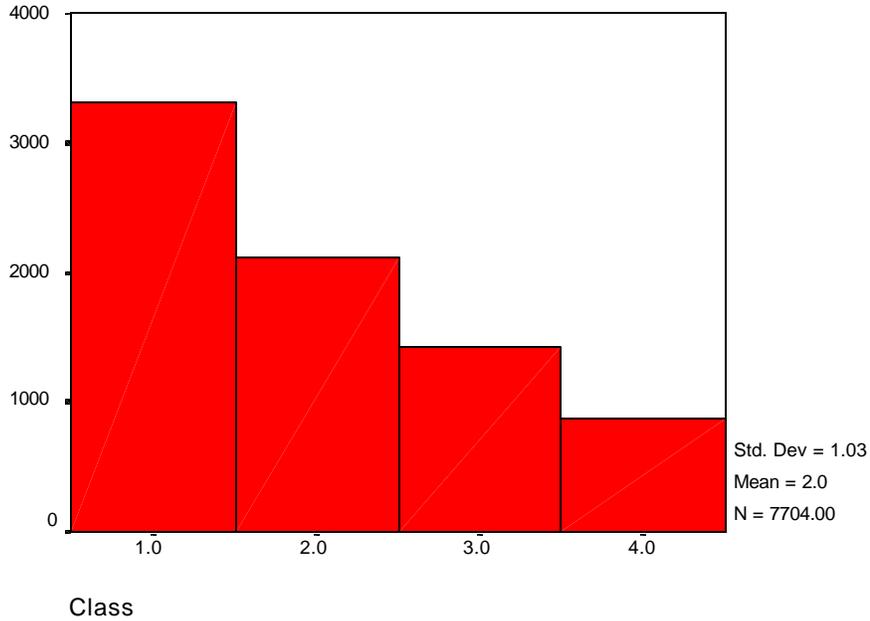
First, with the creation and implementation of MIDS, complete merging of prior conduct data may be deficient. Second, the Conduct System underwent some

transformation starting in 1998. A significant change to the Conduct System was in the way conduct offenses are coded. Prior to 1998 offenses were categorized by a level series (1000 to 6000) system, which went from least to most serious. After 1998 offense levels were simplified to either Minor or Major. The consequence of this change was a more user-friendly system, which may have increased reporting of offenses.

Third, during the implementation of MIDS and the Conduct System transformation, the ability for midshipmen, faculty, and staff to report conduct offenses electronically via MIDS was created. The electronic conduct offense report form (ACS Form 2) reduced the inevitability of confrontation between the offender and the accuser. Psychologically, less confrontation may have equated to an increase in reported cases. It could be just one or the cumulative effect of all these factors that accounts for the increased caseloads.

Regardless, the fact remains that 4/C midshipmen cases are generally fewer than those of 3/C through 1/C in all years used during this study, as represented in Figure 1, with the exception of 2/C midshipmen in 1998 and 3/C midshipmen in 1999.

**Figure 1. Graph of CLASS Conduct Cases**



This occurs even though attrition rates over four years mean that there are fewer midshipmen from class to class from 4/C up to 1/C midshipmen. Applying the Pershing study logic suggests some inconsistency over time, which indicates as midshipmen go from 4/C to 1/C they are more likely to be reported for a conduct offense.

As with the results of Minorities, further study would be required to determine whether or not this initial sign of inconsistency is due to the propensity for different classes to actually commit more offenses. It may be that 1/C cases are reported at higher rates in accord with organizational norms and values discussed in Chapter 2.

## 2. Regression Analysis

The initial specification for the regression model is represented by the following expression.

$$\text{PUNISH} = b_0 + b_1\text{ATHLETE} + b_2\text{MINORITY} + b_3\text{GENDER} + b_4\text{CLASS2} + b_5\text{CLASS3} + b_6\text{CLASS4} + b_7\text{LEVOFF} + b_8\text{SCNDOFF}$$

The regression results of this model specification are listed in Table 14. The *R Square* tells us that 66.8 percent of the observed variability of PUNISH (Number of Demerits Awarded) is explained by the eight independent variables. Additionally, the Analysis of Variance (ANOVA) confirms the linear relationship between the dependent and independent variables.

The coefficients for the independent variables are listed in Table 14. Seven of the eight independent variables contributed significantly to predicting the number of demerits awarded (PUNISH) and all coefficients were positive.

### a. ATHLETE

Athletic Status (ATHLETE) is not significant. Thus, the regression does not support a claim, that if an athlete has committed an offense he/she will be given fewer demerits than others committing a similar offense.

**Table 14. Initial Multiple Linear Regression Results**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817 <sup>a</sup>	.668	.668	13.26

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, 4/C Midshipmen, 2/C Midshipmen, Level of Offense

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2721777	8	340222.140	1936.105	.000 <sup>a</sup>
	Residual	1352204	7695	175.725		
	Total	4073981	7703			

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, 4/C Midshipmen, 2/C Midshipmen, Level of Offense

b. Dependent Variable: Number of Demerits Awarded

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.534	.269		31.685	.000
	Athletic Status	.101	.357	.002	.282	.778
	Minority Status	.964	.351	.018	2.742	.006
	Gender	1.351	.447	.020	3.023	.003
	2/C Midshipmen	2.869	.372	.056	7.722	.000
	3/C Midshipmen	4.917	.424	.083	11.599	.000
	4/C Midshipmen	4.051	.509	.056	7.958	.000
	Level of Offense	45.116	.437	.746	103.184	.000
	Secondary Offense	7.736	.477	.118	16.225	.000

a. Dependent Variable: Number of Demerits Awarded

**\*\*Excluded Variable: CLASS1 (1/C Midshipmen)**

**b. MINORITY**

Minority Status (MINORITY) is both significant and positive. This indicates that minorities, everything else being equal, are awarded an average of 0.964 more demerits than non-minorities represented by the Constant.

In an effort to resolve which specific minorities within the group are awarded more demerits, an additional regression was run with each minority grouping as delineated in Chapter III (Refer to Appendix B for Regression of Minority Groups). The results of this post hoc regression found African American and Asian-American & Filipino received significantly more demerits than the reference group - Caucasians. Additionally, the regression of Minority-Athlete (MINATH), as presented in Appendix C, did not uncover any significance with minorities who are also athletes.

**c. GENDER**

Gender (GENDER) is significant and positive. This indicates that females, everything else being equal, are awarded an average of 1.351 more demerits than males. Additionally, because the Pershing study linked gender with minorities and athletes, a separate regression was run with GENDER integrated and recoded with the independent variables ATHLETE and MINORITY to become Female-Athlete, Female-Minority, and Female-Minority-Athlete. The result of this post hoc regression, as presented in Appendix C, did not discover significance with females that share demographic tags with minorities and athletes.

**d. CLASS**

All class ranks (CLASS2-4) were very significant with positive coefficients. The statistical result that 3/C midshipmen are likely to receive an average of 4.917 more demerits than 1/C midshipmen, 0.866 more than 4/C midshipmen.

**e. LEVOFF**

Level of Offense (LEVOFF) is significant and has a positive coefficient. This result indicates that midshipmen who commit a Major level offense receive an average of 45.116 more demerits than those who commit Minor offenses. Within the *R Square* of .668, LEVOFF accounts for approximately .646 of the *R Square* when run with just LEVOFF as the independent variable, presented in Appendix D.

An additional regression was run with LEVOFF recoded into four categories according to the maximum number of demerits that can be awarded for a specific conduct offense code (OFFCODE). Category II was excluded as for the purpose of a reference group. The results, as expected, are consistent with LEVOFF and are presented in Appendix D. In both regressions, as expected the more serious the offense the more demerits awarded.

**f. SCNDOFF**

Secondary Offenses are significant and positive. This result indicates that Midshipmen who have secondary offenses attached to their primary offense case receive an average of 7.736 more demerits than midshipmen with no secondary offenses attached.

**C. PRESENTATION OF USNA VALUES SURVEY RESULTS**

Though the USNA Values Survey has served as a mechanism for initiating this study, more importantly, it is an instrument against which to assess the statistical analysis. The questions that deal directly with the consistency of the Conduct system and the independent variables are presented. Later in this chapter these questions are compared to the interpreted statistical analysis of the case data.

The first question for establishing the perception of consistency starts with the notion of how punishment is awarded throughout the Brigade, Company to Company. Table 16 presents the question and results. The results reflect the point made by Admiral Boorda (1990).

**Table 16. Perception of Company-to-Company Consistency**

63. The administration of the Conduct System is consistent from company to company.			
	<b>Strongly Agree &amp; Agree</b>	<b>Neither</b>	<b>Disagree &amp; Strongly Disagree</b>
<b>Year</b>			
1998	14%	23%	64%
1999	14%	20%	66%
2000	16%	21%	63%
2001	17%	21%	63%
<b>AVG%</b>	<b>15.25%</b>	<b>21.25%</b>	<b>64%</b>

Boorda (1990) reported the following, which speaks directly to the results in Table 16:

One manifestation of the problem is when two or more midshipmen in different companies, who together or even at different times commit the same offense

(like and related/unrelated offenses), they may receive widely different punishments. While recognizing that leadership styles will differ, the wide disparities, at best, give an appearance of inequity. (p.22)

Additionally, the idea of consistency is again asked regarding the perception of "the disciplinary action taken on those found in violation of the Conduct System" (refer to Table 17). Though the contexts in which a midshipman may answer this question may vary, this study's context addresses the sub-groups identified in the independent variables. Note the change in results for options (a) and (c) after 1998, which coincides with the transformation of the Conduct System.

**Table 17. Perception of Disciplinary Action (Punishment)**

68. Which of the following statements most accurately reflects your opinion of the disciplinary action taken for those found in violation of the Conduct System?				
	1998	1999	2000	2001
a. Disciplinary action is generally fair and appropriate.	20%	28%	28%	27%
b. Disciplinary action is generally too harsh.	28%	31%	30%	31%
c. Disciplinary action is generally too lenient.	12%	3%	4%	4%
d. Disciplinary action is too inconsistent.	37%	38%	38%	38%

Consistency with regard to punishment does not always imply that the same offense will receive the same punishment every time, but if the punishment deviates from expectations, either by seeming excessive (harsh) or insufficient (lenient), a perception of inequity may occur. Table 17 illustrates this perception of inconsistency with the percentages of respondents stating that punishment was other than "fair and appropriate" ranging from 72% to 77% each year, a clear majority. For comparison, using the

same definition of consistency for the same question asked by the Values Survey about the Honor System yields a range of 51% to 67%.

The principal question for this study concerns perceptions of bias relating to gender, minorities, and athletes as shown in Table 18. The Table is broken into two groups with the first being the way the question was asked from 1998-1999. The second group represents how the question was asked from 2000-2001. From both groups it is evident that a substantial portion, on average 46%, of the Brigade perceives Athletes as getting preferential treatment ("Biased in Favor of") by the Conduct System.

An interesting note of contrast between the two groups of questions is the shift in results when midshipmen are given the choice of "Administered Fairly" in Group II over "Neither" in Group I. These two choices are not equivalent. Of particular note, the "Biased in Favor of" results increase by 2% for athletes, and a considerable 10% increase for women. Due to a limitation of this study, it is unclear whether perceptions really changed or rather that the respondents interpreted the questions differently.

In summary, it is evident that a clear majority of the Brigade surveyed perceives that there are inconsistencies in the administration of awarding punishment by the Conduct System. Though the perception of inconsistency is somewhat reduced when questions are asked about sub-groups, the results are still substantial enough to warrant a statistical analysis.

**Table 18. Perceptions of Bias**

<b>Group I (Questions as asked from 1998-1999)</b>							
The administration of the Conduct System is <b>biased against</b> :							
		Strongly Agree/Agree		Neither	Disagree/Strongly Disagree		
<b>Women</b>	<b>1998</b>	9%		28%		63%	
	<b>1999</b>	6%		27%		67%	
<b>Men</b>	<b>1998</b>	22%		32%		46%	
	<b>1999</b>	21%		32%		47%	
<b>Minorities</b>	<b>1998</b>	10%		30%		60%	
	<b>1999</b>	7%		31%		62%	
<b>Athletes</b>	<b>1998</b>	13%		26%		61%	
	<b>1999</b>	12%		28%		60%	
The administration of the Conduct System is <b>biased in favor of</b> :							
		Strongly Agree/Agree		Neither	Disagree/Strongly Disagree		
<b>Women</b>	<b>1998</b>	35%		28%		37%	
	<b>1999</b>	36%		27%		37%	
<b>Men</b>	<b>1998</b>	8%		31%		61%	
	<b>1999</b>	5%		32%		64%	
<b>Minorities</b>	<b>1998</b>	23%		33%		44%	
	<b>1999</b>	18%		35%		48%	
<b>Athletes</b>	<b>1998</b>	50%		24%		27%	
	<b>1999</b>	40%		28%		32%	
<b>Group II (Question as asked from 2000-2001)</b>							
Using the following scale, what is your perception of the overall administration of the Conduct System with respect to the following groups:							
A. Administered Fairly							
B. Biased Against							
C. Biased in Favor of							
		Administered Fairly		Biased Against		Biased in Favor of	
		2000	2001	2000	2001	2000	2001
69.	Women	50%	52%	3%	4%	47%	44%
70.	Men	75%	75%	24%	24%	1%	1%
71.	Minorities	76%	76%	6%	6%	18%	18%
72.	Varsity Athletes	37%	42%	11%	16%	52%	42%

#### D. DATA INTERPRETATION

The interpretation of the statistical results presented in this study is presented in the context of demerits awarded using the first Research Question:

- 1.) *Are the punishments administered through the Naval Academy's Conduct System consistently related to the intensity of the charged offense (a) across time and (b) independent of athletic status, minority status, gender, and class?*

First and foremost it is imperative to recognize that by the largest margin both the intensity of the offense, represented by the Level of Offense (LEVOFF) and the Secondary Offense (SCNDOFF) variables are the determinants of demerits awarded (PUNISH). Together they account for approximately 0.660 (refer to Appendix D) of the total variance, which is 99 percent of the explained variance (0.668 *R Squared*). Their Standardized Coefficients are 0.746 and 0.118 respectively for a combined 0.864. These results strongly indicate that Adjudicating Authorities, at the most fundamental level, are awarding demerits according to intensity of the charged offense. It does not take a regression model to illustrate that punishments are related to the level of offense. But including LEVOFF and SCNDOFF in the regression model helps to illustrate the practical importance of the demographic variables.

Although the demographics of athletic status (ATHLETE), minority status (MINORITY), gender (GENDER), and class (CLASS2-4) only account for approximately one percent

of the variance, with a combined Standardized Coefficient of 0.235, their significance cannot be dismissed. However, the interpretation must be tempered. The demographic variables are not very important in the sense that is most relevant to the issues of institutional bias.

#### **1. ATHLETE**

First, because athlete's case representation was 6.2 percent below their Brigade representation, this may suggest that either they are not reported equally compared to non-athletes, or because of their athletic status they are better disciplined and actually commit fewer offenses. The regression results however, are not significant, which is consistent with the null hypothesis that athletes are treated fairly. Of noteworthy interest, when an additional regression, as seen in Appendix E, was run with only Minor cases selected athletic status is marginally significant at 0.066 with a small negative coefficient. This is the closest the data comes to exhibiting preferential treatment for athletes.

#### **2. MINORITY**

Because minority status is over represented in cases compared to Brigade representation, and because it is statistically significant with a positive coefficient in the regression, an inconsistency may exist. All together, the statistics suggest that minorities commit more offenses, relative to their representation, and/or are more likely to be reported when they do in comparison to Caucasians. Additionally, once subject to the Conduct System they are likely to receive more demerits than Caucasians. It must be emphasized again, however, that

very little of the variance in demerits is explained by minority status.

Four questions immediately appear relevant in explaining this apparent disparate treatment. First, do minorities commit more major offenses than non-minorities, which would account for them receiving more demerits? No. Including level of offense (LEVOFF) in the regression model accounts for this possibility. A Crosstabulation and Chi-Square analysis performed between MINORITY and LEVOFF (refer to Appendix F) indicates that minorities and non-minorities are within 1 percent of each other in commission of Major offenses (Minority=16.9%, Non-Minority=17.8%). The Chi-Square is not significant.

Second, do minorities have a higher percentage of secondary offenses attached to their primary offense case than non-minorities? No. Including secondary offenses (SCNDOFF) in the regression model also accounts for this possibility. A Crosstabulation and Chi-Square analysis performed between MINORITY and SCNDOFF (refer to Appendix F) indicates that they are within 1 percent of each other (Minority=14.7%, Non-Minority=14.3%) and the Chi-Square is insignificant. Therefore, SCNDOFF is not likely to be a contributing factor to minorities receiving more demerits.

Third, if it is assumed that repeat offenders may receive more punishment than the first time offender, are minorities more like to receive more demerits than non-minorities? Due to limitations of the data in this study, the exact percentage of repeat offenders could not be created to compare minorities and non-minorities. However, minority cases are greater in number than their Brigade

representation, suggesting that repeat offenders are relatively common. Therefore, this may be a contributing factor to the significance of MINORITY.

Fourth, is discrimination present in the Conduct System? This question cannot be answered directly. To claim there is no discrimination, one has to postulate that minorities have a greater propensity to commit offenses. The data used in this study provides no evidence on this point.

### **3. GENDER**

Gender, like athletic status, is less represented in cases than its representation in the Brigade, but unlike athletes, gender is statistically significant in the regression with a positive coefficient. The fact that females commit offenses at a lower rate than their Brigade representation but like minorities are punished more heavily than the reference group of males is noteworthy.

Represented by the results of the regression, gender has a higher coefficient indicating females may receive more demerits than minorities. However the margin between females and minorities is very small and on the practical level, insignificant.

Using the same four possibilities as used with minorities to explain the disparity in demerits awarded uncovers one interesting result. In the results of the Crosstab/Chi-Square (Appendix F) of GENDER and SCNDOFF the Chi-Square tests is significant with a value that exceeds the critical value with one degree of freedom. Therefore, a relationship exists between females and secondary

offenses that may or may not contribute to the significance of GENDER.

#### **4. CLASS**

Class is the most interesting variable in considering both punishment over time and the norms and values within the Brigade related to the Conduct System. The regression model results indicate that 3/C midshipmen are likely to receive more demerits than other classes when they enter the Conduct System and that 1/C midshipmen receive fewer demerits on average than members of other classes.

Further, Crosstabs/Chi-Squares of CLASS1-4, LEVOFF and SCNDOFF were performed (refer to Appendix F). The result was, though 4/C midshipmen generally account for the lowest number of cases of all classes in every year used in this study, with exceptions already noted, their cases have the highest percentage (23.1%) of Major level offenses, and still 3/C midshipmen, with 23.0% major offenses, receive more demerits. The 1/C midshipmen Major level offenses only account for 13.0% of their cases.

The cumulative results of all three findings lead to the following interpretation. When a 1/C midshipman commits an offense it is likely to be minor, and he or she is very prone to being officially reported into the Conduct System. Though the reason for this would require a more thorough analysis, this study concludes that 1/C midshipmen are expected to champion high standards of conduct and when they fail they are held officially accountable.

There are at least two explanations as to why 1/C midshipmen receive fewer demerits than underclassmen. First, 1/C midshipmen have the highest level of privileges

compared to lower classes and therefore are more likely to commit offenses at the Minor level, because many offenses are associated with the abuse of privileges. Additionally, other forms of punishment, such as restriction, involve loss of privileges. It is easier to impose alternative punishments on midshipmen who otherwise receive considerable privileges. Such punishment may in fact be a more effective deterrent than demerits at this rank level.

Near the other end of the spectrum are the 3/C midshipmen who have just been relieved from the rigors and excusals of Plebe year. They are no longer the inexperienced young men and women they were when they entered the Academy. They are expected to know what is right and wrong, and are unable to use unawareness as an excuse. For this, and because that they have relatively fewer privileges to impinge on they are awarded more demerits.

This interpretation speaks to the norms and values of the Brigade. In a preliminary inquiry, personnel familiar with the Conduct System confirmed this interpretation to be consistent with their experiences and perceptions of the Conduct System. A more specific analysis is warranted to definitively confirm this.

#### **E. CORRELATION OF SURVEYED PERCEPTIONS VS. STATISTICAL ANALYSIS**

This section addresses the second research question:

*2. Are midshipmen perceptions of the Conduct System congruent with the statistical analysis?*

The variable, CLASS, is not surveyed with the Conduct System questions and will not be addressed in this section.

### **1. ATHLETE**

Between 40 to 52 percent of midshipmen between the years 1998 to 2001 believe that the Conduct System is "biased in favor of" athletes. The statistical analysis does not support this perception. For this perception to be accurate the regression result would have to be significant with a negative coefficient. It is neither.

One possible reason, statistically, that may explain the strong perception of favoritism toward athletes is revealed by their descriptive statistic. The mean of athlete cases is lower than athlete representation within the Brigade. This descriptive may support one who believes that a midshipman is less likely to be officially reported to the Conduct System because of his or her athletic status. It is also reasonable to speculate the varsity teams may have disciplinary tools or measures that may prevent athlete offenses, or when they occur, to deal with the offenses.

### **2. MINORITY**

A substantial majority of midshipmen disagree/strongly disagree that the Conduct System is "biased against" minorities (60%-62% from 1998-1999), and in fact believe that they are treated "fairly" (76% from 2000-2001). The statistical analysis leans somewhat in the opposite direction from the majority perception. It appears that if a minority and Caucasian commit the same offense, the minority is likely to receive more demerits. This statement implies that the Conduct System is biased against

minorities, at least relative to demerits awarded assuming the offenses are in fact equal.

The practical significance that can be drawn from the regression analysis indicates that a minority may receive 51 demerits when the Caucasian may receive 50. At most, since demerits are awarded in increments of 5, a minority may receive as high as 55 demerits. Though it is not clear to what degree midshipmen may consider punishment to be harsh or lenient, it is likely that the example above would not trigger either response. Still, a "bias-against" attitude exists and it is evident in the surveyed perceptions that many midshipmen do not detect this small disparity.

Consequently, the statistical analysis is not congruent with the 18 to 23 percent of midshipmen who perceive the Conduct system to be biased in favor of minorities. Overall, the statistical analysis, both the Descriptives and the regression, is not congruent to the same degree with the perceptions of how minorities are administered demerits by the Conduct System. To answer the bias questions purely on the statistical analysis the most accurate choice would lean more toward "biased against."

### **3. GENDER**

Although never reaching a majority, a substantial percentage (35-47%) of midshipmen perceives the Conduct System is "biased in favor" of women. From 2000-2001, the majority (50-52%) believed the Conduct System was "administered fairly" toward women. Conversely, a very low percentage (3-9%) perceived the Conduct System "biased against" women. In contrast to minorities, the fact that

female conduct cases are lower than their representation within the Brigade suggests a bias in favor of women, which is in line with the perception of the Brigade. But with a statistically significant regression result and a positive coefficient, like minorities, a "bias against" women exists.

Of noteworthy interest, fewer midshipmen perceive bias against women than perceive bias against minorities. Additionally, a larger percentage of the Brigade perceives bias in favor of women than the percentage perceiving bias in favor of minorities. With the regression results indicating that women receive more demerits than minorities it would appear that the perceptions of the Brigade regarding women are incorrect. Their misperceptions may be due to their awareness of women being officially reported to the Conduct System is higher than their awareness of the outcome and punishments awarded.

#### **4. THE CONDUCT SYSTEM**

In the context of this study, it is imperative to interpret the results within the framework of the definition of consistency used:

*Consistency with regard to punishment does not always imply that the same offense will receive the same punishment every time, but if the punishment deviates from expectations, either by seeming excessive (harsh) or insufficient (lenient), a perception of inequity may occur.*

In addition, the consistency of punishment is only measured by demerits awarded by subgroup to athletes, minorities, females, and all four classes. The fact that 11

percent of the cases received no demerits has no noteworthy effect on the character of the results, as can be seen when these cases are excluded from the regression model as presented in Appendix G. The assumption in regards to demerits awarded is that if they are inconsistent, other forms of punishment are also suspect of the same. This study does not account for the many other possible reasons that may contribute to midshipmen having varied perceptions of the consistency of punishment. For example, different company-to-company punishments and/or apparent randomness of punishments awarded by Adjudicating Authorities may also add to perceptions.

On average from 1998-2001, 38 percent of midshipmen felt that "disciplinary action is too inconsistent." Additionally, 6 percent felt "discipline is generally too lenient" and 30 percent "too harsh." Under the definition of consistency used for this study both "lenient" and "harsh" would be included as being inconsistent, or other than fair. This now raises the tally of potentially inconsistent opinion to a substantial 74 percent. Although the regression results do indicate some very small inconsistencies, the weight of the results, in both significance and actual number of demerits, does not strongly support a charge that punishments are particularly lenient or harsh, and thereby inequitable. Therefore, this study concludes that the statistical analysis is not congruent with the strength of the majority perception of inconsistency, at least in so far as the inconsistency relates to the subgroups focused on in this study.

## **F. CHAPTER SUMMARY**

Overall, a midshipman who commits a conduct offense can be confident that he or she will be awarded demerits consistent, within the definition of this study, and within the policies outlined by the Administrative Conduct System Manual. Simply, this means that the demerits received will be commensurate with the level of offense. However, there is cause for awareness of possible prejudices revealed in the disparate results of this study. There are slightly higher demerit awards particularly for minorities and women.

The statistical analysis of this study combined with the surveyed perceptions of midshipmen regarding the USNA Administrative Conduct System demonstrates a considerable degree of faulty perceptions. It is difficult to affirm or negate a person's perception on any issue because those perceptions are derived from experiences, real or not. The statistical analysis aligned with the surveyed perceptions is but one tool in providing clarity to the perceptions. The results of this study suggest that the perceptions are not wholly congruent with the data in the context of demerits awarded.

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## V. DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

*To which cannot be done perfectly must be done in  
a manner as near perfection as may be.  
(Daniel Webster)*

### A. DISCUSSION

This thesis seeks to objectively examine a subjective process. Circumstances surrounding similar offenses differ from case to case, and there is no single number of demerits appropriate in apparently similar cases. Given the independence and humanity of Adjudicating Authorities and the lack of coordination among them, it would be surprising if some inconsistency were not perceived, and also found. To expect perfection, statistical significance with zero coefficients, is contrary to any assumption that could logically be derived about a subjective process, particularly when racial and gender integrations issues are included. The idea of subjectivity alone connotes multiple points of view and is synonymous with words like bias, prejudice, and partisanship.

The definition of consistency stated by this study is founded in the idea of equity. It states that consistency with regard to punishment does not always imply that the same offense will receive the same punishment every time, but if the punishment deviates from expectations, either by seeming excessive (harsh) or insufficient (lenient), a perception of inequity may occur. Therefore consistency of punishment is fundamental to a rational system and to the

perception of equity. Ideally, the vision for the Conduct System should promote equity as its highest measure of consistency.

The irony behind midshipmen perceptions that tend to view the Conduct System as harsh, lenient and inconsistent, all less than fair, is the fact that the midshipmen accept this state of inequity as part of the price of maintaining their limited control of the system. A supplementary question from the Values Survey (1998-2001) relating to conduct finds that, on average, 60% are willing to accept inconsistency in adjudications. Though this particular question specifically addresses the issues of company-to-company inconsistencies, the key is that the majority is willing to accept inconsistency in order to have involvement by the midshipmen chain of command in the adjudication of conduct offenses. It is questionable whether midshipmen would be as accepting of disparate treatment toward minorities and gender. It is recommended that a question addressing such disparities be asked.

## **B. CONCLUSIONS**

The null hypothesis that there is no inconsistency of punishment across time or among subgroups is rejected by the statistical results of this study. Results from the data analysis in Chapter IV reveal that there are numerically small inconsistencies or disparities in how demerits are awarded by Adjudicating Authorities, adversely affecting minorities and women. The disparity in regards to how demerits are awarded to different classes does not appear to be supported by a bias; instead it is likely a result of the construct of the four-class system and the

norms and values of the Brigade. The literature and studies presented in Chapter 2, particularly on the issues of minorities and gender, lead toward an expectation of disparate treatment, however slight.

The issue of minority and gender integration, though to a lesser degree than in American society broadly, undeniably still challenges the military culture. This study indeed reflects the notions of Moskos (1973) who concludes that the military environments, coupled with similar socio-educational backgrounds, are conducive to a condition in which inequities and disparities are reduced, not eliminated.

The following is a summary of this study's major findings:

- Athletic status, minority status, gender and class account for approximately 1% of the explained variance in demerits issued in the statistical model. Level of offenses and secondary offenses account for the remaining 99% and are the primary criteria by which demerits are awarded.
- Athlete conduct cases are significantly fewer than their Brigade representation and the regression results were not statistically significant. Therefore, this study cannot support a claim that if an athlete commits an offense he/she will be given fewer demerits, which would reflect the strong perceptions of the Brigade that suggests the Conduct System is "biased in favor" of athletes.

- Minorities are significantly over-represented in conduct case relative to their Brigade representation. Additionally, the regression results were significant with a positive coefficient indicating they received on average .964 more demerits than Caucasian. These results are exactly contrary to a strong perception of the Brigade that the Conduct System is "biased in favor" of minorities.
- Female conduct cases are significantly fewer than their Brigade representation. However, the regression results were significant with a positive coefficient indicating they received on average 1.351 more demerits than males. This last result is contrary to the perception of the Brigade that the Conduct System is "biased in favor" of women.
- Of all four classes, the regression results indicate that 3/C midshipmen received 4.917 more demerits than 1/C midshipmen, who received the least.

### **C. RECOMMENDATIONS**

This study has been conducted in order to provide Naval Academy personnel, both officers and midshipmen, with an increased awareness in regards to the equity of punishment under the Conduct System.

Because the demographic variables in this study suggest only a small impact in the statistical model, their practical significance is limited. It is the opinion of the author of this study that an explicit action or change to the Conduct System policy is not warranted by the

results of this study alone. The significance of the results does not justify any shift in policy or action that may impose limits on individual judgments of leaders within the Brigade and Academy staff.

Since punishments are awarded by Adjudicating Authorities only, they are the focus for recommendations. In concert with the recommendations made by Admiral Boorda twelve years ago, this study recommends increased awareness in considering consistency in the awarding of punishment under the Conduct System.

To achieve this, first, training of Adjudicating Authorities is fundamental. To date there is none. This duty is delegated by rank and billet position of both officers and midshipmen. Awareness of disparities throughout the Brigade in regards to the Conduct System should be continuously monitored and managed by the Conduct Officer and Brigade Conduct staff at the Company, Battalion, and Regimental levels. Specifically, it is recommended that each Adjudicating Authority be regularly advised of his/her punishment awarding record in relation to that of other Adjudicators. Awareness alone may be enough force to reduce inconsistencies and reveal concealed prejudices.

To foster perceptions that are founded on fact vice rumor and anecdote, it is recommended that a conduct accountability board be formed. Chaired by the Brigade Conduct Officer, and made up from respective Battalion and Company conduct staff, this board would monitor conduct case results. It would serve an implicit and explicit function. Implicitly, Adjudicating Authorities, knowing

that their cases are going to be reviewed by midshipmen will be much more attentive to the outcomes they produce. Explicitly, the board can disseminate timely and accurate information regarding cases, particularly high profile ones, and dispel misconceptions that arise from rumor and incomplete information.

The overall goal of this accountability board is not to be punitive, provocative, or second-guessing of Adjudicating Authorities. Nor is it intended to be the conduit for an appeal process. The intent will be to ensure certainty of Conduct System policy and consistency of punishment commensurate with the level of offense and with due regard for the professional behavior development of the offender and the good order and discipline of the Brigade.

#### **D. ISSUES FOR FURTHER RESEARCH**

The following areas for further research are warranted on the basis of the results of this study and to provide additional insight into the Naval Academy's Conduct System:

- An analysis to determine the priority weight given to all forms of punishment and to determine if those weights change from class to class.
- An analysis of each form of punishment to validate or invalidate the assumption made by this study that, if inconsistency exists in one punishment, it is likely to exist in others.
- An analysis to thoroughly explore the four-class system and its relation to the Conduct System. Though this study identified which class will receive more

demerits, the interpretation as to why remains speculative.

- An analysis that focuses on repeat offenders in an effort to further explain the results of this study.
- An analysis that explores whether or not there is a difference in punishment in relation to whether the case is reported by a midshipman or officer.
- The interpretation of the survey questions of this study in relation to the statistical data was not performed systematically based on formal survey theory and construction. A thorough analysis of the Values Survey questions regarding the Conduct System is warranted. This may include the examination of the perceptions of different subgroups toward each other. For example, what are the perceptions of minorities about the treatment of minorities?

Such studies will contribute to a climate of real and perceived equity and ensure the Naval Academy continues its tradition of excellence.

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**APPENDIX A. CORRELATION OF ALL VARIABLES**

**Correlations: ALL VARIABLES**

**Correlations**

		Number of Demerits Awarded	Athletic Status	Minority Status	Gender	Class	Level of Offense	Secondary Offense
Number of Demerits Awar	Pearson Correl Sig. (2-tailed) N	1.000 .488 7704	.008 .488 7704	.016 .173 7704	.037* .001 7704	.174* .000 7704	.804* .000 7704	.435* .000 7704
Athletic Status	Pearson Correl Sig. (2-tailed) N	.008 .488 7704	1.000 .000 7704	-.071* .000 7704	.038* .001 7704	-.023* .041 7704	.005 .674 7704	.034* .003 7704
Minority Status	Pearson Correl Sig. (2-tailed) N	.016 .173 7704	-.071* .000 7704	1.000 .000 7704	.036* .001 7704	.048* .000 7704	-.010 .376 7704	.005 .669 7704
Gender	Pearson Correl Sig. (2-tailed) N	.037* .001 7704	.038* .001 7704	.036* .001 7704	1.000 .000 7704	.043* .000 7704	.003 .790 7704	.084* .000 7704
Class	Pearson Correl Sig. (2-tailed) N	.174* .000 7704	-.023* .041 7704	.048* .000 7704	.043* .000 7704	1.000 .000 7704	.107* .000 7704	.122* .000 7704
Level of Offens	Pearson Correl Sig. (2-tailed) N	.804* .000 7704	.005 .674 7704	-.010 .376 7704	.003 .790 7704	.107* .000 7704	1.000 .000 7704	.411* .000 7704
Secondary Off	Pearson Correl Sig. (2-tailed) N	.435* .000 7704	.034* .003 7704	.005 .669 7704	.084* .000 7704	.122* .000 7704	.411* .000 7704	1.000 .000 7704

\*\*Correlation is significant at the 0.01 level (2-tailed).

\*Correlation is significant at the 0.05 level (2-tailed).

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**APPENDIX B. REGRESSION OF MINORITY GROUPS**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818 <sup>a</sup>	.668	.668	13.25

a. Predictors: (Constant), Other & Missing, Secondary Offense, 3/C Midshipmen, African-American, Native American/Hawaiin & Pacific Islander, Athletic Status, Asian-American & Filipino, Gender, Hispanic & Puerto Rican, 4/C Midshipmen, 2/C Midshipmen, Level of Offense

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2722748	12	226895.679	1291.453	.000 <sup>a</sup>
	Residual	1351233	7691	175.690		
	Total	4073981	7703			

a. Predictors: (Constant), Other & Missing, Secondary Offense, 3/C Midshipmen, African-American, Native American/Hawaiin & Pacific Islander, Athletic Status, Asian-American & Filipino, Gender, Hispanic & Puerto Rican, 4/C Midshipmen, 2/C Midshipmen, Level of Offense

b. Dependent Variable: Number of Demerits Awarded

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.543	.270		31.696	.000
	Athletic Status	2.517E-02	.359	.000	.070	.944
	Gender	1.374	.447	.020	3.071	.002
	2/C Midshipmen	2.880	.372	.056	7.748	.000
	3/C Midshipmen	4.931	.424	.083	11.628	.000
	4/C Midshipmen	4.024	.509	.056	7.901	.000
	Level of Offense	45.121	.437	.746	103.152	.000
	Secondary Offense	7.759	.477	.118	16.265	.000
	African-American	1.534	.509	.020	3.015	.003
	Hispanic & Puerto Rican	.251	.535	.003	.470	.638
	Asian-American & Filipino	1.643	.772	.014	2.128	.033
	Native American/Hawaiin & Pacific Islander	-.145	1.402	-.001	-.103	.918
	Other & Missing	-.902	2.284	-.003	-.395	.693

a. Dependent Variable: Number of Demerits Awarded

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**APPENDIX C. REGRESSION WITH GENDER/MINORITY INTEGRATIONS**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818 <sup>a</sup>	.668	.668	13.25

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, 4/C Midshipmen, Female-Minority-Athlete, 2/C Midshipmen, Level of Offense, Minority-Athlete, Female-Athlete, Female-Minority

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2723230	12	226935.805	1292.142	.000 <sup>a</sup>
	Residual	1350752	7691	175.628		
	Total	4073981	7703			

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, 4/C Midshipmen, Female-Minority-Athlete, 2/C Midshipmen, Level of Offense, Minority-Athlete, Female-Athlete, Female-Minority

b. Dependent Variable: Number of Demerits Awarded

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.593	.276		31.107	.000
	Athletic Status	-.417	.435	-.008	-.957	.338
	Minority Status	1.005	.426	.019	2.356	.018
	Minority-Athlete	1.252	.942	.011	1.329	.184
	Gender	1.414	.640	.021	2.210	.027
	Female-Athlete	1.708	1.122	.014	1.521	.128
	Female-Minority-Athlete	-1.265	2.673	-.004	-.473	.636
	Female-Minority	-1.578	1.107	-.013	-1.426	.154
	2/C Midshipmen	2.862	.372	.056	7.699	.000
	3/C Midshipmen	4.916	.424	.083	11.590	.000
	4/C Midshipmen	4.039	.509	.056	7.928	.000
	Level of Offense	45.094	.437	.746	103.140	.000
	Secondary Offense	7.723	.477	.118	16.191	.000

a. Dependent Variable: Number of Demerits Awarded

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**APPENDIX D. LEVOFF & SCNDOFF REGRESSIONS**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804 <sup>a</sup>	.646	.646	13.68

a. Predictors: (Constant), Level of Offense

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2633425	1	2633424.905	14079.725	.000 <sup>a</sup>
	Residual	1440556	7702	187.037		
	Total	4073981	7703			

a. Predictors: (Constant), Level of Offense

b. Dependent Variable: Number of Demerits Awarded

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.622	.172		67.734	.000
	Level of Offense	48.618	.410	.804	118.658	.000

a. Dependent Variable: Number of Demerits Awarded

**APPENDIX D: LEVOFF & SCNDOFF REGRESSIONS (Cont.)**

**Regression with Cats I, III, & IV Offenses**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.782 <sup>a</sup>	.611	.610	14.35

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, Category 1 Offenses: 00-10 Demerits Maximum, 4/C Midshipmen, 2/C Midshipmen, Category 4 Offenses: 35-100 Demerits Maximum, Category 3 Offenses: 20-35 Demerits Maximum

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2488769	10	248876.909	1207.794	.000 <sup>a</sup>
	Residual	1585212	7693	206.059		
	Total	4073981	7703			

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, Category 1 Offenses: 00-10 Demerits Maximum, 4/C Midshipmen, 2/C Midshipmen, Category 4 Offenses: 35-100 Demerits Maximum, Category 3 Offenses: 20-35 Demerits Maximum

b. Dependent Variable: Number of Demerits Awarded

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.238	.478		17.219	.000
	Athletic Status	8.052E-02	.387	.001	.208	.835
	Minority Status	.794	.381	.015	2.088	.037
	Gender	1.531	.485	.023	3.160	.002
	2/C Midshipmen	1.647	.404	.032	4.076	.000
	3/C Midshipmen	3.195	.462	.054	6.923	.000
	4/C Midshipmen	-.551	.557	-.008	-.988	.323
	Category 1 Offenses: 00-10 Demerits Maximum	-2.474	.547	-.045	-4.524	.000
	Category 3 Offenses: 20-35 Demerits Maximum	2.599	.492	.056	5.285	.000
	Category 4 Offenses: 35-100 Demerits Maximum	39.388	.577	.702	68.313	.000
	Secondary Offense	10.938	.509	.167	21.486	.000

a. Dependent Variable: Number of Demerits Awarded

APPENDIX D: LEVOFF & SCNDOFF REGRESSIONS (Cont.)

**Regression with LEVOFF & SCNDOFF**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.812 <sup>a</sup>	.660	.660	13.42

a. Predictors: (Constant), Secondary Offense, Level of Offense

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2687697	2	1343848.664	7465.266	.000 <sup>a</sup>
	Residual	1386284	7701	180.014		
	Total	4073981	7703			

a. Predictors: (Constant), Secondary Offense, Level of Offense

b. Dependent Variable: Number of Demerits Awarded

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.981	.172		63.717	.000
	Level of Offense	45.476	.441	.752	103.161	.000
	Secondary Offense	8.298	.478	.127	17.363	.000

a. Dependent Variable: Number of Demerits Awarded

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**APPENDIX E: REGRESSION WITH MINOR CASES ONLY**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.372 <sup>a</sup>	.139	.138	9.27

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, 4/C Midshipmen, 2/C Midshipmen

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87734.251	7	12533.464	145.937	.000 <sup>a</sup>
	Residual	544925.3	6345	85.883		
	Total	632659.6	6352			

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, 4/C Midshipmen, 2/C Midshipmen

b. Dependent Variable: Number of Demerits Awarded

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.037	.200		40.283	.000
	Athletic Status	-.505	.275	-.021	-1.836	.066
	Minority Status	.626	.270	.027	2.316	.021
	Gender	2.361	.346	.080	6.831	.000
	2/C Midshipmen	3.178	.284	.141	11.179	.000
	3/C Midshipmen	5.802	.330	.219	17.564	.000
	4/C Midshipmen	7.102	.399	.219	17.815	.000
	Secondary Offense	8.140	.440	.218	18.497	.000

a. Dependent Variable: Number of Demerits Awarded

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APPENDIX F: INTERPRETATION CROSSTABLATIONS/CHI-SQUARES

**Crosstabs/Chi-Squares of IV's to levoff & scndoff**

**Athletic Status \* Level of Offense**

Crosstab

			Level of Offense		Total
			Minor	Major	
Athletic Status	Non-Athlete	Count	4854	1025	5879
		Expected Count	4848.0	1031.0	5879.0
		% within Athletic Status	82.6%	17.4%	100.0%
		Residual	6.0	-6.0	
Athlete	Athlete	Count	1499	326	1825
		Expected Count	1505.0	320.0	1825.0
		% within Athletic Status	82.1%	17.9%	100.0%
		Residual	-6.0	6.0	
Total	Total	Count	6353	1351	7704
		Expected Count	6353.0	1351.0	7704.0
		% within Athletic Status	82.5%	17.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.176 <sup>b</sup>	1	.674		
Continuity Correction <sup>a</sup>	.148	1	.700		
Likelihood Ratio	.176	1	.675		
Fisher's Exact Test				.673	.349
Linear-by-Linear Association	.176	1	.674		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 320.04.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**Athletic Status \* Secondary Offense**

**Crosstab**

			Secondary Offense		Total
			No Secondaries	Secondaries	
Athletic Status	Non-Athlete	Count	5073	806	5879
		Expected Count	5034.2	844.8	5879.0
		% within Athletic Status	86.3%	13.7%	100.0%
		Residual	38.8	-38.8	
	Athlete	Count	1524	301	1825
		Expected Count	1562.8	262.2	1825.0
		% within Athletic Status	83.5%	16.5%	100.0%
		Residual	-38.8	38.8	
Total	Count	6597	1107	7704	
	Expected Count	6597.0	1107.0	7704.0	
	% within Athletic Status	85.6%	14.4%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.768 <sup>b</sup>	1	.003		
Continuity Correction <sup>a</sup>	8.544	1	.003		
Likelihood Ratio	8.540	1	.003		
Fisher's Exact Test				.004	.002
Linear-by-Linear Association	8.767	1	.003		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 262.24.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**Minority Status \* Level of Offense**

**Crosstab**

			Level of Offense		Total
			Minor	Major	
Minority Status	Caucasian	Count	4766	1029	5795
		Expected Count	4778.8	1016.2	5795.0
		% within Minority Status	82.2%	17.8%	100.0%
		Residual	-12.8	12.8	
	Minority (Non-Caucasian)	Count	1587	322	1909
		Expected Count	1574.2	334.8	1909.0
		% within Minority Status	83.1%	16.9%	100.0%
		Residual	12.8	-12.8	
Total	Count	6353	1351	7704	
	Expected Count	6353.0	1351.0	7704.0	
	% within Minority Status	82.5%	17.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.785 <sup>b</sup>	1	.376		
Continuity Correction <sup>a</sup>	.725	1	.395		
Likelihood Ratio	.791	1	.374		
Fisher's Exact Test				.386	.198
Linear-by-Linear Association	.785	1	.376		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 334.77.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**Minority Status \* Secondary Offense**

**Crosstab**

			Secondary Offense		Total
			No Secondaries	Secondaries	
Minority Status	Caucasian	Count	4968	827	5795
		Expected Count	4962.3	832.7	5795.0
		% within Minority Status	85.7%	14.3%	100.0%
		Residual	5.7	-5.7	
	Minority (Non-Caucasian)	Count	1629	280	1909
		Expected Count	1634.7	274.3	1909.0
		% within Minority Status	85.3%	14.7%	100.0%
		Residual	-5.7	5.7	
Total	Count	6597	1107	7704	
	Expected Count	6597.0	1107.0	7704.0	
	% within Minority Status	85.6%	14.4%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.183 <sup>b</sup>	1	.668		
Continuity Correction <sup>a</sup>	.153	1	.696		
Likelihood Ratio	.183	1	.669		
Fisher's Exact Test				.679	.347
Linear-by-Linear Association	.183	1	.668		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 274.31.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**Gender \* Level of Offense**

**Crosstab**

			Level of Offense		Total
			Minor	Major	
Gender	Male	Count	5505	1167	6672
		Expected Count	5502.0	1170.0	6672.0
		% within Gender	82.5%	17.5%	100.0%
		Residual	3.0	-3.0	
	Female	Count	848	184	1032
		Expected Count	851.0	181.0	1032.0
		% within Gender	82.2%	17.8%	100.0%
		Residual	-3.0	3.0	
Total	Count	6353	1351	7704	
	Expected Count	6353.0	1351.0	7704.0	
	% within Gender	82.5%	17.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.071 <sup>b</sup>	1	.790		
Continuity Correction <sup>a</sup>	.049	1	.824		
Likelihood Ratio	.071	1	.791		
Fisher's Exact Test				.792	.410
Linear-by-Linear Association	.071	1	.790		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 180.98.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**Gender \* Secondary Offense**

**Crosstab**

			Secondary Offense		Total
			No Secondaries	Secondaries	
Gender	Male	Count	5791	881	6672
		Expected Count	5713.3	958.7	6672.0
		% within Gender	86.8%	13.2%	100.0%
		Residual	77.7	-77.7	
	Female	Count	806	226	1032
		Expected Count	883.7	148.3	1032.0
		% within Gender	78.1%	21.9%	100.0%
		Residual	-77.7	77.7	
Total	Count	6597	1107	7704	
	Expected Count	6597.0	1107.0	7704.0	
	% within Gender	85.6%	14.4%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	54.913 <sup>b</sup>	1	.000		
Continuity Correction <sup>a</sup>	54.209	1	.000		
Likelihood Ratio	49.609	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	54.906	1	.000		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 148.29.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**1/C Midshipmen \* Level of Offense**

**Crosstab**

			Level of Offense		Total
			Minor	Major	
1/C Midshipmen	0	Count	3477	922	4399
		Expected Count	3627.6	771.4	4399.0
		% within 1/C Midshipmen	79.0%	21.0%	100.0%
		Residual	-150.6	150.6	
	1	Count	2876	429	3305
		Expected Count	2725.4	579.6	3305.0
		% within 1/C Midshipmen	87.0%	13.0%	100.0%
		Residual	150.6	-150.6	
Total	Count	6353	1351	7704	
	Expected Count	6353.0	1351.0	7704.0	
	% within 1/C Midshipmen	82.5%	17.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	83.081 <sup>b</sup>	1	.000		
Continuity Correction <sup>a</sup>	82.530	1	.000		
Likelihood Ratio	85.186	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	83.070	1	.000		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 579.58.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**1/C Midshipmen \* Secondary Offense**

**Crosstab**

			Secondary Offense		Total
			No Secondaries	Secondaries	
1/C Midshipmen	0	Count	3617	782	4399
		Expected Count	3766.9	632.1	4399.0
		% within 1/C Midshipmen	82.2%	17.8%	100.0%
		Residual	-149.9	149.9	
	1	Count	2980	325	3305
		Expected Count	2830.1	474.9	3305.0
		% within 1/C Midshipmen	90.2%	9.8%	100.0%
		Residual	149.9	-149.9	
Total	Count	6597	1107	7704	
	Expected Count	6597.0	1107.0	7704.0	
	% within 1/C Midshipmen	85.6%	14.4%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	96.769 <sup>b</sup>	1	.000		
Continuity Correction <sup>a</sup>	96.125	1	.000		
Likelihood Ratio	100.149	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	96.757	1	.000		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 474.90.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**2/C Midshipmen \* Level of Offense**

**Crosstab**

			Level of Offense		Total
			Minor	Major	
2/C Midshipmen	0	Count	4636	955	5591
		Expected Count	4610.5	980.5	5591.0
		% within 2/C Midshipmen	82.9%	17.1%	100.0%
		Residual	25.5	-25.5	
	1	Count	1717	396	2113
		Expected Count	1742.5	370.5	2113.0
		% within 2/C Midshipmen	81.3%	18.7%	100.0%
		Residual	-25.5	25.5	
Total	Count	6353	1351	7704	
	Expected Count	6353.0	1351.0	7704.0	
	% within 2/C Midshipmen	82.5%	17.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.922 <sup>b</sup>	1	.087		
Continuity Correction <sup>a</sup>	2.809	1	.094		
Likelihood Ratio	2.891	1	.089		
Fisher's Exact Test				.093	.047
Linear-by-Linear Association	2.922	1	.087		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 370.54.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**2/C Midshipmen \* Secondary Offense**

**Crosstab**

			Secondary Offense		Total
			No Secondaries	Secondaries	
2/C Midshipmen	0	Count	4833	758	5591
		Expected Count	4787.6	803.4	5591.0
		% within 2/C Midshipmen	86.4%	13.6%	100.0%
		Residual	45.4	-45.4	
	1	Count	1764	349	2113
		Expected Count	1809.4	303.6	2113.0
		% within 2/C Midshipmen	83.5%	16.5%	100.0%
		Residual	-45.4	45.4	
Total	Count	6597	1107	7704	
	Expected Count	6597.0	1107.0	7704.0	
	% within 2/C Midshipmen	85.6%	14.4%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	10.914 <sup>b</sup>	1	.001		
Continuity Correction <sup>a</sup>	10.675	1	.001		
Likelihood Ratio	10.657	1	.001		
Fisher's Exact Test				.001	.001
Linear-by-Linear Association	10.913	1	.001		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 303.62.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**3/C Midshipmen \* Level of Offense**

**Crosstab**

			Level of Offense		Total
			Minor	Major	
3/C Midshipmen	0	Count	5266	1027	6293
		Expected Count	5189.4	1103.6	6293.0
		% within 3/C Midshipmen	83.7%	16.3%	100.0%
		Residual	76.6	-76.6	
	1	Count	1087	324	1411
		Expected Count	1163.6	247.4	1411.0
		% within 3/C Midshipmen	77.0%	23.0%	100.0%
		Residual	-76.6	76.6	
Total	Count	6353	1351	7704	
	Expected Count	6353.0	1351.0	7704.0	
	% within 3/C Midshipmen	82.5%	17.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	35.169 <sup>b</sup>	1	.000		
Continuity Correction <sup>a</sup>	34.711	1	.000		
Likelihood Ratio	33.281	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	35.164	1	.000		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 247.44.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**3/C Midshipmen \* Secondary Offense**

**Crosstab**

			Secondary Offense		Total
			No Secondaries	Secondaries	
3/C Midshipmen	0	Count	5408	885	6293
		Expected Count	5388.7	904.3	6293.0
		% within 3/C Midshipmen	85.9%	14.1%	100.0%
		Residual	19.3	-19.3	
	1	Count	1189	222	1411
		Expected Count	1208.3	202.7	1411.0
		% within 3/C Midshipmen	84.3%	15.7%	100.0%
		Residual	-19.3	19.3	
Total	Count	6597	1107	7704	
	Expected Count	6597.0	1107.0	7704.0	
	% within 3/C Midshipmen	85.6%	14.4%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.613 <sup>b</sup>	1	.106		
Continuity Correction <sup>a</sup>	2.479	1	.115		
Likelihood Ratio	2.563	1	.109		
Fisher's Exact Test				.111	.059
Linear-by-Linear Association	2.613	1	.106		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 202.75.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**4/C Midshipmen \* Level of Offense**

**Crosstab**

			Level of Offense		Total
			Minor	Major	
4/C Midshipmen	0	Count	5680	1149	6829
		Expected Count	5631.4	1197.6	6829.0
		% within 4/C Midshipmen	83.2%	16.8%	100.0%
		Residual	48.6	-48.6	
	1	Count	673	202	875
		Expected Count	721.6	153.4	875.0
		% within 4/C Midshipmen	76.9%	23.1%	100.0%
		Residual	-48.6	48.6	
Total	Count	6353	1351	7704	
	Expected Count	6353.0	1351.0	7704.0	
	% within 4/C Midshipmen	82.5%	17.5%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	21.021 <sup>b</sup>	1	.000		
Continuity Correction <sup>a</sup>	20.590	1	.000		
Likelihood Ratio	19.718	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	21.018	1	.000		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 153.44.

**Appendix F (cont.): Interpretation Crosstabulations/Chi-Squares**

**4/C Midshipmen \* Secondary Offense**

**Crosstab**

			Secondary Offense		Total
			No Secondaries	Secondaries	
4/C Midshipmen	0	Count	5933	896	6829
		Expected Count	5847.7	981.3	6829.0
		% within 4/C Midshipmen	86.9%	13.1%	100.0%
		Residual	85.3	-85.3	
	1	Count	664	211	875
		Expected Count	749.3	125.7	875.0
		% within 4/C Midshipmen	75.9%	24.1%	100.0%
		Residual	-85.3	85.3	
Total	Count	6597	1107	7704	
	Expected Count	6597.0	1107.0	7704.0	
	% within 4/C Midshipmen	85.6%	14.4%	100.0%	

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	76.187 <sup>b</sup>	1	.000		
Continuity Correction <sup>a</sup>	75.296	1	.000		
Likelihood Ratio	66.904	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	76.177	1	.000		
N of Valid Cases	7704				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 125.73.

**APPENDIX G: REGRESSION WITH POSITIVE DEMERIT CASES**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.850 <sup>a</sup>	.723	.722	12.22

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, 4/C Midshipmen, Level of Offense, 2/C Midshipmen

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2653775	8	331721.867	2219.879	.000 <sup>a</sup>
	Residual	1018980	6819	149.432		
	Total	3672755	6827			

a. Predictors: (Constant), Secondary Offense, Minority Status, 3/C Midshipmen, Athletic Status, Gender, 4/C Midshipmen, Level of Offense, 2/C Midshipmen

b. Dependent Variable: Number of Demerits Awarded

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.761	.270		39.790	.000
	Athletic Status	-9.35E-02	.349	-.002	-.268	.789
	Minority Status	1.055	.343	.020	3.075	.002
	Gender	1.196	.434	.018	2.756	.006
	2/C Midshipmen	2.420	.367	.047	6.600	.000
	3/C Midshipmen	3.667	.411	.062	8.923	.000
	4/C Midshipmen	2.411	.486	.034	4.960	.000
	Level of Offense	46.871	.419	.791	111.991	.000
	Secondary Offense	6.798	.458	.106	14.848	.000

a. Dependent Variable: Number of Demerits Awarded

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