

Dishonesty and cheating in a Federal Service Academy: Toleration is the main ingredient

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ABSTRACT

Formal anonymous exit surveys were administered to 747 former cadets at the U.S. Air Force Academy from years 2002 to 2011. The cadet honor code specifically states, "We will not lie, steal or cheat, nor tolerate among us anyone who does." Nevertheless, survey results indicated there was a significant, measurable toleration of dishonesty and cheating by these former cadets. Over 62% of these participants had admitted tolerating other cadets violating the honor code at least once, but less than 9% had actually reported these violations. Results support both Leon Festinger's (1957) Theory of Cognitive Dissonance and Brent and Atkisson's (2011) reformulation of Neutralization Techniques. These former cadets rationalized their behavior by simply disregarding toleration of dishonesty as an honor violation, thus invoking denial of responsibility for their actions. Factors contributing to the failure of whistleblowing as a deterrent to dishonesty and cheating are also discussed. Toleration of dishonest acts by others seems to be by far the most significant contributing force behind one's own subsequent dishonesty.

Keywords: dishonesty, cheating, cognitive dissonance, neutralization, toleration, whistleblowing

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INTRODUCTION

What are the antecedents to dishonesty? There are bewildering arrays of theories offering explanations ranging from the philosophical to the biological. One of the more promising theories has been offered by the mathematical biologist Martin Nowak (2011). Nowak and his colleagues Corina Tarnita and E.O. Wilson (2010) presented a mathematically sound and persuasive algorithm favoring eusociality – that is, temptations to dishonesty can be explained within the framework of group selection theory. In regard to the honesty question, an individual within a group will always be able to better his position by acting in his own self-interest (read: cheat) rather than behaving for the welfare of the group (read: altruism). However, the algorithm derived by Nowak et al. states that groups which behave altruistically (read: honestly) will always have a survival advantage over groups which tolerate individual cheaters. Hence, there will always be a perpetual struggle between altruists and cheaters.

Nowak (2011) has couched this ongoing struggle in terms of an economic game theory, namely the widely cited Prisoner's Dilemma. In fact, the Prisoner's Dilemma is but one variant of the powerful Nash Equilibrium algorithm, first proposed by the Nobel laureate John Nash. Briefly stated, the Nash Equilibrium says that no individual player will receive an incremental benefit from changing actions, as only other players will benefit from such a change. Stated another way, no matter which way any player moves from his present position, he will be worse off than if he stands pat. There is no such thing as a final, satisfactory solution to the dilemma (Fisher, 2008). In addition to the Prisoner's Dilemma, a very short list of examples of other game variants of the Nash Equilibrium include (1) The Tragedy of the Commons, (2) Chicken, (3) The Dictator Game, (4) The Ultimatum Game, and (5) Mutually Assured Destruction.

The Prisoner's Dilemma Revisited. The Prisoner's Dilemma was first formally introduced by Flood (1952). Since that time, this classic paradigm has generated thousands of publications, ranging in contexts from individually controlled psychology laboratory studies such as gambling, to quasi-experimental political science encounters such as the international nuclear arms race. All variants of the Prisoner's Dilemma deal with the concept of cooperation versus defection. That is, those persons who act in the best interest of the group are labeled cooperators, and those who act in their own best interest are labeled as defectors.

In the context of this paper, which deals with the topic of dishonesty, (a) cooperators are labeled as honest whistleblowers, and (b) defectors are labeled as honor code violators. Initially if both parties choose to cooperate with each other, each one still has the incentive to defect. In fact regardless of the other party's choice, each one is better off defecting. Hence defecting is the dominant strategy for both, and it is, as pointed out by Alvin Roth (1995) a sub-optimal Nash equilibrium. That is if both defect, then both are now worse off than if they had initially cooperated.

Tolerating Dishonesty. All U.S. service academies have an honor code/concept which clearly mandates that cadets and midshipmen will not lie, cheat, or steal. The U.S. Air Force Academy's honor code reads specifically, "We will not lie, steal or cheat, nor tolerate among us any one who does." The final phrase of the honor code is traditionally referred to as the "non-toleration clause." The U.S. Military Academy's honor code is similar, including the non-toleration clause. The U.S. Naval Academy's honor code/concept does not include the non-toleration clause; however, toleration of other midshipmen's dishonesty is viewed as a disciplinary matter and not as a matter of honor. Either way, lying, cheating, stealing, and, of

course, tolerating dishonesty at any U.S. service academy can be officially met with severe sanctions, including disenrollment (Air Force Cadet Wing Handbook, 2009).

All cadets and midshipmen take a formal honor oath and are presumed to abide by this rigid code. Thus, the Air Force Academy authorities have clearly stated that it is a cadet's obligation not only not to lie, steal, or cheat, but also to report if he or she has observed other cadets lying, stealing, or cheating. In effect, this non-toleration clause makes it a cadet's duty to whistleblow. It has been commonly observed that the non-toleration clause grates the ears of those newly arrived cadets who have been accustomed to hearing the street logic that one does not snitch on one's friends (Malmstrom, 2011).

Effectiveness of the Non-toleration Requirements. How effective are such non-toleration clauses in reducing dishonesty? Each major service academy normally hears or processes 120 to 140 formal honor cases per year. But by personal inspection, the Air Force Academy's honor division conducts no more than two investigations of toleration of dishonesty per year. In contrast, longitudinal surveys of 2464 graduates of the three major academies from the classes of 1959 through 2010 consistently indicate that historically over 50% of these academy graduates have, in retrospect, admitted to having witnessed and tolerated other cadets' and midshipmen's dishonesty at least once (Malmstrom, Oraker, & Mullin, 2012). Clearly, these graduates' behaviors and their professed attitudes are disconnected.

The 1976 Borman Report. As far back as 1951, the United States service academies have experienced well-publicized large-scale cheating incidents (Malmstrom, 2004, 2005a, 2005b). In particular, in response to West Point's so-called Electrical Engineering 304 cheating scandal of 1976, the 1950 West Point graduate, former astronaut, and at that time President of Eastern Airlines, Colonel Frank Borman, was directed to author a final report to the Secretary of the Army. This so-called Borman Report outlined numerous failings of the West Point honor system and made an equal number of recommendations to strengthen the system. His report began with the observation "... the most fundamental of the Honor System's inadequacies has been the expansion of the Code well beyond its intended purpose (Report to the Secretary of the Army, 1976).

Borman's (1976) almost prescient narrative predicted that "... any 'cheating' scandal would find its beginning in a 'toleration' situation." He especially noted that "... adherence to the Honor Code is more difficult when cadets perceive dishonesty around them."

Cognitive Dissonance Revisited. The theory of cognitive dissonance, first proposed by Leon Festinger (1957) has sparked a revival of interest. Cognitive dissonance, often described as "mental discomfort" explores the conflict between individual's behaviors and attitudes. If the individual has a behavior (for example – smoking cigarettes) which conflicts with his or her attitude (for example—"I know it's bad for my health"), then Festinger's model suggests that the individual will try to bring the behavior and the attitude into alignment, that is, reduce the dissonance. One could be fully aware that smoking holds significant health risks and yet continue to smoke. The dissonance occurs because of unpleasant mental discomfort and tension. The smoker could achieve consonance by changing one of the two positions (Festinger, 1961; Festinger & Aronson, 1960; Gire & Williams, 2007). In this example, there are two simple ways to reduce the dissonance: (a) quit smoking, or (b) change one's attitude towards smoking. Festinger proposed that the most convenient way to reduce dissonance was for one to change his or her attitude rather than the behavior. For example, one is apt to rationalize smoking behavior in inexhaustible ways—"I can always quit tomorrow," "It doesn't cost that much," "It relaxes

me,” “Better tobacco than heroin,” ... etc..

There have been innumerable iterations of Festinger’s model, nearly all of which have received strong support. Ellen Klass’ (1978) review of numerous studies of the Festinger model showed it could be extended to social situations of aggression, social advocacy, interpersonal damage, and immoral actions. Klass also pointed out that, unfortunately, nearly all studies of Festinger’s model were limited to controlled laboratory experiments. That is, the model contained a definite lack of actual field data verification, especially when applied to immoral behaviors.

The Neutralization Technique. What are the components of rationalizing dishonesty? Sykes and Matza (1957) first grouped the process of mentally rationalizing academic dishonesty into what they labeled neutralization techniques, later regrouped and revised by Scott and Lyman (1968). Edward Brent and Curtis Atkisson (2011) then reformulated these techniques utilizing a qualitative Pareto analysis. Their review of the literature identified six major techniques on how students justified academic dishonesty. Their major neutralization themes are:

- (1) Denial of responsibility; [“It was beyond my control.”],
- (2) Denial of injury; [“I’m not hurting anybody.”],
- (3) Condemning the condemners; [“The Internet makes it too easy to cheat.”],
- (4) Self-fulfillment; [“For the thrill of it.”],
- (5) Appeal to higher loyalties; [“I did it for my classmates.”], and
- (6) Denial of the victim; [“The system is unfair and so deserves some payback.”].

As if to give more credence to the Brent and Atkisson review, Vivian Yee (September 26, 2012) writing for the New York Times cited most of these exact neutralization techniques voiced by students who freely admitted cheating at the prestigious Stuyvesant School in New York City.

Jana Pershing (2003) expanded “neutralization techniques” into the broader umbrella of organizational or “occupational misconduct.” Pershing cited a 1990 General Accounting Office survey of 527 Naval Academy midshipmen regarding obvious Honor Concept violations. Of the sample, the survey found that 500 or 94.7 percent had not reported peers for alleged Honor Concept violations. Pershing conducted an additional informal survey of 40 Naval Academy graduates from the classes of 1992 and 1993 which concluded that 20 of these graduates “... instead expressed a preference to respond to occupational misconduct by counseling peers [in lieu of reporting them].”

Toleration of dishonesty by peers appears at first to fall within Brent and Atkisson’s (2011) neutralization categories of both Denial of Responsibility and Appeal to Higher Loyalties. It is primarily the Denial of Responsibility technique #1 which might persuade cadets and midshipmen to mentally rewrite the honor code/concept, in effect, discounting it for their own purposes. Valerie Fointiat and her colleagues (2008) have otherwise called this the “misattribution paradigm” first introduced by Zanna & Cooper (1976). In essence, the paradigm says that people rationalize dishonest behaviors using misattributed (and highly implausible) motives such as, “The cat ate my homework,” “My mother was sick,” “I was distracted by the fluorescent lights,” or even “The war news on TV was distressing”.

A second, but less powerful neutralization technique might be the Appeal to Higher Loyalties (technique #5) essentially the rationale that “...one does not snitch on one’s classmates (Malmstrom, Mullin & Oraker, 2012).” However, this technique #5, as suggested by Brent and

Atkisson (2011) may well be only a post-hoc justification for one who has already cheated.

The Fairness Paradigm. As the study by Brent and Atkisson (2011) suggests, it should, therefore, come as no surprise that students cheat for all sorts of reasons, and there is a long list of their rationalizations. Adding to this list of justifications, neurologist Anjan Chatterjee, proposed a powerful explanation for cheating comes from economists' studies of fairness. Fairness would, therefore, seem to fall under the neutralization category #6, Denial of the Victim. If, for example, a previously non-drug using athlete observes other athletes using illegal, performance-enhancing drugs, "Then it becomes a matter of evening the score; you're not cheating, you're restoring fairness." It is especially so in competitive situations such as athletics or war that no one likes to be placed in the degrading situation of being the dupe and/or the chump (Carey, 2011). Indeed, restoration of fairness is apparently a deep-seated, primitive social drive observed even in capuchin monkeys who perceive themselves as having been unfairly treated as the chump (Brosnan & deWaal, 2003).

If fairness is important to humans, then there are two obvious remedies for leveling the academic playing field. First, one can also resort to cheating as a defensive measure against being played as the chump. A related laboratory study by Gino, Ayal & Ariely, (2009) demonstrated that the "bad apple effect" of cheating can spread quickly. A longitudinal study by Carrell et al. (2008) examined surveys completed by over 2,000 graduates of the U.S. Military, Naval, and Air Force Academies from the years 1959 to 2003. Analyses of these surveys suggested that the restoration of fairness did, indeed, play a role in promoting dishonest behavior by these former cadets and midshipmen. Carrell et al. also identified a related phenomenon called the multiplier effect which revealed that every cadet or midshipman who admitted to cheating in high school had the potential of creating three more cheaters at the academies. Cheating behaviors have the potential to spread rapidly, even in institutions with rigidly enforced honor codes.

Second, one could also level the academic playing field by reporting dishonest classmates (read: whistleblowing), but it is unfortunately a dangerous game. Whistleblowing may have unpleasant social side effects, including ostracism, retaliation by the exposed offender, and in extreme cases, death threats (Malmstrom, 2011).

Problems with whistleblowing. Why would there be there such reluctance by cadets and midshipmen to report or even confront dishonesty of classmates, despite such a clearly mandated duty to do so? Returning to the original repeated-measures Prisoner's Dilemma framework as proposed by Nowak (2011), a group of players can be divided into two categories, defectors (i.e. cheaters) and non-defectors (i.e. whistleblowers). It is a given that (1) any population has a potential pool of cheaters, and (2) the game is entirely transparent, so everyone will know who has cheated and who has blown the whistle. There are several possible outcomes to the whistleblowing process.

First, if no one whistleblows on the cheaters, after numerous iterations the Prisoner's Dilemma will ultimately drag the group into chaos. Both tolerators and cheaters alike are forced into the category of defectors, and each player will be put into an every-man-for-himself position, an undesirable suboptimal Nash Equilibrium.

Alternatively, if the whistleblowers act according to their duty, cheaters will be punished and cheating will decline. However, there is a caveat that if the costs to the whistleblowers are significant, the game may deteriorate into a costly tit-for-tat standoff. In this instance, both the cheaters and tolerators are punished and also the whistleblowers are

ostracized or otherwise retaliated against. This is yet again a suboptimal Nash Equilibrium position.

The resolution of the dilemma would seem to rest with the tolerators. Tolerators fall into the category of what both behavioral scientists and economists call “free riders.” Under this presented paradigm, whistleblowers pay a disproportionate penalty, and tolerators pay nothing.

Hypotheses. It seems clear that the effectiveness of the service academy honor codes have been in decline for decades, and the underlying factors contributing to this decline will be examined. First to be examined is the hypothesis contained in the Borman Report (1976) and formalized as Brent and Atkisson’s 2011 technique #1, Denial of Responsibility, namely that “... any ‘cheating’ scandal would find its beginning in a ‘toleration’ situation.” It seems likely that toleration of dishonest behaviors would be a major gateway (and primary dependent variable) leading to further honor code violations. A corollary to this hypothesis suggests further examination into the components of toleration of dishonesty. It could be, for example, that cadets simply have discounted (i.e. neutralized) toleration of dishonesty as an honor violation, and additionally, further support for Festinger’s (1957) theory of Cognitive Dissonance.

An alternative explanation for the increase in cheating and other honor code violations is the Fairness hypothesis (technique #6), a desire of the former cadets to re-establish fairness. In this case, we would expect (1) a negative correlation between cadets’ low academic performance and their involuntary departure from the academy and (2) a positive correlation between reporting other cadets for dishonesty (i.e. whistleblowing) and their involuntary departure. Note that this hypothesis does not necessarily exclude the Denial of Responsibility (technique #1).

METHOD

Participants. The participants were 747 separating cadets (i.e. resignees or non-graduates) from the U.S. Air Force Academy [USAFSA] from the academic year classes 2002 through 2011. These former cadets were in the process of exiting the Academy and were no longer subject to the honor code. The survey participants were limited to only resignees, as it would have been institutionally unethical to query active duty cadets directly as to whether or not they had violated the honor code.

As part of the anonymity protocol, there was no effort to record the gender or age of any participant. As 15% of the total cadet population is, by law, female, it was assumed 15% of our participants were also female. The mean number of semesters our respondents had completed prior to departure was $M = 3.037$, $SD = 1.61$. These former cadets had just completed their resignation process from the Academy and were presented a voluntary exit survey regarding their experiences with the Academy honor system. About 75 resignees were randomly surveyed from each academic year. Therefore, this survey was completed by nearly 20% of the over 4,000 men and women who departed the Academy during that 10-year span.

Instrument. The instrument was a 28 question survey. All honor survey items were recorded on a Likert-type interval continuum ranging from 1 to 7. This was the same survey previously mailed to over 6000 Army, Navy, and Air Force Academy graduates with minor modifications on two demographic variables, namely Grade Point Average and Semesters completed. This original survey is referenced and reproduced in its entirety in Carrell et al. (2008).

Of this random sample of 747 former cadets, only about 15% indicated they were separating involuntarily, either for medical, academic, disciplinary, or honor issues. We estimate that no more than 25 or 3% had separated on honor violations. About 50% of these former cadets had separated voluntarily at the two-year point for the reason of “change of career goals,” meaning simply they did not want to further pursue a military career.

The Exit Survey. The exit survey contained four demographic variables (a) Semesters Completed successfully at USAFA (1 through 8) [Semesters Completed]; (b) Whether cadet’s departure was voluntary or involuntary [Voluntary or Involuntary Departure]; (2) (c) Resignee’s cumulative GPA [Grade Point Average]: (1) 4.0 to 3.50; (2) 3.49 to 3.00; (3) 2.99 to 2.50; (4) 2.49 and less. (d) Academic Year the survey was administered, 2002 through 2011.

The survey included two Likert-type scaled survey questions, presented on a seven-point scale, asking the cadet’s respect for the honor code [Respect for Code] and the value placed on the Honor System [Value on Honor]. Both survey questions are shown in Figures 1 and 2.

Lastly, the exit survey presented six Likert-type questions, also presented on a seven-point scale, asking directly the frequency with which as cadets had (1) known of but not reported other honor code violators [Tolerated Dishonesty], (2) wanted to but not reported other honor code violators [Lacked Resolve], (3) reported other honor code violators [Reported Violators], (4) had personally committed a non-academic honor code violation [Non-academic Violation], and (5) had personally committed an cadet academic honor code violation [Cheated], and (6) had personally cheated in high school [High School Cheated]. The scaled survey questions are shown in Figure 3.

Because the survey had distinguished the admitted honor code violations into either academic (survey question #15) and non-academic violations (survey question #14), both variables were combined into an additional variable of total admitted honor violations [Total Violations], which was merely the highest value recorded in any resignee’s response to either question #14 or #15. For example, if a resignee responded to question #14 with a (2) and responded to question #15 with a (4) [see Figure 3], the combined honor violation was then scored as a (4).

Design. The survey allowed analyses on several levels. First, all the Likert-type questions and demographics were easily amenable to both a Pearson product-moment correlation matrix and a stepwise multiple regression analysis. Additionally, comparisons could be made for fit of the fit of frequency distributions between the Lacked Resolve and Reported Violators, and Reported Violators and Total Violations question responses.

RESULTS AND DISCUSSION

Overall Correlations. Table 1 presents the grand correlation matrix, using the questions of the modified survey originally presented in Carrell et al. (2008) also shown in Figures 1, 2, and 3, namely: Semesters Completed, Voluntary or Involuntary Departure, Grade Point Average, Academic Year, Respect for Code, Lacked Resolve, Tolerated Dishonesty, Cheated, Total Violations, High School Cheated, and Reported Violators. As a conservative measure, correlations are computed for only 1-tail tests.

Tolerated Dishonesty: Toleration of others’ honor code violations [Tolerated Dishonesty] showed strong correlations with one’s own admitted academic violations

[Cheated], $r(745) = .5279$, $p < .001$; total honor violations [Total Violations] $r(745) = .5845$, $p < .001$, wanted to but did not report [Lacked Resolve] $r(745) = .5509$, $p < .001$; and admitted high school cheating [High School Cheated] $r(745) = .2735$, $p < .001$; and Reported Violators $r(745) = .1289$, $p < .01$. Thus, it appears that the more one tolerated others' honor code violations, the more likely one was to commit additional honor violations.

Respect for Code: It is also notable that one's respect for the honor code [Respect for Code] showed significant negative correlations with numerous variables: toleration of others' honor violations [Tolerated Dishonesty] $r(745) = -.3914$, $p < .001$; academic violations [Cheated] $r(745) = -.3320$, $p < .001$; total honor violations [Total Violations] $r(745) = -.4027$, $p < .001$; Lacked Resolve $r(745) = -.1414$, $p < .01$; and High School Cheated $r(745) = -.1614$, $p < .001$. Herein is a curious negative correlation of Respect for Code with High School Cheated, suggesting that those who tended not to cheat in high school later developed a mild lack of respect for the Academy honor code. Hence, in agreement with the toleration of others' honor violations, the more one violated the honor code, and the less he or she expressed respect for the honor code.

Semesters Completed: Semesters Completed did show significance with reason for departure [Voluntary or Involuntary Departure], $r(745) = .2155$, $p < .001$, suggesting only that the longer one remained at the Academy, the more likely his or her departure was involuntary.

Voluntary/Involuntary Departure: The Voluntary/Involuntary Departure variable also showed mild significance $r(745) = .1414$, $p < .01$ with Grade Point Average, an indication that those with higher academic standing were more likely to experience involuntary separation. However, there was no significant correlation of Grade Point Average with the Reported Violators. Hence, the Fairness hypothesis shows at best ambiguous support.

Frequencies of Admitted Violations: Next was the tabulation of the incidences of toleration of others' honor violations [Tolerated Dishonesty], reporting of others' honor violations [Reported Violators], wanting to but not reporting, [Lacked Resolve], academic cheating [Cheated], and one's own total admitted honor violations [Total Violations]. Table 2 shows the raw frequency distributions of the five variations of honor violations. Figure 4 presents the same data presented on histograms, ranging from responses 1=never to 7=weekly or daily.

By inspection alone of the frequencies for Tolerated Dishonesty and Reported Violators, it is obvious that well over 62% of our participants had tolerated other cadets violating the honor code at least once, but fewer than 9% had actually reported any of these violations. A second comparison of frequencies of Tolerated Dishonesty and Total Violations, indicate that while over 48% of the participants had themselves admitted violating the honor code at least once, 62% had admitted tolerating others' violations of the code! There is, therefore, a clear discrepancy between the two figures, since toleration [Tolerated Dishonesty] itself is, by definition, an honor code violation. It is evident apparent that, paradoxically, a significant percentage of our participants simply did not personally regard toleration of dishonesty as an honor code violation.

The totals given in both Table 2 and Figure 4 are conservative values. A further inspection of the raw data indicates that 78 of the 747 respondents admitted tolerating dishonesty but denied ever having violated the honor code. If these 78 additional resignees are added to the Total Violations ($n = 366$) column, then 444 of the 747 respondents had in fact violated the code.

There are two separate indications from these findings. First, it is obvious that if the participants had complied with the honor code completely, that (a) the mean values of Tolerated Dishonesty and Total Violations would have been at least equal to, (or more likely that) Total Violations would have been greater than Tolerated Dishonesty, and (b) the expected mean value of Tolerated Dishonesty (actual $M=2.84$) would have been 1.0, and the mean value of reported [Reported Violators] (actual $M=1.15$) would have been at the very least equal to or no higher than 2.0. In actuality, the average former cadet admitted tolerating dishonesty much closer to at least 3 times a year.

Comparison of Resignees' v. Graduates' Value Placed on Honor: Because there exists the possibility that resignees may have responded with more negatively biased attitudes than actual graduates (i.e. the "sour grapes" effect), both groups were compared with the values they had placed on the Honor System itself. A simple unequal variances t-test was performed between responses on Question #19 (see Figure 2), Value on Honor, from the 747 resignees versus 203 Air Force Academy randomly surveyed graduates from the classes of 1999 through 2010. The data from Air Force graduates is taken from the previously cited 52-year survey study of 2464 service academy graduates (Malmstrom, Oraker & Mullin, 2012).

Indeed, the graduates ($M = 6.11$, $SD = 1.14$) placed significantly greater Value on Honor than did the resignees ($M = 5.71$, $SD = 1.43$), $t(394) = 4.216$, $p < .0001$ (one-tailed). Although the mean differences between the two groups is indeed statistically significant, both groups still consistently expressed high positive regard on the Value of Honor; therefore, the differences between groups would seem to be of small practical significance.

Goodness of Fit for Reported Violators: Next, we have compared the frequency distributions of Tolerated Dishonesty v. Reported Violators, and Lacked Resolve v. Reported Violators. A chi-square (χ^2) comparison for goodness of fit shows significant differences between the distributions of the three variables, Tolerated Dishonesty v. Reported Violators, $\chi^2(6, N = 747) = 29.786$, $p < .005$; and Lacked Resolve v. Reported Violators, $\chi^2(6, N = 747) = 42.871$, $p < .005$.

Hence, if the non-toleration clause were totally effective, the Lacked Resolve variable would have been equal to 1.00 across the board, and this is clearly not the case. Second, as discussed earlier, the Tolerated Dishonesty v. Reported Violators distributions are indeed unequal, but they are skewed to the reverse of the expected order. In fact, the Tolerated Dishonesty distribution lies far to the left of Reported Violators distribution. As reported earlier, the mean value for Tolerated Dishonesty is $M=2.84$, and the mean value of Reported Violators is $M=1.15$. There is a significantly wide gap between Tolerated Dishonesty and Reported Violations.

Factors Influencing Toleration of Dishonesty. Lastly, we performed a stepwise multiple regression analysis using the variables of Grade Point Average, Respect for Code, Lacked Resolve, Reported Violators, and Total Violations as predictors for the critical variable Tolerated Dishonesty.

Stepwise Regression Summary. Table 3, the Stepwise Multiple Regression Analysis Summary, shows the cumulative variance accounted for by the critical Tolerated Dishonesty variable, Question #8, "As a cadet/midshipman, I knew of (but did not report) other cadets/midshipmen who were violating the honor code."

Results of the stepwise regression analysis have several indications. First, Grade Point Average is not a significant contributor to toleration of dishonesty. Second, a lack of respect

for the honor code does contribute significantly to toleration of dishonesty. Third, those who admitted to overall violations of the code were themselves also significantly more likely to tolerate dishonesty. Fourth, and perhaps most importantly, it appears that the Lacked Resolve variable (Read: “a failure of personal conviction”) is also a significant contributor to toleration of dishonesty.

GENERAL DISCUSSION

The results of this study show consistent support extending Festinger’s original 1957 model into social situations of dishonesty. As many of these former cadets had consciously chosen to tolerate dishonesty in others, it appears that they had reduced their own cognitive dissonance by simply amending their own rules of morality.

It is significant that that 465, or about 62% of these 747 former cadets admitted toleration of dishonest behaviors by others, a clear violation of the honor code. Conversely, only 67 or about 9% of these former cadets admitted they had actually complied with the honor code’s non-toleration clause and had, indeed, reported suspected dishonest behaviors by their fellow cadets. There is a wide gap between toleration and whistleblowing.

All cadets receive about 25 hours of formal annual training in the applications of the honor code and ethics. These former cadets were, therefore, well aware of the various requirements of the honor code, including non-toleration of dishonesty. Hence, it appears there were wide discrepancies between these former cadets’ understanding versus their applications of the honor code. Table 2 shows that 248 of 747, or 33%, admitted they had wanted to, but did not report, others’ dishonest behaviors, a strong indicator of a lack of personal convictions. Results suggest that one may, therefore, reasonably question the effectiveness of non-toleration clause.

Furthermore, 366 of 747 admitted having violated the honor code at least once. In addition 99 other former cadets (or 13%) denied violating the honor code but then admitted to tolerating honor code violations. This behavior is a clear contradiction, as toleration of dishonesty is defined to be a violation in itself. Therefore by adding both groups there are 465 cadets (or 62%) who directly or indirectly admitted to at least one honor violation. The reasons these former cadets refrained from reporting could be various such as cowardice, loyalty to friends, personal involvement in the violation itself, or even modeling (Bandura, 1969; McKimmie, Terry & Hogg, 2001). All of these reasons are well-defined as Neutralization Techniques as previously described and reformulated by Brent and Atkisson (2011).

It seems clear that conscience by itself is indeed a motivation for whistleblowing, but it is a relatively weak one. There are implications that the reasons people tolerate dishonesty may be more complex than previously thought. Indeed, as the stepwise regression indicates, there is still about 50% of the variance unaccounted for as to why these former cadets tolerated dishonesty. For the present, it appears that a significant number of these former cadets had demonstrated a sense of “selective morality” by making up their own personal rules by simply disregarding toleration as a violation of honor. This is an instance of Brent and Atkisson’s (2011) Technique #1, Denial of Responsibility.

Social psychologists Carol Tavris and Elliot Aronson (2007) have described cognitive dissonance theory as the mechanism whereby we practice self-deception, or in other words, we justify lying to ourselves. Cognitive dissonance theory is at the very core of hypocrisy, as

hypocrites can easily recognize dishonesty in others but not in themselves. Recognition of one's own hypocrisy remains a topic worthy of continuing research.

The mathematical algorithm presented by Nowak, Tarnita & Wilson (2010) states that there is no definite resolution to the dilemma that individual self-interest will always be in competition with the best interest of the group. Hence, the scales will always cycle between cooperators and cheaters. Presently, it is evident from the studies of Malmstrom, Oraker & Mullin (2011) that the honor systems of the federal service academies have been in gradual decline towards a suboptimal Nash Equilibrium. It will remain to be seen whether the cycle can be reversed towards one of cooperation. However, it is also evident that any reversal towards honesty can be brought about only if direct effort is put into a workable, enforceable honor system. At present, there are insufficient positive incentives for those with integrity to be enforcers. Hence, according to the Nowak et al. (2011) model, there exists an ever-increasing level of toleration of dishonesty.

The results of this study strongly support the hypothesis that toleration of dishonesty by others is a most prevalent seed element within, if not the key to, understanding dishonest behaviors. The non-toleration clause of the cadet Honor Code, while certainly a worthy ideal, appears to have had only weak effectiveness in curtailing dishonest behaviors. One such explanation behind the ineffectiveness of non-toleration is that there are numerous penalties but few rewards for whistleblowing. Aleksander Berentsen and Simon Loertscher (2008) have suggested that increasing penalties on rule violators is but one reasonable option. This study supports the hypothesis that increasing rewards for whistleblowing might also be in order.

If toleration of dishonesty exists on such a significantly measurable scale in a cohesive, formal organization such as a service academy with its rigidly defined honor code, one is left to speculate on the incidence of toleration in a less-regulated civilian society. On a much broader scale, hopefully the results of this 10-year survey will hopefully direct future research into the well-documented ineffectiveness of such well-meaning federal measures as the Sarbanes-Oxley Law and the Whistleblower Protection Act (Dworkin, 2007). It is evident that enforcement of such laws is hindered by lack of incentives to the whistleblower. Much research remains as to why whistleblowing is or is not an effective deterrent to dishonesty.

Figure 1. Likert-type Survey Question for Degree of Respect for Code:
 5. As a cadet/midshipman, my respect for the honor code/concept was:

LIKERT SCALE:	1	2	3	4	5	6	7
	totally negative	strongly negative	mildly negative	neutral	mildly positive	strongly positive	totally positive

Figure 2: Likert-type Survey Question for Degree of Value on Honor:
 19. Of all those values I learned at the Academy, I rate Honor to be of the following importance:

LIKERT SCALE:	1	2	3	4	5	6	7
	not at all	not very	at times important	moderately important	above average	very	extremely important

Figure 3: The Six Likert-type Survey Questions for Frequency of Admitted Activities: Tolerated Dishonesty, Lacked Resolve, Reported Violators, Non-academic Violation, Cheated, High School Cheated.

- 8. As a cadet/midshipman, I knew of (but did not report) other cadets/midshipmen who were violating the honor code: [i.e. Tolerated Dishonesty]
- 9. As a cadet/midshipman, I wanted to (but did not report) violations of the honor code: [I.e. Lacked Resolve]
- 11. As a cadet/midshipman, I reported other cadets/midshipmen who I felt had violated the honor code/concept [i.e. Reported Violators]:
- 14. As a cadet/midshipman, I felt I had violated some NON-academic aspect of the honor code: [i.e. Non-academic Violation]
- 15. As a cadet/midshipman, I felt I had violated some academic aspect of the honor code: [i.e. Cheated]
- 16. When I was in high school, I was actively involved in either receiving or passing academic information (activities which would otherwise have been academic violations of the Academy honor code): [i.e. High School Cheated]

LIKERT SCALE:	1	2	3	4	5	6	7
	never	1-3 times total	1-4 times a year	occasionally every few months	about once a month	2-3 times a month	routinely weekly or daily

Table 1. Correlation matrix for survey variables: Semesters Completed, Voluntary v. Involuntary Departure, Grade Point Average, Academic Year, Respect for Code, Tolerated Dishonesty, Lacked Resolve, Cheated (Academic), High School Cheated, Total Violations, and Reported Violators (n=747)

VARIABLES	Semesters Completed	Voluntary/Invol Dept	Grade Point Average	Academic Year	Respect for Code	Tolerated Dishonesty
Semesters Compl	1.000					
Voluntary/Invol Dept	0.2155***	1.000				
Grade Point Avg	-0.0210	0.1414**	1.000			
Academic Year	-0.0125	-0.0066	0.0425	1.000		
Respect for Code	-0.0634	0.0012	-0.0469	-0.0263	1.000	
Tolerated Dishonesty	0.0854*	0.0151	0.0718	0.0635	-0.3914***	1.000
Lacked Resolve	0.0118	0.0195	0.0726	0.0301	-0.1414**	0.5509***
Cheated	0.0894	0.0235	0.0559	0.0177	-0.3320***	0.5279***
High School Cheated	0.0174	-0.0469	0.0029	0.0029	-0.1614***	0.2735***
Total Violations	0.0838*	0.0001	0.0313	0.0299	-0.4027***	0.5485***
Reported Violators	0.0460	0.0455	0.0723	0.0349	0.0248	0.1298**

VARIABLES	Lacked Resolve	Cheated	High School Cheated	Total Violations	Reported Violators
Lacked Resolve	1.000				
Cheated	0.3594***	1.000			
High School Cheated	0.1284**	0.3778***	1.000		
Total Violations	0.3572***	0.8537***	0.4036***	1.000	
Reported Violators	0.3214***	0.1802***	0.0486	0.1509***	1.000

*p<.05 1-tail
 **p<.01 1-tail
 ***p<.001 1-tail

Table 2. Frequency distributions of the five variations of honor violations: Tolerated Dishonesty, Reported Violators, Lacked Resolve, Cheated (Academic), Total Violations (n=747).

LIKERT SCALE	1 Never	2 1-3- times total	3 1-4 times a year	4 Occasionally every few months	5 About once a month	6 2-3 times a month	7 Routinely weekly or daily
Tolerated Dishonesty	282	159	50	83	48	74	51
Reported violators	680	44	9	8	4	1	1
Lacked Resolve	499	113	29	52	24	16	14
Cheated (Academic)	497	167	14	36	11	15	7
Total Violations	381	237	29	51	20	20	9

Figure 4. Histograms Representing Data in Table 2. Frequency Distributions Comparing the Five Variations of Honor Code Violations: Tolerated Dishonesty, Reported Violators, Lacked Resolve, Cheated, and Total Violations (N=747)

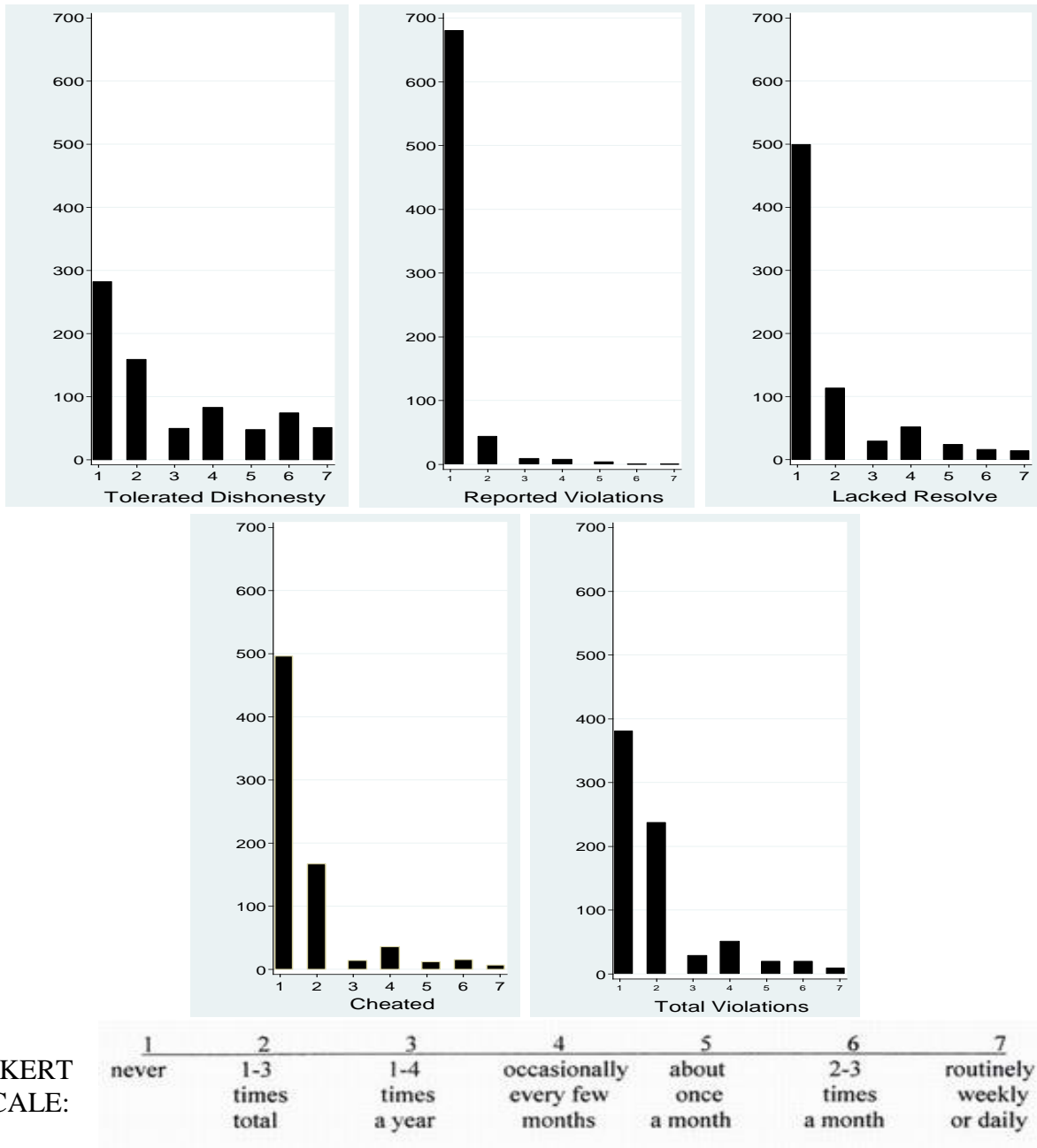


Table 3. Stepwise Multiple Regression Analysis Summary Table for Question, “As a cadet/midshipman, I knew of (but did not report) other cadets/midshipmen who were violating the honor code [Tolerated Dishonesty].

VARIABLE	t	F	R ² (Cumulative Variance)	p
Grade Point Average	1.00	1.00	0	.317(ns)
Respect for Code	-11.6	134.62	.1512	<.0001
Total Violations	16.02	218.82	.3707	<.0001
Reported Violators	2.01	147.82	.3716	.045
Lacked Resolve	14.18	191.07	.5051	<.0001

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