Academic Expectations of a High School and the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia

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ABSTRACT

A review of research indicates that academic dishonesty is a common occurrence at all levels of education with high school being a significant determinant in whether one will engage in cheating at the college level. Current research is heavily concentrated on cheating at the college level. This study investigated the academic expectations of a high school and the frequency of academic dishonesty as reported by high school principals. Specifically, four research questions were addressed:

1. To what extent are the academic expectations of a high school related to the frequency of academic dishonesty as reported by high school administrators?
2. To what extent is the implementation of an honor code at a high school related to the frequency of academic dishonesty as reported by high school administrators?
3. What do high school administrators perceive as the most important causes of academic dishonesty?
4. To what degree do high school administrators perceive academic dishonesty as an important problem in high schools?

This quantitative research study used a sample drawn from public high school administrators (principals or assistant principals) in the Commonwealth of Virginia. A total of 129 participants from a possible 267 public high schools were surveyed. There was no relationship found between the implementation of an honor code and the frequency of academic
dishonesty. School administrators perceived the academic expectations of the school and teacher, the lack of an honor code, and the enforcement of an honor code as less likely to be contributing factors to academic dishonesty in comparison to other factors. The main causes for student cheating perceived by the principals were a fear of failure, laziness or procrastination and ease of cheating. Overall, the principals placed less importance upon academic dishonesty in comparison to other disciplinary problems they face at the high school level.
TABLE OF CONTENTS

ABSTRACT ................................................................................................................................. ii
LIST OF TABLES ......................................................................................................................... vi
CHAPTER 1 INTRODUCTION ..................................................................................................... 1
  Statement of the Problem ......................................................................................................... 2
  Purpose of the Study ................................................................................................................. 4
  Importance of the Study .......................................................................................................... 5
  Research Questions ................................................................................................................. 6
  Definitions and Key Terms ..................................................................................................... 7
  Summary .................................................................................................................................. 8
CHAPTER 2 REVIEW OF RELATED LITERATURE ..................................................................... 9
  Search and Selection Criteria .................................................................................................. 9
  Prevalence of Academic Dishonesty ...................................................................................... 10
  Longitudinal Studies of Academic Dishonesty on College Campuses ................................ 12
  Academic Dishonesty in High School .................................................................................... 13
  Why Students Cheat ............................................................................................................. 14
  Academic Dishonesty and Motivation .................................................................................. 17
  The Impact of Technology on Academic Dishonesty ......................................................... 20
  Academic Dishonesty and Honor Codes ............................................................................. 21
  Summary .................................................................................................................................. 24
CHAPTER 3: METHODOLOGY ................................................................................................. 25
  Research Questions .............................................................................................................. 26
  Research Variables ................................................................................................................. 26
  Subjects ................................................................................................................................... 27
  Instrumentation ...................................................................................................................... 28
  Data Collection Procedures ................................................................................................. 29
  Data Analysis .......................................................................................................................... 30
CHAPTER 4 FINDINGS .............................................................................................................. 32
  Purpose ................................................................................................................................... 32
  Description of the Sample ...................................................................................................... 32
  Demographics of Schools in the Sample ............................................................................... 33
### LIST OF TABLES

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Survey Specification for Research Questions</td>
<td>28</td>
</tr>
<tr>
<td>2.</td>
<td>Guidelines for Internet Surveys*</td>
<td>29</td>
</tr>
<tr>
<td>3.</td>
<td>Data Analysis Matrix</td>
<td>31</td>
</tr>
<tr>
<td>4.</td>
<td>Demographics of Schools in the Sample</td>
<td>34</td>
</tr>
<tr>
<td>5.</td>
<td>Ratio of Rigorous Exams/Dual Enrollments to Graduating Senior</td>
<td>35</td>
</tr>
<tr>
<td>6.</td>
<td>Percent of Students Reported to Attend College</td>
<td>36</td>
</tr>
<tr>
<td>7.</td>
<td>Description of Honor Codes</td>
<td>36</td>
</tr>
<tr>
<td>8.</td>
<td>Honor Code Levels of Respondents’ School</td>
<td>37</td>
</tr>
<tr>
<td>9.</td>
<td>Analysis of Academic Expectations—Enrollment in College Post Graduation and Percent of Rigorous Exams Taken</td>
<td>39</td>
</tr>
<tr>
<td>10.</td>
<td>Descriptive Statistics for Contributing Factors</td>
<td>41</td>
</tr>
<tr>
<td>11.</td>
<td>Mean Differences and T-test Values of Factors Contributing to Academic Dishonesty</td>
<td>44</td>
</tr>
<tr>
<td>12.</td>
<td>Importance of Academic Dishonesty Compared to Other School Disciplinary Problems</td>
<td>47</td>
</tr>
<tr>
<td>13.</td>
<td>Perceived Rate of Academic Dishonesty on Assignments</td>
<td>49</td>
</tr>
<tr>
<td>14.</td>
<td>Results of Regression Analysis of Academic Expectations and Honor Code on Cheating</td>
<td>50</td>
</tr>
<tr>
<td>15.</td>
<td>Pearson Correlations Between Factors Associated with Academic Dishonesty and Academic Expectation for Fourth Quartile Schools (n=32)</td>
<td>51</td>
</tr>
<tr>
<td>16.</td>
<td>Pearson Chi-square for Other Discipline Problems Relative to Academic Dishonesty</td>
<td>52</td>
</tr>
<tr>
<td>17.</td>
<td>Pearson Correlations between Discipline Problems and Academic Expectation of the Highest Fourth Quartile</td>
<td>53</td>
</tr>
</tbody>
</table>
CHAPTER 1 INTRODUCTION

Academic dishonesty is an issue that plagues our nation’s schools and permeates throughout our society. Beginning in the 1960’s, countless research studies have been conducted involving the nature and frequency of academic dishonesty or cheating behavior. Research on academic dishonesty indicates cheating is a common occurrence in our nation’s high schools and colleges (McCabe, Trevino, & Butterfield, 2012) Donald McCabe, previously of the Center for Academic Integrity, has conducted a great deal of research at the university level and is one of the leading authorities and experts on cheating in the United States. McCabe et al, (2012) estimated that more than two-thirds of college students have cheated, which is similar to the findings of other researchers (Bowers, 1964, Whitley, 1998). Research on cheating at the high school level also has high frequencies of reported cheating (McCabe et al., 2012; Schab, 1991). The prevalence of research supports the notion that further investigation into academic dishonesty is critical since it is a recurring problem that remains unresolved.

McCabe, Trevino, and Butterfield (2001) conducted a review of research on academic dishonesty that spanned a decade. The study reported that the majority of the research pertaining to academic dishonesty from 1960 to 1990 involved individual factors (i.e., demographics, personal characteristics), while the research of McCabe and colleagues (2001) focused on contextual factors (i.e., institutional norms, school policies) that influence academic dishonesty. Whitley (2002) reported that the limited research on institutional factors associated with cheating is concentrated on honor codes. Whether academic dishonesty is a result of individual behavior, institutional norms, or a combination of the two is an interesting question for researchers. The prevalence of academic dishonesty at all levels of education clearly indicates a serious issue that needs greater attention from the education community.
Statement of the Problem

In recent decades, numerous studies have been conducted to ascertain the prevalence of academic dishonesty and other forms of unethical behavior. Our society has also seen an increase in unethical behavior including in the workplace (such as with Enron), in the lending practices of banks, and in parents manipulating the media (such as with the “balloon boy”). These illustrations have led to greater questions regarding how to educate students to make ethical decisions. The Josephson Institute of Ethics (2002) issued a report after surveying 12,000 high school students regarding their attitudes about lying, cheating, and stealing that summarized the evidence saying, “a willingness to cheat has become the norm and that parents, teachers, coaches, and even religious educators have not been able to stem the tide” (p.1). Regrettably, the findings of the Institute of Ethics’ surveys are not unique and provide pause for educators. To this point, a 2006 Washington Post article reported, “60% of students admitted to cheating on a test, 82% lied, and 28% stole” (Aratani, 2006, p.1). Michael Josephson, founder of the Institute of Ethics, stated in this article, “ethics, scandals involving politicians, chief executives and teachers…have done little to model the importance of integrity” (cited in Aratani, 2006, p.2). In 2006 and 2008, Josephson conducted further studies which both indicated similar frequencies of cheating. Josephson’s (2008) “The Ethics of American Youth” reported,

Cheating in school continues to be rampant and it’s getting worse. A substantial majority (64 percent) cheated on a test during the past year (38 percent did so two or more times), up from 60 percent and 35, respectively, in 2006. (Josephson, 2008, p.1)

In 2012, Josephson reported that cheating was on the decline from previous studies: “In 2010, 59% of students admitted they had cheated on an exam in the past year; in 2012 that rate
dropped to 51%” (2012, para. 3). Josephson commented on this trend indicating, “It’s a small ray of sunshine through lots of dark clouds” (2012, para. 5)

McCabe et al. (2012) published *Cheating in College*, a book that reported on their studies over a 20-year period as well as the research of others on the topic of academic dishonesty. McCabe et al. (2012) reported findings similar to Josephson’s more recent studies on high school cheating, indicating a decline in self-reported cheating among college undergraduates. They attributed a possible reason for this trend to changing attitudes among students regarding what is and is not cheating. Despite some hopeful recent trends, the evidence supports the belief that cheating is a prevalent issue and an important one since it indicates that a majority of students are forming negative habits and values that will follow them throughout their education.

Cheating is not a new problem in our schools or society; however, it is becoming a more frequent means of obtaining success according to David Callahan. In his book, *The Cheating Culture*, Callahan (2004) identifies specific examples of how pervasive cheating has become within American culture. He stated in his preface:

As I mulled over these questions of values, I began noticing other stories in the news about cheating. The historian Stephen Ambrose was enmeshed in a plagiarism scandal; Princeton’s admissions officer was in trouble for breaking into Yale’s computer; Alabama’s football team was put on probation for recruitment violations; the IRS reported that tax evasion was up sharply. (Callahan, 2004, p. viii)

The pervasiveness of cheating in our society extends from students in school just trying to get an edge to those just trying to survive academically. Callahan provided possible reasons why more students are willing to engage in various forms of cheating:
Horace Mann and Stuyvesant [schools] are unusually competitive places, but more and more students are under the kinds of pressures found at these schools. Parents and students understand the stakes of education have shot up in recent years. A growing obsession with college admission has been paralyzed by increased cheating among high school students across the United States. (Callahan, 2004, p. 203)

Academic dishonesty is a topic discussed in the popular press as well as being a topic of interest to researchers. Consider an incident of academic dishonesty at Winston Churchill High School in Montgomery County, Maryland, that was front page news in the Washington Post in 2010 with headlines stating, “Students at Potomac school hack into computers; grades feared changed” (Bimbaum & Johnson, January 29, 2010, p.1) and “Criminal investigation opened in grade-changing scandal at Churchill High” (Bimbaum & Johnson, March 4, 2010, p.1). Most alarming to the readers was the stellar reputation of Winston Churchill High School:

Potomac high school serves an affluent swath of Montgomery County and routinely ranks among the elite schools in the region and nation. The 2,100-student school has a 98 percent graduation rate and just 1 percent of its seniors didn’t go to college. (Bimbaum, Morse, & Johnson, 2010, p.1)

This non-isolated cheating scandal at a high performing high school demonstrates the need for action including conducting additional research on academic dishonesty.

**Purpose of the Study**

The majority of the research has focused on academic dishonesty at post-secondary institutions. The availability of studies at the high school level is limited (McCabe et al., 2012). This study investigates academic dishonesty at the high school level. This area was chosen as the focus since researchers recognize that, “students who begin cheating earlier in life are likely
to continue to engage in this behavior in college” (Anderman & Murdock, 2007, p.13). This finding is consistent with findings from other research on academic dishonesty that cheating in high school is a predictor to cheating in college (Bowers, 1964, Lambert et al., 2003). McCabe et al. (2012) reported on the importance of surveying high school students indicating “that, first, cheating habits develop early and, second, there was something to be learned from high school students” (p. 21). Presently, gaps exist in the research on academic dishonesty in public high schools. McCabe et al. (2012) commented on a possible reason for the gap indicating they have received low approval from teachers and school administrators for conducting research on cheating in public high schools.

To investigate academic dishonesty fully, both the individual and contextual factors influencing academic dishonesty must be understood. This study investigated whether there is a relationship between the academic expectations of a high school and the frequency of academic dishonesty as reported by high school administrators (principals and assistant principals) in the Commonwealth of Virginia.

**Importance of the Study**

Academic dishonesty is a critical problem for the educational community, particularly at the high school level. High school administrators are under increasing pressure to raise student achievement, improve student performance, and prepare students for college. The No Child Left Behind (NCLB) Act of 2001 placed enormous pressure on schools to perform. Recently, the U.S. Department of Education has started awarding billions of dollars in federal aid as part of the Race to the Top program to reward teachers and schools for student performance in the classroom (Duncan, 2009). In the presence of these pressures, there are numerous reports of
classroom teachers, school principals, and even school districts cheating on state exams to help their schools earn a passing grade, including:

- Chicago, 2002: Two economics professors were brought in by the Chicago Public Schools to look for cheating. They found suspicious test results in 70 classrooms, suggesting a pattern of cheating that led to a district-wide investigation. Teachers were accused of giving tips to students, erasing answers, and filling in blank answers (Kummer, 2006, p.4).
- Texas, 2004: Dallas Morning News analysis found 400 of 7,700 Texas Public Schools reported scores with unusually high scores. The state hired a Texas security firm, Caveon, which this month flagged 699 scores at schools (Kummer, 2006, p.4).

These examples in Chicago and Texas illustrate the pressure schools are under since the advent of standardized testing. This pressure to perform has a direct impact on the academic expectations within high schools and a potential impact on the frequency of academic dishonesty. Strong leadership is critical to combat incidents of this nature. Research on academic dishonesty is needed to identify how academic expectations of a school may lead to academic dishonesty and what to do to prevent it.

**Research Questions**

This study investigated the impact of the academic expectations of high schools on the frequency of academic dishonesty as reported by administrators (high school principals and assistant principals) in the Commonwealth of Virginia. The following four research questions were investigated:

1. To what extent are the academic expectations of a high school related to the frequency of academic dishonesty as reported by high school administrators?
2. To what extent is the implementation of an honor code at a high school related to the frequency of academic dishonesty as reported by high school administrators?
3. What do high school administrators perceive as the most important causes of academic dishonesty?

4. To what degree do high school administrators perceive academic dishonesty as an important problem in high schools?

**Definitions and Key Terms**

*Academic Dishonesty*—For the purpose of this study, academic dishonesty and academic cheating are synonymous. In the review of literature there are varying definitions and measurement techniques to define academic dishonesty or cheating (Jensen, Arnett, Feldman, & Cauffman, 2002; McCabe et al., 2012; Newstead et al., 1996). Jensen et al. defined academic dishonesty as, “students’ attempt to present others’ academic work as their own” (2002, p. 210). The Educational Testing Service (ETS) in “Cheating is a Personal Foul” similarly defined academic cheating as, “representing someone else’s work as your own. It can take many forms: from sharing another’s work, to purchasing a term paper or test questions in advance, to paying another to take a test or do the work for you” (1999, n.p.)

*Academic Expectations of the School*—For the purpose of this study, academic expectations were operationalized as the number of seniors taking either (a) International Baccalaureate (IB) or Advanced Placement (AP) or Cambridge exams or (b) enrolled in dual enrollment. Academic expectations were quantified as a ratio of exams/dual enrollments to graduating seniors. This ratio comes from the work of Washington Post reporter, Jay Matthews, who designed the Challenge Index to rank schools according to the number of IB or AP exams given at a school each May divided by the number of graduating seniors. (Matthews, 2005) Increased access to either advanced programs (IB/AP) is widely regarded as a way to raise the academic expectations of a school. Specifically, low performing schools have adopted IB/AP
programs to raise the bar (2005). In this study, this ratio served as an indicator of the academic expectations of the school. Additionally, the percent of the graduating class enrolling in two- or four-year college after graduating, as reported by administrators on the survey, was taken into account in calculating academic expectations.

_Honor Code_—For the purposes of this study, this term was defined as the official school policy on academic dishonesty and whether one exists or not.

_High School Principals_—For the purposes of this study, high school principals included both principals and assistant principals and both are also referred to as administrators.

**Summary**

Academic dishonesty is a critical problem at all levels of education. Because research indicates that if cheating occurs at the high school level it is more likely to continue during college, research on the topic at the high school level is particularly important. In Chapter 2, a review of the literature on academic dishonesty identifies research regarding the causes and relationships associated with cheating within academic institutions. Specifically, the individual and contextual factors commonly associated with cheating behavior are reviewed. Chapter 3 provides an overview of the quantitative methodology and procedures employed in this study while Chapter 4 reports the findings and Chapter 5 provides a discussion regarding the findings.
CHAPTER 2 REVIEW OF RELATED LITERATURE

This study investigated whether there is a relationship between the academic expectations of a high school and the frequency of academic dishonesty as reported by high school administrators (principals and assistant principals) in the Commonwealth of Virginia. Academic dishonesty is a critical issue that needs to be addressed since research provides evidence that it is becoming more common in our society as well as in our schools. Both research and the current media report that many factors contribute to the prevalence of academic dishonesty. A review of the related literature illustrates to what degree cheating is a recurring problem at both the college and high school levels (Davis et al., 2009; McCabe et al., 2012; Schab, 1991; Whitley, 1998).

While a majority of the early studies centered on academic dishonesty at the college level, McCabe and others have also conducted studies at the high school level. The research on academic dishonesty distinguishes between individual and contextual factors as primary motivating factors related to cheating. Individual factors include personal and/or demographic characteristics, whereas contextual factors center on institutional norms and school policies (McCabe et al., 2001). The research on academic dishonesty began in the mid-20th century. It reveals the increase in various forms of cheating and accounts for societal changes such as the increasing role of technology. This study is designed to examine the degree to which a contextual factor, the academic expectations of a school, impacts academic dishonesty.

Search and Selection Criteria

The research available on this topic was retrieved from a wide variety of sources. The Educational Clearinghouse Information Center (ERIC) was a significant source of many of the articles reviewed from the 1960s to the present. The keywords entered when searching were: “cheating,” “academic dishonesty,” “plagiarism,” and “technology and cheating.” When
“cheating” was entered as the keyword, over 1,400 results were identified. The use of Yahoo and Google web browsers also revealed relevant websites and articles pertaining to cheating. The Center for Academic Integrity, Educational Testing Service, and the Josephson Institute of Ethics were also valuable sources for literature on recent trends, statistics, and surveys conducted on academic dishonesty. In addition, websites of these organizations provided additional resources and bibliographic information on current articles, journals, and books focused on academic dishonesty. The Virginia Tech University Library’s online catalogue of available electronic databases and e-journals was also a valuable tool for locating and retrieving research articles. E-journals were primarily found utilizing ERIC and EBSCOhost, online research databases of journals in education and other disciplines. Typically, articles were retrieved from either educational journals or psychology-related disciplines. Finally, newspapers and magazines, such as The Washington Post and US News and World Report, were a common source for reports on cheating. The use of this wide variety of sources and research provided a thorough synthesis of the literature available on academic cheating.

Prevalence of Academic Dishonesty

Academic dishonesty is not a new problem, although it has only garnered researchers’ attention since the 1960s. In 1964, Bill Bowers conducted one of the earliest studies involving cheating at the college level by surveying students across the nation (McCabe et al., 2001). Bowers (1964) set out to determine the prevalence of cheating on college campuses, the sources and reasons for academic dishonesty, and the effectiveness of preventive measures. Bowers’ surveyed the deans and student body presidents to ascertain the problem of academic dishonesty at their schools as well as to survey the students themselves. Compared to other forms of academic misconduct, cheating was ranked second behind drinking. The deans and student body
presidents estimated that approximately 15% to 20% of students cheated and/or plagiarized (Bowers, 1964). The students, on the other hand, self-reported a rate of cheating three times that reported by the deans. The study also found the following factors to be strong determinants of the level of academic dishonesty in college: peer disapproval of cheating, personal disapproval of cheating, prior history of cheating in high school, the academic climate, and the role of an honor code (Bowers, 1964). Bowers research provided a solid foundation for later works on academic dishonesty.

A number of research studies have provided statistical evidence pertaining to the frequency of academic dishonesty by students. These studies help one to better understand the nature and frequency of cheating, and are useful for school administrators to assist in developing specific academic policies to combat cheating. McCabe and his colleagues reported in Cheating in College (2012) the results of twenty decades of research on cheating. They reported the frequency of cheating as reported by high school students based on studies from 2000-2010. The studies revealed that 82% of high school students reported cheating, 58% reported plagiarizing on a written assignment, and 73% reported cheating on a test (2012). These findings are similar to the results of Josephson’s (2008) survey which reported that 64% of high school students admitted to cheating on a test. The 29th Who’s Who Among American High School Students Poll, as reported by ETS (1999), indicated: 80% of our nation’s best students cheated to get ahead; 50% stated cheating is not a problem; 95% stated they cheated but it was not detected; 40% cheated on an examination; and 67% admitted to plagiarizing. In comparison, ETS (1999) reported a much lower rate of estimated cheating by high school students a half century earlier. One of McCabe’s studies (2001) identified the common forms of cheating among high school juniors. Sixty-six percent reported they copied from a test/exam, 62% reported they helped
another student cheat on a test/exam, 75% reported they submitted work other than their own, and 90% admitted to allowing another student to copy homework. Together, this evidence highlights the prevalence of academic dishonesty in high schools on both formal (tests/exams) and informal (homework/assignments) assessments. Educators should be concerned with the prevalence of cheating and want to gain a better understanding of both the individual and contextual factors causing students to cheat.

**Longitudinal Studies of Academic Dishonesty on College Campuses**

Early research on academic dishonesty was conducted at colleges and universities in an effort to reveal the prevalence of student cheating across campuses. McCabe and Trevino (1996) compared the results of Bowers’ landmark 1964 study addressing cheating to their own study conducted in 1990-91. Bowers surveyed a diverse sample of 5,000 students on 99 campuses of differing sizes, while McCabe and Trevino (1996) surveyed over 6,000 students at 31 campuses. These studies and comparisons are important because they involved multiple colleges and universities and showed trends in cheating over a span of three decades. Both studies focused attention on academic dishonesty on tests, examinations, and major written assignments. Due to the 25-year time lapse and the fact that different students were surveyed, it is not possible to draw exact comparisons between the researchers’ findings. However, both studies were important in examining similarities regarding the frequency of academic dishonesty. Both studies revealed that cheating was common on campuses, albeit at slightly differing levels. McCabe & Trevino (1996) drew from fewer campuses than Bowers (1964) and, since the students were from different academic institutions, differing policies and attitudes regarding cheating may have been prevalent. In another study (1993), Bowers and McCabe found 63% of the students had cheated in 1963, in comparison 70% admitted to cheating 30 years later.
McCabe & Trevino, 1996). These trends in cheating are similar to findings of the Josephson Institute of Ethics (2002, 2008, 2012) research on academic dishonesty, as well as the findings of McCabe et al. (2001, 2012). Again, this research is significant because it analyzes patterns and trends in cheating behavior on college campuses over a span of time. The important contributions of these studies are that they provide trend data for the purpose of conducting further research on the nature of cheating. In terms of the validity of the studies, the nature of self-reporting of cheating behavior by students is a clear limitation (McCabe et al., 2012; Newstead et al., 1996). While one cannot be certain that participants are completely honest in their responses, using self-report data is an appropriate and common method to gather data regarding cheating.

**Academic Dishonesty in High School**

In the 1990s another survey instrument was utilized to determine the prevalence of cheating, this time by high school students. This study (Schab, 1991) identified patterns of cheating in high schools over a span of 30 years. It is important because the majority of the research on cheating is at the post-secondary level. In Schab’s study, high school students were questioned in 1969, 1979, and 1989 on their various attitudes and behaviors regarding cheating. Like a majority of the research on cheating, a survey instrument was used (McCabe, 1999). “The survey was administered to 1,629 high school students in 1969, 1,100 in 1979, and 1,291 students in 1989” (Schab, 1991, p.2). Although it is unclear from the study whether the participants were from the same school each time, the sample sizes and the survey items were consistent over time. The student responses indicated an increasingly pessimistic view regarding student cheating, and revealed an increase in self-reported academic dishonesty over time. The students revealed that 75% of their peers cheated, with an increase in percentages over time.
Similar increases involving the practice of cheating were evident, a finding consistent with previous studies that revealed that 75% of students reported cheating behavior when surveyed (McCabe, Trevino, & Butterfield, 2012). Evans & Craig (1990) conducted a study surveying middle and high school students (n=1,763) and their teachers (n=107) to ascertain their views on cheating compared to prior research findings. The findings indicated that both teachers and students viewed cheating as a serious problem which is consistent with prior research (Anderman & Murdock, 2007). The study did find a significant difference between the responses of teachers and students regarding overall cheating. Students identified a greater rate of cheating in their individual schools than the teachers. Similar to the Schab (1991) study, students were pessimistic about cheating and only 47% of students in the Evans and Craig study (1990) felt students would report cheating as a prevention method. The students also indicated most students do not see anything wrong with cheating (1990). While research on academic dishonesty at the high school level is limited, it consistently finds that high school students indicate it is a common occurrence.

**Why Students Cheat**

There are numerous reasons why cheating is more prevalent in our schools today compared to cheating of earlier generations of American students. In the CNN article, “Survey: Many Students say Cheating’s OK,” author Kathy Slobogin explored the study’s findings with McCabe and noted that “students find it so much easier to rationalize their cheating” (Slobogin, 2002, p.2). To further that idea, students said that, aside from academic pressure, students cheat because the “adult world sets such poor examples” (p. 2). McCabe (2001) reported several reasons why students cheat including parental pressures, desire to get into a good college and peer influences. The role of collaboration has also increased; McCabe (1996) cites an increase
from 11% based on Bowers’ 1963 study to 49% based on McCabe’s 1993 study. Of those students surveyed in 1993, 83% did not consider collaboration a serious infraction (McCabe, 1996).

Schab’s study (1991) identified five causes of student cheating: a fear of failure, a lazy attitude toward study, a parent demand for good grades, a desire to keep up with others, and the ease of cheating. Bowers (1964) also found a strong relationship between several of these factors. In Bowers’ study, the time spent studying had a negative relationship on the likelihood a student would cheat. A parent demanding good grades was also a strong determinant of a student cheating. These factors are attributable to both individual as well as contextual factors associated with cheating. Consideration of both factors is important in determining some of the common reasons students cheat on assignments, particularly in a high school setting. The validity of the results of the Schab survey is limited since the study relies on participants accurately assessing cheating behavior in their schools. Self-reporting students might have a tendency to either deflate or inflate their behavior, reducing the likelihood of obtaining valid results (McCabe, et al., 2012). Schab provided reasons for cheating based on student responses; however, he did not establish direct causation. The value of the survey is tracking student responses over time to assess changes in student’s attitudes regarding academic dishonesty.

Another study, Academic Dishonesty Among High School Students, involved high school students and was unique from previous studies as focus groups were used (McCabe, 1999). McCabe conducted a focus group of 32 high school and college students to determine the prevailing attitudes of students regarding cheating. A focus group allows the researcher to question a group of students collectively and identify common themes from the participants. Since responses are not anonymous like in most surveys, there may be a tendency to present bias.
into the responses from participants (Dillman, 2009). The focus group revealed that high school students tend to be more cavalier about issues of academic dishonesty than college students. Students responded that cheating was viewed as acceptable by both students and faculty, and that cheating was not viewed too seriously by students in the focus group (McCabe, 1999). Overall, the students interviewed in the study possessed a very pessimistic attitude regarding cheating, and what prevention methods could be used at the school level to combat it. Jensen et al. (2002) conducted a study on the motivations behind cheating among high school and college students. This study was rare, since it included both high school and college age students. The researchers surveyed 229 high school students and 261 college students to determine how students evaluated cheating in the context of different motives and their own involvement in cheating behavior. Participants were provided 19 different vignettes and were asked to respond on a 4-point scale to determine whether the cheating was acceptable or not acceptable. Participants also self-reported their own cheating behavior. Findings indicated that cheating was viewed as less acceptable by college students than high school students (Jensen et al., 2002), which corroborates the findings from the 1999 McCabe study. The results of the study by Jensen et al. (2002) confirmed their hypothesis that acceptance of cheating for both high school and college age students is higher among students who evaluate cheating leniently, a finding that supports the early research of Bowers (1964). McCabe (1999) and Jensen et al. (2002) both found that if students deemed the reason for cheating acceptable and they could rationalize their behavior, it was more likely they would cheat. Lambert et al. (2003) also supported this notion in a study involving college students. Their findings indicated some students justified their cheating based on a number of factors. The researchers conducted a multivariate analysis and found two justification measures that were significantly related to academic dishonesty: to earn a better grade and to graduate.
The study was limited in that it involved only 850 students on one campus; however, conducting a multivariate analysis as opposed to a bivariate analysis did offer results that differed from those of past studies. In this study (2003), personal characteristics such as age, gender, marital status, and GPA were not found to be predictors of cheating as in other studies (Whitley, 1998). These studies provide further insight into how students behave and the motivating factors that contribute to academic dishonesty. The results are also reflective of the prevailing current attitudes of both high school and college students as reported in other studies (McCabe & Trevino, 1996, Bowers, 1964). The research is clear regarding the prevalence of cheating by students at all levels; the question is what motivates students to cheat and what can be done to prevent it.

**Academic Dishonesty and Motivation**

Albert Bandura’s social cognitive theory, self-efficacy, provides an explanation into what motivates students to cheat (Bandura, 1997). Murdock, Hale, and Weber (2001) reported that self-efficacy influences the choices students make regarding whether or not to engage in cheating and, specifically, whether or not they will feel confident in performing a task. They also found that low academic self-efficacy is a determinant in a student’s decision regarding cheating. This is also shown in Bowers 1964 study in which students with lower grades, an indicator of ability along with motivation, were more likely to cheat based on the inverse relationship between grade average and cheating (1964).

In another study, Anderman et al. (1998) examined the relationship between motivational variables and self-reported cheating beliefs in a sample of urban middle school adolescents. Unlike the majority of the studies on cheating which are descriptive in nature, Anderman et al. attempted to establish a relationship between cheating and specific motivational orientations,
specifically goal orientation theory. They hypothesized that students who cheat are extrinsically goal oriented and perceive their classrooms as being extrinsically goal oriented. The participants, 285 urban middle school students, were administered a questionnaire. The dependent variables were the student’s self-reported cheating behavior and beliefs about cheating. The researchers manipulated the independent variables, a performance-oriented or extrinsic learning environment versus a mastery-oriented learning environment, to determine what motivated students to cheat. The study found a correlation between student-described motivations and their tendency to cheat. They concluded that, as a whole, “students who report cheating tend to worry about school, perceive their school as being performance focused, perceive their classrooms as being extrinsically oriented” (1998, p. 88). Murdock et al. (2004) examined the effects of context variables on whether a high school student was likely to cheat. The researchers surveyed (n=204) ninth and tenth graders. The quality of the pedagogy and whether the classroom goal structure was performance-based were significantly related in the study to a student’s justification of cheating. These findings are consistent with Anderman et al. (1998) in that in a performance-based classroom a student is more likely to cheat. This research offers further insight into the motivation behind cheating and what behavioral, classroom constructs, and psychological factors might influence a student’s decision to cheat in school. It is evident that social, motivational, and academic factors contribute to cheating. An understanding of the attitudes of both teachers and students plays a pivotal role in developing effective strategies to reduce cheating. Current research continues to gather this information.

In 2004, Rettinger, Jordan, and Peschiera conducted an experiment using vignettes to evaluate the motivation of students to cheat under certain conditions. Participants read a vignette that described a hypothetical student who had the opportunity to cheat during an examination.
The researchers defined intrinsic goals, “as mastery goals, mastery orientation, learning goals or learning association…associated with increasing one’s competence, or mastering a body of information” (Rettinger et al., 2004, p.874). Extrinsic goals are generally associated with performing a task for the purpose of earning an external reward or incentive (Anderman et al., 1998). The participants in the study were then asked to rate their own likelihood of cheating in the given situation, as well as reporting their own individual motivations and actual cheating behavior. The purpose of this study was to evaluate specific predictors of cheating behavior (Rettinger et al., 2004). The variables manipulated were student motivation to perform (intrinsic v. extrinsic) and student competence or ability level. Thus, both individual/demographic characteristics and contextual factors were assessed in this study. The small undergraduate sample size (n=103) limits the generalizability of the findings. However, the responses to the vignettes and the self-reporting of their individual academic traits enabled researchers to compare self-reported attitudes and behaviors to the responses on the vignettes. This study concluded that students with high extrinsic motivation and lower ability levels were more likely to cheat (Rettinger et al., 2004). This study is of particular importance because the use of experimental design in research on academic dishonesty is not a commonly used methodology (Rettinger et al, 2004). Additionally, the majority of the research on cheating involves survey results, while research on what motivates students to cheat is rare (Jensen et al, 2002). Again there are limitations to Rettinger’s study since the dependent variable is the perception of peers’ potential cheating behavior and may not be a true measure of a student’s tendency to cheat. Additionally, the study only included schools with an honor code, which may limit comparison with future studies involving schools with various types of honor codes (Rettinger et al., 2004).
This study is significant in providing a better understanding of a student’s motivation to cheat, as well as providing stronger research data.

**The Impact of Technology on Academic Dishonesty**

The rise of technology is a significant factor impacting the increase in cheating, especially plagiarism, in our nation’s schools. McCabe (2001) conducted a study on student reports of using technology to cheat. Thirty-four percent of the students reported copying verbatim from another source, 60% copied a few sentences, and 16% admitted to turning in a paper directly from the Internet. McCabe et al. (2012) reported that Internet cheating is on the rise in comparison to other more traditional means of cheating on tests. This misuse of technology is another factor that creates an easy opportunity for students to cheat on assignments.

According to Villano:

Students are not only cutting and pasting from websites; often they buy the whole package. Some sites, known as paper mills offer a term paper for as little as $6.95 a page....Schoolsucks founder Kenneth Sahr has said that the papers housed on his site are meant to be used as research material. (2006, p. 28)

Internet sites as well as electronic encyclopedias are popular sources for students in the business of copying papers (Davis et al., 2009; Lathrop & Foss, 2000). Davis et al., in *Cheating in School* (2009), discussed the impact of technology on cheating in the information age. The researchers concluded that cheating and plagiarism are advancing due to additional opportunities and the relative ease of cheating available through numerous sources on the web (2009). Lathrop & Foss (2000) discussed the methods by which students are cheating with new advances in technology. Hand-held computers, programmable calculators, pagers, web sites, computer
networks, distance learning, faxes and e-mail, laser printers and copiers, headsets, and other electronic devices are all being used to engage in academic dishonesty. Schools are taking necessary precautions to catch and thus deter students from plagiarizing information via the Internet. Companies, such as Turnitin, check documents via a web browser for originality against a database of previously submitted papers (Villano, 2006). This is a simple way for a classroom teacher to prevent cheating and is one of many options available to educators. These detection services should be used by teachers only as a means of detecting possible cheating, since the student may have similarities to on-line text but properly quote or cite the source (Davis et al., 2009). The digital age has made information more accessible and thus created new ways for students to engage in behavior that is unethical. However, it is the students themselves who elect to cheat and, therefore, researchers must determine what motivates students to cheat instead of completing the required work independently.

**Academic Dishonesty and Honor Codes**

School policies and the academic environment of a school may deter students from cheating. For example, it appears an honor code on college campuses is a deterrent to cheating. This is the hypothesis that McCabe et al. (2002) examined in their study *Honor Codes and Other Contextual Influences on Academic Integrity*. In 1999, the researchers conducted a quantitative study of 21 college campuses and investigated the relationship between academic dishonesty and contextual influences in the following types of honor code schools: traditional, modified, and schools without an honor code. This study was a replication and extension of an earlier study of the subject by McCabe and Trevino, although the schools were larger, less selective, and had less students living on campus than the prior studies (1993). McCabe et al. (2002) conducted another study for two primary reasons: (a) to test the strength of the McCabe and Trevino model on a
different sample; and (2) to introduce a modified honor code as an additional factor that may influence academic dishonesty.

Originally, McCabe and Trevino (1993) examined the effectiveness of honor codes and other contextual factors on academic dishonesty. These contextual factors included: the perceived severity of penalties, perceived certainty of being reported, perceived understanding/acceptance of policy, perception of peers’ behavior, and existence of an honor code. A multivariate analysis revealed that the perception of peers’ behavior was the most important contextual variable (1993). Study respondents also corroborated this notion of the perception of peers’ behavior stating:

If others do it you’re being left behind by not participating….It’s the 90’s; you snooze, you lose….When most of the class is cheating on a difficult exam and they will ruin the curve, it influences you to cheat so your grade won’t be affected. (McCabe & Trevino. 1993, p. 533)

McCabe et al. (2002) replicated the 1993 study in an effort to test the findings of the earlier study and examine the role of a modified honor code in an academic environment. According to McCabe and Trevino in *Honesty and Honor Codes* (2002), traditional honor codes typically use unproctored exams along with a judicial process that students implement, written pledges, and an obligation to report incidents of cheating. Modified honor codes focus on two primary strategies. First, the school “must communicate to its students that academic integrity is a major institutional priority” (2002, p.38). Second, students must play an important role in enforcement and education of the code. Typically, on both traditional and modified honor code campuses, the impact is surprisingly strong, according to McCabe and Trevino (2002). In the 1999 study, schools volunteered to participate in the study and included eight institutions with
traditional honor codes, four institutions with modified honor codes, and nine schools without an honor code. The researchers contacted a random sample of sophomores, juniors, and seniors on all 21 campuses and distributed a questionnaire about students’ perceptions of academic integrity. A regression analysis of all five independent variables showed relatively strong support for the relationship between academic dishonesty and perceptions of peer behavior (2002), which validated an earlier study by McCabe & Trevino (1993) involving traditional honor code and non-honor code institutions.

McCabe et al. (2012) offer further insight into the role of honor codes in their book *Cheating in College*. The authors first compare the results of two studies, conducted in 1990/1991 and 1995/1996, at selected campuses with and without honor codes. The same 31 schools were represented in both studies which asked about students’ engagement in nine types of cheating. There were 500 students in the 1990/1991 study and 400 students in the 1995/1996 study. In both studies, the schools with honor codes had a lower rate of self-reported cheating (48% and 60%) compared to the schools with no honor codes (74% and 82%) (McCabe et al., 2012). The authors further comment on the effectiveness of traditional honor codes and the role students play in policing themselves. They reported that only 2% of students in a no-honor-code environment versus 7% in a honor code environment were likely to report an incident of cheating by a “friend” (2012, p.101). This corroborates earlier studies on the importance of peer behavior on cheating (McCabe & Trevino, 1993; McCabe et al., 2002). James Lang (2013), a college professor, discussed the role of honor codes in his book, *Cheating Lessons*. Lang reports on McCabe’s findings that students are unlikely to report cheaters and acknowledges that cheating is likely to occur more frequently based on their peers’ perception or approval of their cheating (2013). Lang stresses the importance of establishing an open dialogue about academic
dishonesty, and he believes less importance should be placed on the honor code itself. This research on honor codes indicates the existence of an honor code is not powerful enough in and of itself to deter cheating; however it is one mechanism to use to begin open discussion about the importance of academic integrity.

Summary

Academic dishonesty, a problem at all levels of education, exists within a culture that is experiencing a malaise regarding ethical issues. The past and current evidence included in this review on the prevalence of cheating portrays an increase in the frequency of cheating. The rise of cheating on college campuses was first reported in Bower’s 1964 landmark study on cheating. Since that time, numerous researchers have conducted further studies on cheating on both college campuses and in secondary schools. Numerous surveys and focus groups have been conducted to ascertain the prevailing attitudes held by students regarding their academic behavior and to identify reasons for why students cheat. Qualitative and quantitative studies included in this review provide a better understanding of the numerous variables associated with cheating as well as specific motivating factors for cheating. Studies of the impact of academic honor codes on cheating were also reviewed. In particular, McCabe’s numerous research studies spanning over two decades provide sound evidence that cheating is a serious problem in our nation’s schools. Chapter 3 describes the methodology utilized in this quantitative study designed to assess whether and to what degree a relationship exists between a high school’s academic expectations and the frequency of academic dishonesty reported by administrators in the Commonwealth of Virginia.
CHAPTER 3: METHODOLOGY

The purpose of this research was to determine whether there is a relationship between the academic expectations of a high school and the frequency of academic dishonesty as reported by high school administrators in the Commonwealth of Virginia. Additionally, the research investigated the administrators’ perceptions of the main causes of academic dishonesty and how large the problem of cheating presently is in their high schools. Academic dishonesty is a significant problem to be investigated due to its increased use by high school students as reported in the research literature and addressed by educators across the country.

The methodology employed for this quantitative research study is both descriptive and correlational in design. It is descriptive since the research, “involves collecting data in order to test hypotheses or answer questions concerning the current status of the subject of the study” (Gay, 1992, p. 13). To assess the degree to which cheating is a problem in public high schools in the Commonwealth of Virginia, a survey of principals was conducted. The research design is also correlational in nature, i.e., “to determine whether, and to what degree, a relationship exists between two or more quantifiable variables” (1992, p. 14). A quantitative approach was selected so that all public high schools in the Commonwealth of Virginia could be represented in the study if their administrator, (i.e., principal, assistant principal) participated. This chapter includes the research questions and describes the study variables, subjects, instrument, and procedures for data collection and analysis.
Research Questions

The overarching question examined in this study is how academic expectations correlate to the frequency of academic dishonesty found in public high schools in the Commonwealth of Virginia. To consider this question, the following four research questions were addressed:

1. To what extent are the academic expectations of a high school related to the frequency of academic dishonesty as reported by high school administrators?
2. To what extent is the implementation of an honor code at a high school related to the frequency of academic dishonesty as reported by high school administrators?
3. What do high school administrators perceive as the most important causes of academic dishonesty?
4. To what degree do high school administrators perceive academic dishonesty as an important problem in high schools?

Research Variables

This study sought to determine whether a relationship exists between the academic expectations of a high school and the frequency of academic dishonesty. The technique for gathering the data to measure these variables of interest was a survey of administrators presently working in Virginia public high schools. The following variables were studied: academic expectations of a school, academic dishonesty (i.e., cheating), type of honor code, and socioeconomic status. These variables are operationalized as follows:

*Academic expectations* is defined in two ways:

1. (AE1) a ratio of rigorous exams to graduating seniors. The total number of International Baccalaureate (IB), Advanced Placement (AP), Cambridge, and dual enrollment (e.g., receiving high school and college credit for a class) exams (i.e.,
rigorous exams) is presented as a ratio of number of rigorous exams to number of graduating seniors.

2. (AE2) the percent of the graduating class reported as planning to enroll in a two or four year college after graduation.

*Academic dishonesty* is measured by the frequency of academic dishonesty as reported by high school administrators (principals and assistant principals).

*Honor code* is defined as the official school policy on academic dishonesty and is reported using the following levels of classification:

1. No honor code
2. Honor code with minimal sanctions (fail assignment, parental notification, honor contract)
3. Honor code with suspension for repeat offenses
4. Honor code with suspension for first offense
5. Honor code with removal from IB/AP/Cambridge or honors program for multiple offenses
6. Honor code with removal from IB/AP/Cambridge or honors program for first offense

*Socio-economic status* of the school is defined as the percentage of students eligible for free and reduced lunch (FARMS).

**Subjects**

The 308 public high schools in the Commonwealth of Virginia with a graduating class during the 2009-2010 school year constituted the population from which a convenience sample of principals was drawn. All principals in the Commonwealth of Virginia employed during the 2009-2010 school year were originally included in the sample. Principals new to a school in 2010-2011 were not included; however, they had the option of having their assistant principal complete the survey if the assistant principal worked in the school in 2009-2010. The *Virginia High School League Directory* was utilized in conjunction with the website of the Virginia
Department of Education to gather e-mail addresses and contact information for all high school principals in Virginia.

**Instrumentation**

A survey was determined to be an efficient means to gather information from public high school principals in Virginia. Since an appropriate instrument to address the research questions was not found in the literature, a survey was developed that consisted of questions pertaining to each of the four research questions. A table of specification (Table 1) was developed to ensure alignment between the research questions and survey items.

**Table 1**

*Survey Specification for Research Questions*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Survey Questions</th>
<th>Item Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent are the academic expectations of a high school related to the frequency of academic dishonesty as reported by high school administrators?</td>
<td>#5, 6, 7</td>
<td>Academic expectations</td>
</tr>
<tr>
<td></td>
<td>#9</td>
<td>Dishonesty scale</td>
</tr>
<tr>
<td>2. To what extent is the implementation of an honor code at a high school related to the frequency of academic dishonesty as reported by high school administrators?</td>
<td>#8,</td>
<td>Honor code</td>
</tr>
<tr>
<td></td>
<td>#9</td>
<td>Dishonesty scale</td>
</tr>
<tr>
<td>3. What do high school administrators perceive as the most important causes of academic dishonesty?</td>
<td>#10</td>
<td>Causes of academic dishonesty</td>
</tr>
<tr>
<td>4. To what degree do high school administrators perceive academic dishonesty as an important problem in high schools?</td>
<td>#11</td>
<td>Problem of academic dishonesty</td>
</tr>
</tbody>
</table>

To help ensure validity, the survey was reviewed by several experts, a focus group of assistant principals, and a director of accountability. These experts were asked to review the process used in developing the instrument as well as the instrument itself and to make a judgment concerning how well items represented the content of the focus of the research, academic dishonesty (Gay, 1992). These experts were both researchers and practitioners in the
field of education. They assisted in evaluating each survey question for both validity and clarity. Items included in the final draft survey were those items with both high validity and clarity. Final revisions were made based on input received from the experts (see Appendix A for the final survey). Once the final survey was completed, the web-based application SurveyMonkey® was used to administer the online survey.

**Data Collection Procedures**

The Virginia Department of Education website and the *Virginia High School League Directory* were used to identify postal and e-mail addresses for current high school principals. In 2009-2010, there were 308 principals at the secondary level in Virginia. *Constructing the Questionnaire: Mail and Internet Surveys* by Dillman (2009) was used as a guide for both the design of the survey and methods to improve the response rate. Table 2 displays Dillman’s guidelines.

**Table 2**

*Guidelines for Internet Surveys*

<table>
<thead>
<tr>
<th>Guideline Number</th>
<th>Guideline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guideline 7.16</td>
<td>To the extent possible, personalize all contacts to respondents</td>
</tr>
<tr>
<td>Guideline 7.18</td>
<td>Use multiple contacts and vary the message across them</td>
</tr>
<tr>
<td>Guideline 7.21</td>
<td>Keep e-mail contacts short and to the point</td>
</tr>
<tr>
<td>Guideline 7.24</td>
<td>Provide clear instructions for how to access the survey</td>
</tr>
<tr>
<td>Guideline 7.31</td>
<td>Implement a system for monitoring progress and evaluating early completes.</td>
</tr>
</tbody>
</table>

*Taken from Dillman, 2009, pp. 237-238

Prior to contacting potential participants, approval was sought and received from the Institutional Review Board (IRB) of the Virginia Polytechnic Institute and State University (see Appendix B for the IRB approval letters). To recruit participants, a postcard was sent to all 308 public high school principals in Virginia informing them of the survey and inviting them to
participate in an online survey about academic honesty (see Appendix C for a copy of the postcard). The postcard was followed by an e-mail to the principals’ school e-mail address approximately one week later. The e-mail was sent to all the principals in June 2011 at the conclusion of the Virginia Standards of Learning (SOL) testing and the end of the school year. The e-mail included a personal message informing them of the nature of the survey and the time required of them (see Appendix D for the 2011 e-mail). The e-mail also included a link to the survey as well as specific instructions on how to access and complete the survey. Once the survey was sent out to participants, follow-up e-mails were sent to encourage non-respondents to participate in the study (see Appendix E for the 2011 follow-up e-mail).

Data were collected using SurveyMonkey®, an online web-based survey application. Once the data were collected, they were exported from SurveyMonkey® into an Excel spreadsheet and then into Mathematical and SPSS for analyses. To ensure confidentiality, all data files were password protected and available only to the researcher. No personal information (individual names or school names) were included in the electronic files. All hard copies of data files were stored in a locked cabinet with no personal information.

**Data Analysis**

Both descriptive statistics and regression analysis were used to determine whether relationships existed between the academic expectations of the high schools and the frequency of incidences of academic dishonesty as well as the nature of these relationships. Descriptive statistics (frequencies, means, and standard deviations) were used to describe the sample and identify correlations between and among the variables. To address the first research question, regression analysis was used to determine the degree to which academic expectations of a high school contributed to variance in the dependent variable (academic dishonesty). To address the
second research question, a Spearman’s rank correlation coefficient (Spearman’s rho) was used to determine whether a true correlation (rather than one due to chance) existed between honor codes and instances of academic dishonesty. For the third and fourth research questions, descriptive statistics were used to reveal the participants’ perceptions about causes of academic dishonesty and whether academic dishonesty was a problem in their schools. Additionally, a Pearson r correlation coefficient was used. Table 3 summarizes the analyses used in this study.

Table 3

*Data Analysis Matrix*

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Procedure Used</th>
<th>Survey Question #s</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To what extent are the academic expectations of a high school related to the frequency of academic dishonesty as reported by high school administrators?</td>
<td>Regression on Academic Expectations</td>
<td>#5, 6, 7 (Academic Expectations) #9 (Dishonesty Scale)</td>
<td>Regression Coefficient</td>
</tr>
<tr>
<td>2. To what extent is the implementation of an honor code at a high school related to the frequency of academic dishonesty as reported by high school administrators?</td>
<td>Spearman Rho One Way ANOVA</td>
<td>#8 (Honor Code) #9 (Dishonesty Scale)</td>
<td>Spearman Rank Correlation</td>
</tr>
<tr>
<td>3. What do high school administrators perceive as the most important causes of academic dishonesty?</td>
<td>Pearson R T-tests Descriptive Statistics</td>
<td>#10 (Causes of Academic Dishonesty)</td>
<td>Correlation Coefficient Frequency Distribution</td>
</tr>
<tr>
<td>4. To what degree do high school administrators perceive academic dishonesty as an important problem in high schools?</td>
<td>Pearson R Pearson Chi-square Descriptive Statistics</td>
<td>#11 (Problem of Academic Dishonesty)</td>
<td>Correlation Coefficient Frequency Distribution</td>
</tr>
</tbody>
</table>
CHAPTER 4 FINDINGS

Purpose

This chapter includes the findings on the relationship between the high school academic expectations and the frequency of academic dishonesty as reported by high school principals and assistant principals. This chapter includes a description of the final sample, the results of the analyses for each of the four primary research questions, and additional findings.

Description of the Sample

The entire population of Virginia public high school principals was targeted for inclusion in the sample. A listing was obtained from the Virginia High School League Directory for the high school principals in the 133 Virginia school divisions. Permission was sought a priori from each of the four school divisions that indicated notification approval was required to conduct research in their division. These divisions were contacted to receive permission to administer the survey to principals per their approval process. Three of the school divisions declined permission for their administrators to participate. These school divisions elected not to participate indicating they did not see any direct benefits to their participation in the study. Therefore, principals in a total of 130 of the 133 divisions in the Commonwealth of Virginia were available to participate.

Principals were initially contacted via a postcard alerting them to the survey. Approximately one week later, a follow-up e-mail was sent to their school e-mail account. The e-mail included an invitation and explanation inviting principals to participate. The e-mail also included a link to the survey. The survey consisted of 12 questions that were answered online using the SurveyMonkey® application. Question 1 gave the principal the option to take the survey or decline to take it.
The final study sample was comprised of principals from 97% of the 133 Virginia school divisions who received the survey. A total of 267 high school principals and assistant principals were included in the survey. A total of 156 surveys were returned for a response rate of 58.4%. Of the 156 surveys received, 129 (48.3%) were useable. A total of 24 individuals declined to participate in the survey. Two surveys were excluded as a result of duplicate responses and one was excluded due to incomplete responses.

Question 2 asked respondents, *Were you the principal or assistant principal in the current school for the 2009-2010 school year.* New principals were excluded from participation unless they forwarded it to an assistant principal who had been in the building during the 2009-2010 school year. An additional 38 respondents indicated they were not serving in the capacity of principal during the 2009-2010 school year and therefore did not complete the survey. In February 2012, the survey was sent once again to those schools that did not respond to the first recruitment effort in June 2011 to increase the response rate. At this time, principals were given the option to forward the survey to an assistant principal (see appendix F for the second wave of e-mails sent in 2012). Those schools that provided a valid e-mail address in the survey or responded to the researcher via e-mail that they had completed the survey were removed from the e-mail distribution list. As a result of the second recruitment effort, the total number of usable surveys increased to 129.

**Demographics of Schools in the Sample**

Responses to question 3, *How many students attend your school as of September 30, 2009,* indicate that, of the 129 schools represented, 16% had a school enrollment of 0-499 students, 26% had 500-999 students, 27% had 1,000-1,499 students, 20% had 1,500-1,999, 11% had more than 2,000 students, and one principal did not report school size. Overall, among
participating schools, there were slightly fewer schools with enrollment below 1,000 students (n=54; 42%) compared to those schools with enrollment greater than 1,000 (n=74; 57%).

In response to question 4, *Approximately what percentage of your students are on Free and Reduced lunch as of September 30, 2009*, respondents indicate that, of the 129 schools, there were 26 (20%) schools below 20% of student enrollment on free and/or reduced lunch, 51 (40%) schools between 20-39%, 37 (29%) schools between 40-59%, 11 (9%) schools (8.5%) over 60%, and 2 (1%) schools over 80%, and two principals did not report FARMS. Table 4 provides a profile of the demographics of the schools in the sample.

Table 4
*Demographics of Schools in the Sample*

<table>
<thead>
<tr>
<th>Student Enrollment</th>
<th>Students on Free/Reduced Meals (FARMS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. of Students</td>
</tr>
<tr>
<td>0-499</td>
<td>21 (16.41%)</td>
</tr>
<tr>
<td>500-999</td>
<td>33 (25.80%)</td>
</tr>
<tr>
<td>1,000-1,499</td>
<td>34 (26.60%)</td>
</tr>
<tr>
<td>1,500-1,999</td>
<td>26 (20.31%)</td>
</tr>
<tr>
<td>2,000+</td>
<td>14 (10.93%)</td>
</tr>
<tr>
<td>No Response</td>
<td>1 (0.78%)</td>
</tr>
</tbody>
</table>

**Academic Expectations of the School**

**Rigorous Exams**

Responses to question 6, *How many seniors graduated from your school in the 2009-2010 school year*, were used in conjunction with question 7, *How many AP/IB/Cambridge exams and dual enrollments did your school administer in 2009-2010* to determine the ratio of the number of students taking the rigorous exams or enrolled in dual enrollment to the total number of seniors in the graduating class. Of the 129 participating schools, responses indicate there were 8 schools that administered no rigorous exams, 65 that administered less than one exam per
graduating senior, 30 schools that administered from 1 to 1.99 per graduating senior, and 26 schools that administered greater than two rigorous exams per graduating senior. The majority of the schools (n=73; 57%) administered less than one exam per graduating senior. A considerably smaller percentage of the schools (n=26; 20%) administered more than two exams per graduating senior. Table 5 displays the distribution of rigorous exams to number of graduating seniors.

Table 5

<table>
<thead>
<tr>
<th>Rigorous Exams/Dual Enrollments per Graduating Senior</th>
<th>No. (%) of Schools in the Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00</td>
<td>8 (6.20%)</td>
</tr>
<tr>
<td>&gt;0.00-0.99</td>
<td>65 (50.39%)</td>
</tr>
<tr>
<td>1.00-1.99</td>
<td>30 (23.26 %)</td>
</tr>
<tr>
<td>2.00-2.99</td>
<td>18 (13.20%)</td>
</tr>
<tr>
<td>3.00-3.99</td>
<td>5 (4.65%)</td>
</tr>
<tr>
<td>4+</td>
<td>3 (2.33%)</td>
</tr>
</tbody>
</table>

College Attendance

In response to question 5, *Approximately what percentage of your students go on to a two or four year college*, participants indicated there were five schools (4%) that reported less than 19% of students attended college, there were 14 schools (11%) that reported between 20-39% attended college, there were 19 schools (15%) reporting between 40-59% attended college, there were 52 schools (41%) reporting between 60-79% attended college, and there were 38 schools (30%) reporting between 80-100% of seniors attended college. The highest percentage (n=90; 70%) of respondents reported 60-100% of students attended college, while 38 (30%) reported less than 60% of students attended college. Table 6 displays the percent of students attending college after graduation as reported by participating administrators.
Table 6

Percent of Students Reported to Attend College

<table>
<thead>
<tr>
<th>Percent of Graduating Seniors Reported Going to College</th>
<th>No. (%) of Schools in the Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19%</td>
<td>5 (03.90%)</td>
</tr>
<tr>
<td>20-39%</td>
<td>14 (10.94%)</td>
</tr>
<tr>
<td>40-59%</td>
<td>19 (14.84%)</td>
</tr>
<tr>
<td>60-79%</td>
<td>52 (40.63%)</td>
</tr>
<tr>
<td>80-100%</td>
<td>38 (29.69%)</td>
</tr>
<tr>
<td>No Response</td>
<td>1 (0.78%)</td>
</tr>
</tbody>
</table>

School Honor Codes

Question 8 instructed respondents to indicate which of the six levels of honor codes exists in their schools. Table 7 indicates the options for indicating the honor code. Three principals did not respond to this question.

Table 7

Description of Honor Codes

<table>
<thead>
<tr>
<th>Level</th>
<th>Type of Honor Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No honor code</td>
</tr>
<tr>
<td>2</td>
<td>An honor code with minimal sanctions (fail assignment, parent notification, honor contract)</td>
</tr>
<tr>
<td>3</td>
<td>An honor code with suspension for repeat offenses w/o removal from a program</td>
</tr>
<tr>
<td>4</td>
<td>An honor code with suspension for first offense w/o removal from a program</td>
</tr>
<tr>
<td>5</td>
<td>An honor code with removal from the IB/AP/Cambridge or honors program for repeat offenses</td>
</tr>
<tr>
<td>6</td>
<td>An honor code with removal from the IB/AP/Cambridge or honors program for first offense.</td>
</tr>
</tbody>
</table>

Of the 126 administrators who responded to this question, 16 indicated their schools had no honor code (level 1) and 56 administrators indicated their schools had an honor code with minimal sanctions (level 2). Thirty-three administrators responded their schools had an honor code with suspension for repeat offenses (level 3), and 38 administrators reported their schools had an honor code with suspension for first offense w/o removal from a program (level 4). Twenty-nine administrators indicated their schools had an honor code with removal from the IB/AP/Cambridge or honors program for repeat offenses (level 5). Lastly, 24 administrators reported their schools had an honor code with removal from the IB/AP/Cambridge or honors program for first offense (level 6).
code with suspension for repeat offenses without removal from a program (level 3). There were nine administrators who responded their school had an honor code with suspension for first offense without removal from the program (level 4). There were 11 administrators who responded their schools had an honor code with removal from the program for repeat offenses (level 5), and one principal responded that the school had an honor code with removal from the program for a first offense (level 6). The number of schools with either no honor code or an honor code with minimal sanctions, level 1 or 2 represents the majority of the schools (n=71; 55%). The number of schools whose honor code that stipulates a suspension for a first offense (level 4) or repeat offenses (level 3) without removal from the program represents a third of the schools (n=43, 33%). The number of schools with an honor code that stipulates removal from a program for a first offense (level 5) or repeat offense (level 6) represents a small percentage of the schools (n=12, 9%). Table 8 provides a summary of the number and percent of schools for each honor code level.

Table 8

<table>
<thead>
<tr>
<th>Honor Code Levels</th>
<th>No. (%) of Schools in the Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16 (12.70%)</td>
</tr>
<tr>
<td>2</td>
<td>56 (44.44%)</td>
</tr>
<tr>
<td>3</td>
<td>33 (26.19%)</td>
</tr>
<tr>
<td>4</td>
<td>9 (7.14%)</td>
</tr>
<tr>
<td>5</td>
<td>11 (8.73%)</td>
</tr>
<tr>
<td>6</td>
<td>1 (0.79%)</td>
</tr>
<tr>
<td>No Response</td>
<td>3 (2.33%)</td>
</tr>
</tbody>
</table>

**Analysis and Findings**

The purpose of the study was to assess the relationship between academic expectations of high schools and the frequency of academic dishonesty as reported by high school
administrators. The findings from the four primary research questions as well as additional findings from the research study are reported in this section.

**Research Question 1**

*To what extent are the academic expectations of a high school related to the frequency of academic dishonesty as reported by high school administrators?*

Two measures of academic expectations of high schools were used in this study:

1. a ratio of rigorous exams to graduating seniors. The total number of International Baccalaureate (IB), Advanced Placement (AP), Cambridge, and dual enrollment (e.g., receiving high school and college credit for a class) exams (i.e., rigorous exams) is presented as a ratio of number of rigorous exams to number of graduating seniors.
2. the percent of the graduating class reported as planning to enroll in a two or four year college after graduation.

Regression analyses were conducted for the dependent variable of total cheating and the two independent variables for a school’s academic expectations. For the first measure of a school’s academic expectations (AE1–rigorous exams), the regression resulted in an R-sq value of 0.00 with a p value of 0.99 (p<.05) indicating that a school’s academic expectations as measured by rigorous exams and academic dishonesty did not predict cheating. To address the question of whether the percent of a graduating class reported enrolling in a 2- or 4-year college was a predictor of the number of instances of cheating, a regression analysis was also conducted. The analysis resulted in an R-sq value of 0.01, and a p value of 0.40 (p<.05) indicating there was no significant relationship between a schools’ percent of students enrolling in college and the incidence of cheating. See Table 9 for a summary of the regression analysis.
Table 9

Analysis of Academic Expectations—Enrollment in College Post Graduation and Percent of Rigorous Exams Taken

<table>
<thead>
<tr>
<th>Academic Expectations</th>
<th>Dependent Variable</th>
<th>R-squared</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of exams to seniors</td>
<td>Total Cheating</td>
<td>0.00</td>
<td>0.99</td>
</tr>
<tr>
<td>Enrollment in 2- or 4-year college</td>
<td>Total Cheating</td>
<td>0.01</td>
<td>0.40</td>
</tr>
</tbody>
</table>

**Research Question 2**

To what extent is the implementation of an honor code at a high school related to the frequency of academic dishonesty as reported by high school administrators?

To address this question, a Spearman rank correlation analysis was used to calculate a correlation coefficient (called Spearman’s rho) which was tested for significance. This statistic is a measure of the linear relationship between two variables. In this case, the variables are the types of honor code (which have been ranked) and academic dishonesty. The various levels of honor codes (1 to 6) were ranked for analysis to determine the correlation of honor codes and cheating. The analysis resulted in a Spearman rho correlation of 0.13 and a p value of 0.15 (p<.05) indicating there was no significant relationship between a schools’ honor code and academic dishonesty.

A one-way analysis of variance was run on the various types of honor codes to determine if there were a significant difference between the type of honor code and the variable, total cheating. The ANOVA revealed no significant difference (at the p<.05 level) between the type of honor code and cheating.
Research Question 3

What do high school administrators perceive as the most important causes of academic dishonesty?

This question was addressed by survey item 10 which asked respondents to indicate, on a 5-point Likert scale, how much they agreed that the items listed in Table 10 were contributing factors to the incidences of academic dishonest in their schools. The available responses were: *Strongly Agree* (SA); *Agree* (A); *Undecided* (U); *Disagree* (D); and *Strongly Disagree* (SD).

The administrators indicated they perceive the following factors as contributing to cheating: a fear of failure (mean = 1.98), laziness or procrastination (mean = 1.69), parents demand for good grades (mean = 2.21), a desire to keep up with others (mean = 2.21), ease of cheating (mean = 2.30), misuse of technology (mean = 2.22) and changing societal norms (mean = 2.38). The data indicate that academic expectations of the teacher (mean = 2.79) and school (mean = 2.84) as well as both the lack of an honor code (mean = 3.57) and the insufficient enforcement of an honor code (mean = 3.55) are perceived by high school administrators as factors contributing less to cheating than the other factors. (See Table 10 for the descriptive statistics for contributing factors.)
<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Agree*</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Mean</th>
<th>Std Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laziness or procrastination</td>
<td>42.19% 54</td>
<td>50.78% 65</td>
<td>3.12% 4</td>
<td>3.91% 5</td>
<td>0.00% 0</td>
<td>1.69</td>
<td>0.73</td>
</tr>
<tr>
<td>A fear of failure</td>
<td>25.00% 32</td>
<td>60.16% 77</td>
<td>7.03% 9</td>
<td>7.03% 9</td>
<td>0.78% 1</td>
<td>1.98</td>
<td>0.84</td>
</tr>
<tr>
<td>The misuse of technology</td>
<td>20.31% 26</td>
<td>51.56% 66</td>
<td>14.06% 18</td>
<td>14.06% 18</td>
<td>0.00% 0</td>
<td>2.22</td>
<td>0.95</td>
</tr>
<tr>
<td>The ease of cheating</td>
<td>19.38% 25</td>
<td>49.61% 64</td>
<td>13.18% 17</td>
<td>17.05% 22</td>
<td>0.78% 1</td>
<td>2.30</td>
<td>1.00</td>
</tr>
<tr>
<td>Parent demands for good grades</td>
<td>17.97% 23</td>
<td>55.47% 71</td>
<td>14.06% 18</td>
<td>12.50% 16</td>
<td>0.00% 0</td>
<td>2.21</td>
<td>0.90</td>
</tr>
<tr>
<td>A desire to keep up with others</td>
<td>17.97% 23</td>
<td>56.25% 72</td>
<td>12.50% 16</td>
<td>13.28% 17</td>
<td>0.00% 0</td>
<td>2.21</td>
<td>0.91</td>
</tr>
<tr>
<td>Changing societal norms</td>
<td>17.19% 22</td>
<td>49.22% 63</td>
<td>17.19% 22</td>
<td>11.72% 15</td>
<td>4.69% 6</td>
<td>2.38</td>
<td>1.07</td>
</tr>
<tr>
<td>The insufficient enforcement of an honor code</td>
<td>4.69% 6</td>
<td>14.84% 19</td>
<td>17.19% 22</td>
<td>47.66% 61</td>
<td>15.62% 20</td>
<td>3.55</td>
<td>1.11</td>
</tr>
<tr>
<td>Academic expectations of the teacher</td>
<td>4.65% 6</td>
<td>48.06% 62</td>
<td>14.73% 19</td>
<td>28.68% 37</td>
<td>3.88% 5</td>
<td>2.79</td>
<td>1.04</td>
</tr>
<tr>
<td>The lack of an honor code</td>
<td>3.15% 4</td>
<td>15.75% 20</td>
<td>17.32% 22</td>
<td>48.03% 61</td>
<td>15.75% 20</td>
<td>3.57</td>
<td>1.12</td>
</tr>
<tr>
<td>Academic expectations of the school</td>
<td>2.33% 3</td>
<td>49.61% 64</td>
<td>13.95% 18</td>
<td>30.23% 39</td>
<td>3.88% 5</td>
<td>2.84</td>
<td>1.01</td>
</tr>
</tbody>
</table>

*SA=1; A=2, U=3, D=4, SD=5
A paired t-test was also conducted on the responses from principals regarding the contributing factors to academic dishonesty. A t-test was used to compare the means of the 11 factors to determine if any significant differences between the means were present. The results indicated that significant differences existed for a majority of the factors contributing to academic dishonesty.

The means for a fear of failure and laziness or procrastination, when compared against all of the other nine factors, revealed a significant difference between all of the means. The largest differences between the means for fear of failure and laziness or procrastination existed for the following factors: academic expectations of the teacher, academic expectation of the school, the lack of an honor code, and the insufficient enforcement of an honor code. The significant differences showed that principals perceived the factors of fear of failure and laziness or procrastination as more likely causes of cheating by students at their school. As shown in Table 10 above, fear of failure and laziness or procrastination are reported as being the most important factor based on principal’s perceptions of causes of academic dishonesty. Conversely, the academic expectations of the school and teacher and the lack of and enforcement of an honor code were seen as the least important.

When the five means for a parent demands for good grades, a desire to keep up with others, ease of cheating, and the misuse of technology were compared, there were also significant differences between the means for six of the factors: fear of failure, laziness or procrastination, academic expectations of the school and teacher, and the lack of and enforcement of an honor code. The results are reported in Table 11. The greatest difference in the means between these factors was between the lack of an honor code and insufficient enforcement of an honor code. The implementation or non-enforcement of an honor code was
also shown to be the least likely factors as perceived by principals. The factor, changing societal norms, when compared against the other factors also revealed significant differences between the means for the following: fear of failure, laziness or procrastination, the academic expectations of the school and teacher, as well as the factors pertaining to the implementation of an honor code.

When the means of the academic expectations of the school and teacher were compared against the other factors, significant differences between all were found. As reported in Table 10 earlier, principals’ perceived the academic expectations of the school and teacher as among the least of the contributing factors to academic dishonesty. Additionally, the mean differences were significant for all of the factors when compared with the lack of and enforcement of an honor code.

The t-test results showed significant differences between the means for a majority of the factors. The largest differences were present between the factors pertaining to the academic environment of the school (school and teacher expectations and honor code) rather than to individual and societal factors. These results indicate school administrators perceived the school academic environment, role of an honor code, and expectations to be less important causes of cheating.
### Table 11

*Mean Differences and T-test Values of Factors Contributing to Academic Dishonesty*

<table>
<thead>
<tr>
<th></th>
<th>Fear of Failure</th>
<th>Laziness or procrastination</th>
<th>Parent demand for good grades</th>
<th>Desire to keep up with others</th>
<th>Ease of cheating</th>
<th>Misuse of technology</th>
<th>Academic expectations of teacher</th>
<th>Academic expectations of school</th>
<th>Lack of honor code</th>
<th>Insufficient enforcement of honor code</th>
<th>Changing societal norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fear of Failure</td>
<td>.276</td>
<td>-.228</td>
<td>-.213</td>
<td>-.328</td>
<td>-.244</td>
<td>-.813</td>
<td>-.860</td>
<td>-1.603</td>
<td>-1.559</td>
<td>-.394</td>
<td></td>
</tr>
<tr>
<td>Parent demand for good grades</td>
<td>-.276</td>
<td>-.528</td>
<td>-.520</td>
<td>-.625</td>
<td>-.535</td>
<td>-1.109</td>
<td>-1.156</td>
<td>-1.897</td>
<td>-1.858</td>
<td>-.701</td>
<td></td>
</tr>
<tr>
<td>Desire to keep up with others</td>
<td>.228**</td>
<td>.528</td>
<td>.008</td>
<td>-.078</td>
<td>-.008</td>
<td>-.586</td>
<td>-.617</td>
<td>-1.373</td>
<td>-1.323</td>
<td>-.165</td>
<td></td>
</tr>
<tr>
<td>Ease of cheating</td>
<td>2.725**</td>
<td>5.035***</td>
<td>.098</td>
<td>-.709</td>
<td>-.074</td>
<td>-5.780**</td>
<td>-6.378**</td>
<td>-11.739***</td>
<td>-11.187**</td>
<td>-.151</td>
<td></td>
</tr>
<tr>
<td>Misuse of technology</td>
<td>.244</td>
<td>.535</td>
<td>-.008</td>
<td>.008</td>
<td>-.070</td>
<td>-.578</td>
<td>-.625</td>
<td>-1.349</td>
<td>-1.323</td>
<td>-.150</td>
<td></td>
</tr>
<tr>
<td>Academic expectations of teacher</td>
<td>2.198**</td>
<td>5.733***</td>
<td>-.074</td>
<td>.071</td>
<td>-.846</td>
<td>-5.249***</td>
<td>-5.781***</td>
<td>-12.328***</td>
<td>-11.609**</td>
<td>-.139**</td>
<td></td>
</tr>
<tr>
<td>Academic expectations of school</td>
<td>.813</td>
<td>1.109</td>
<td>.586</td>
<td>.586</td>
<td>.488</td>
<td>.578</td>
<td>.047</td>
<td>-.772</td>
<td>-.766</td>
<td>.406</td>
<td></td>
</tr>
<tr>
<td>Lack of honor code</td>
<td>7.298***</td>
<td>10.091***</td>
<td>5.780***</td>
<td>5.405***</td>
<td>4.172***</td>
<td>5.249***</td>
<td>-.815</td>
<td>-6.862***</td>
<td>-6.451***</td>
<td>3.257**</td>
<td></td>
</tr>
<tr>
<td>Academic expectations of school</td>
<td>.860</td>
<td>1.156</td>
<td>.617</td>
<td>.633</td>
<td>.535</td>
<td>.625</td>
<td>.047</td>
<td>-.740</td>
<td>-.719</td>
<td>.453</td>
<td></td>
</tr>
<tr>
<td>Academic expectations of school</td>
<td>1.603</td>
<td>1.897</td>
<td>1.373</td>
<td>1.378</td>
<td>1.284</td>
<td>1.350</td>
<td>.772</td>
<td>.740</td>
<td>.040</td>
<td>1.175</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fear of Failure</td>
<td>Laziness or procrastination</td>
<td>Parent demand for good grades</td>
<td>Desire to keep up with others</td>
<td>Ease of cheating</td>
<td>Misuse of technology</td>
<td>Academic expectations of teacher</td>
<td>Academic expectations of school</td>
<td>Lack of honor code</td>
<td>Insufficient enforcement of honor code</td>
<td>Changing societal norms</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------</td>
<td>-----------------------------</td>
<td>------------------------------</td>
<td>-------------------------------</td>
<td>------------------</td>
<td>---------------------</td>
<td>---------------------------------</td>
<td>-------------------------------</td>
<td>-------------------</td>
<td>----------------------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Insufficient enforcement of honor code</td>
<td>1.560 ***</td>
<td>1.858 ***</td>
<td>1.323</td>
<td>1.323</td>
<td>1.242 ***</td>
<td>1.323 ***</td>
<td>.766</td>
<td>.719</td>
<td>-.040</td>
<td>-.511</td>
<td>1.173 ***</td>
</tr>
<tr>
<td>Changing societal norms</td>
<td>.394 **</td>
<td>.701</td>
<td>.165</td>
<td>.165</td>
<td>.070</td>
<td>.150</td>
<td>-.406</td>
<td>-.453</td>
<td>-1.1745</td>
<td>-1.173</td>
<td>-10.169 ***</td>
</tr>
</tbody>
</table>

***p<.001; **p<.01; *p<.05
A Pearson product-moment correlation coefficient, Pearson (r), analysis was conducted on survey item 10 to determine whether there were significant correlations between the principals’ ratings of contributing factors to academic dishonesty and the academic expectations of schools. Two significant correlations were found. First, laziness or procrastination as a contributing factor had a significant correlation of .17 [P(r) =.05] with academic dishonesty indicating a positive relationship between laziness or procrastination and academic expectations. Second, academic expectations of the school had a correlation of .20 [P(r) =.02] which was significant at the p<.05 level indicating that academic expectations of the school as a contributing factor was positively correlated with academic expectations. There were no other significant correlations between contributing factors identified by participants and academic expectations for schools.

Research Question 4

To what degree do high school administrators perceive academic dishonesty as an important problem in high schools?

This question was addressed by survey item 11 which asked respondents to indicate, on a 3-point Likert scale, to what degree they perceived academic dishonesty as an important problem in high schools relative to the other school issues listed in Table 12. The available responses were: Less Than, Same As, and More Than.
Table 12

*Importance of Academic Dishonesty Compared to Other School Disciplinary Problems*

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Less Than %</th>
<th>N</th>
<th>Same As %</th>
<th>N</th>
<th>More Than %</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>School violence</td>
<td>1.44</td>
<td>71.09</td>
<td>91</td>
<td>13.28</td>
<td>17</td>
<td>15.62</td>
<td>20</td>
</tr>
<tr>
<td>Student bullying</td>
<td>1.36</td>
<td>68.80</td>
<td>86</td>
<td>30.04</td>
<td>38</td>
<td>3.20</td>
<td>4</td>
</tr>
<tr>
<td>Substance abuse</td>
<td>1.47</td>
<td>63.49</td>
<td>80</td>
<td>26.19</td>
<td>33</td>
<td>10.32</td>
<td>13</td>
</tr>
<tr>
<td>Poor student attendance</td>
<td>1.56</td>
<td>55.56</td>
<td>70</td>
<td>33.33</td>
<td>42</td>
<td>11.11</td>
<td>14</td>
</tr>
<tr>
<td>Student conduct</td>
<td>1.67</td>
<td>43.75</td>
<td>56</td>
<td>45.31</td>
<td>58</td>
<td>10.94</td>
<td>14</td>
</tr>
<tr>
<td>Poor student achievement</td>
<td>1.63</td>
<td>42.86</td>
<td>54</td>
<td>50.79</td>
<td>64</td>
<td>6.35</td>
<td>8</td>
</tr>
<tr>
<td>Technology misuse</td>
<td>1.91</td>
<td>34.65</td>
<td>44</td>
<td>40.16</td>
<td>51</td>
<td>25.20</td>
<td>32</td>
</tr>
</tbody>
</table>

High school administrators perceived academic dishonesty as a relatively minor problem in schools compared to other issues. Over 70% of respondents reported they viewed school violence as a greater problem than academic dishonesty in their school. Similarly a high percentage of respondents viewed student bullying (69%) and substance abuse (63%) as a greater problem than academic dishonesty. A small number of respondents, less than one out of five, viewed the problems of school violence, student bullying, and substance abuse as more pressing issues than academic dishonesty. Respondents also reported they perceived student conduct, student attendance, and student achievement as either less of a problem or a problem of the same degree as academic dishonesty. Only a small number of respondents, less than one out of five, viewed these problems as a greater issue than academic dishonesty.

Technology misuse was viewed by 25% of the respondents as a greater problem than academic dishonesty; however, it was still viewed by a third of respondents as less of a problem than academic dishonesty. The highest percentage of respondents reported perceiving technology misuse as a greater problem than academic dishonesty. Technology misuse often involves cheating as well as several of the other issues, and the overlapping issues may account
for why some of the respondents identified technology misuse as a greater issue. It is evident that, when compared to other serious issues principals must confront academic dishonesty ranks considerably lower than those indicated in the survey.

An additional analysis was also conducted on survey item 11 to determine whether there were significant correlations between the principals’ ratings of school discipline problems and academic expectations of schools. There were no significant correlations between school discipline problems identified in the survey and academic expectations for schools.

Administrators’ perception of academic dishonesty as an important problem was also addressed by item 9 which asked respondents to indicate, on a 4-point Likert scale, the estimated frequency of incidences of academic dishonesty at their school on the following assignments: homework, test and/or quizzes, labs/projects, written assignments, and overall incidences of academic dishonesty. The available responses were: rarely (1), occasionally (2), frequently (3) and very frequently (4). The mean cheating score was computed for each response. The maximum mean score of 4.0 was obtained if a respondent answered very frequently for all five of the selections. A total of 52 schools (40.31%) had a mean from 1.0 to 1.9. There were 72 schools (55.81%) with a mean score of 2.0 to 2.9 and 5 schools (3.88%) had a mean score between 3.0 to 4.0. Based on these responses from principals, total cheating was considered to occur rarely, occasionally or frequently in more than 95% of the schools. The perceived degree of cheating had an overall mean of 1.99 indicating that cheating was estimated to occur occasionally. The average score for each of the types of assignments was calculated with a range of 1 to 4 for each. The mean score for each assignment was the following: homework (mean=2.30), written assignments (mean=1.99), overall incidences of academic dishonesty (mean=1.89), rests and/or quizzes (mean=1.71), and labs/projects (mean=1.65). The only type of
assignment for which multiple respondents reported that academic dishonesty occurs very frequently was homework. Table 13 reveals that, with the exception of homework, administrators rated all of the assignments similarly in the degree of perceived cheating.

Table 13

<table>
<thead>
<tr>
<th>Total Cheating Score*</th>
<th>No. (%) of Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 to 1.9</td>
<td>52 (40.31%)</td>
</tr>
<tr>
<td>2.0 to 2.9</td>
<td>72 (55.81%)</td>
</tr>
<tr>
<td>3.0 to 4.0</td>
<td>5 (3.88%)</td>
</tr>
</tbody>
</table>

*Five items were rated: rarely=1, occasionally =2, frequently=3 and very frequently=4

**Additional Findings**

A multiple regression analysis was conducted using a composite score (Y) of the number of exams per senior, the percentage of students going on to a 2- or 4-year college, the honor code score, and the percentage of students on free/reduced lunch (i.e., FARMS). The following equation was calculated to determine the impact of these variables (academic expectations of the school and the enforcement of an honor code) on the tendency towards academic dishonesty while accounting for the demographic makeup of schools as indicated by FARMS.

\[
Y \text{ (cheating)} = B1 (AE1) + B2(AE2) + B3(Honor \text{ Code}) + B4(FARMS) + E
\]

When all of the independent variables are included in the regression, no significant findings resulted. The values of R-sq. (0.04) resulted in a p-value of .07 (p>.05) indicating neither academic expectations (AE 1 and AE2) nor honor codes are significant predictors of total cheating. The value for each variable is included below in the equation which indicates that no significant relationship was observed among the variables. Table 14 summarizes the results.

\[
Y = (-.06) \text{ AE1} + (.12) \text{ AE2} + (.08) \text{ Honor Code} + (-.49) \text{ FARMS} + 1.95
\]
Table 14

*Results of Regression Analysis of Academic Expectations and Honor Code on Cheating*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>Beta</th>
<th>T</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic Expectations 1</td>
<td>-0.06</td>
<td>-0.12</td>
<td>-1.23</td>
<td>0.22</td>
</tr>
<tr>
<td>Academic Expectations 2</td>
<td>0.12</td>
<td>0.05</td>
<td>0.52</td>
<td>0.60</td>
</tr>
<tr>
<td>Honor Code</td>
<td>0.08</td>
<td>0.19</td>
<td>2.05</td>
<td>0.04*</td>
</tr>
<tr>
<td>Free/Reduced Lunch (SES)</td>
<td>-0.49</td>
<td>-0.18</td>
<td>-1.92</td>
<td>0.06</td>
</tr>
</tbody>
</table>

*Significant at the p<.05 level

An additional analysis was conducted to determine if a relationship exists between any of the factors asked in survey question 10 and those principals whose schools were in the fourth quartile for academic expectations. Those schools in the fourth quartile for academic expectations would have the highest percentage of seniors participating in AP, IB, Cambridge, and Dual Enrollment courses. A Pearson product-moment correlation coefficient or Pearson r [P(r)] was used to assess whether a relationship existed between the principals’ ratings of factors contributing to academic dishonesty and the schools in the fourth quartile, i.e., those with the highest academic expectations of students. Table 15 displays the results of the Pearson analysis. None of the following factors was significant for the schools in the fourth quartile: laziness or procrastination, parents demands for good grades, a desire to keep up with others, the misuse of technology, academic expectations of the teacher, academic expectations of the school, the lack of an honor code, and changing societal norms. However, ease of cheating had a significant correlation of -.40 [P(r) =.02] indicating a significant and inverse relationship between the higher rating of the ease of cheating and the academic expectation of a school in this quartile. Additionally, fear of failure had a correlation of .34 which approached significance [P(r) =.05] indicating that a higher rating of a fear of failure tended to be positively correlated with higher academic expectations in schools in this quartile.
Table 15

Pearson Correlations Between Factors Associated with Academic Dishonesty and Academic Expectation for Fourth Quartile Schools (n=32)

<table>
<thead>
<tr>
<th>Item</th>
<th>Correlation</th>
<th>P(r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A fear of failure</td>
<td>.34</td>
<td>.05**</td>
</tr>
<tr>
<td>Laziness or procrastination</td>
<td>.18</td>
<td>.32</td>
</tr>
<tr>
<td>Parent demand for good grades</td>
<td>-.25</td>
<td>.17</td>
</tr>
<tr>
<td>A desire to keep up with others</td>
<td>-.12</td>
<td>.52</td>
</tr>
<tr>
<td>The ease of cheating</td>
<td>-.40</td>
<td>.02*</td>
</tr>
<tr>
<td>The misuse of technology</td>
<td>-.03</td>
<td>.86</td>
</tr>
<tr>
<td>Academic expectations of the teacher</td>
<td>-.06</td>
<td>.76</td>
</tr>
<tr>
<td>Academic expectations of the school</td>
<td>.08</td>
<td>.68</td>
</tr>
<tr>
<td>The lack of an honor code</td>
<td>.28</td>
<td>.11</td>
</tr>
<tr>
<td>The insufficient enforcement of an honor code</td>
<td>-.30</td>
<td>.09</td>
</tr>
<tr>
<td>Changing societal norms</td>
<td>.15</td>
<td>.41</td>
</tr>
</tbody>
</table>

*Significant at p<.05;  **approaching significance

An additional Pearson Chi-square analysis was conducted for survey question 11. To statistically test this, responses of “Same As” in response to survey question 11 were removed. An omnibus chi-square analysis was conducted to determine if there were any significant differences between the number of “Less Than” or “More Than” responses from the expected. The relationship was significant ($X^2 = 43.20, df = 6, p=.000$), indicating that there were significant differences between the expected frequencies and observed frequencies.

The number of individual responses from principals comparing cheating to the other disciplinary problems is shown in Table 16. The responses show a significant difference between the observed and expected frequencies when all of the factors were included in the chi-square analysis. In comparison to the seven discipline issues in the survey, 81% (n=476) of respondents rated cheating as less of an important issue in comparison, while only 19% (n=108) perceived cheating to be more of a problem.. There were large differences in the reported
number of responses that cheating was less of an issue for the following six factors: school violence (n=90, 82%), student conduct (n=55, 79%), poor student attendance (n=69, 82%), poor student achievement (n=53, 86%), student bullying (n=86, 96%), and substance abuse (n=80, 86%). The only factor for which the responses were approximate to the expected frequency was the response for technology misuse (n=43, 57%), showing that principals did not perceive this to be much more or less of an issue in comparison to cheating. Overall, as reported in Table 16, principals rated academic dishonesty as less of an issue in comparison to the other disciplinary issues.

Table 16

<table>
<thead>
<tr>
<th></th>
<th>Less Than</th>
<th>More Than</th>
<th>Total (100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>School Violence</td>
<td>90</td>
<td>81.8%</td>
<td>20</td>
</tr>
<tr>
<td>Student Conduct</td>
<td>55</td>
<td>78.6%</td>
<td>15</td>
</tr>
<tr>
<td>Poor Student Attendance</td>
<td>69</td>
<td>82.1%</td>
<td>15</td>
</tr>
<tr>
<td>Poor Student Achievement</td>
<td>53</td>
<td>85.5%</td>
<td>9</td>
</tr>
<tr>
<td>Technology Misuse</td>
<td>43</td>
<td>57.3%</td>
<td>32</td>
</tr>
<tr>
<td>Student Bullying</td>
<td>86</td>
<td>95.6%</td>
<td>4</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>80</td>
<td>86%</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>476</td>
<td>81.5%</td>
<td>108</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 43.20; \text{ degrees of freedom } = 6; p < .000 \]

An additional analysis was also conducted on research question number 11 to determine whether there were significant correlations between the principals’ ratings of school discipline problems and academic expectations of schools that fell into the fourth quartile for academic expectations. The results of the Pearson correlation analysis assessing these correlations are shown in Table 17. Only poor student attendance (truancy), which had a correlation of .44 [P(r) = .01] was significantly correlated (at the p<.05 level) to academic expectations of the highest fourth quartile. There were no other significant correlations between school discipline problems
identified in the survey and academic expectations of those schools that fell into the fourth quartile.

Table 17

*Pearson Correlations between Discipline Problems and Academic Expectation of the Highest Fourth Quartile*

<table>
<thead>
<tr>
<th>Item</th>
<th>Correlation</th>
<th>P(r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>School violence (fighting)</td>
<td>-.05</td>
<td>.77</td>
</tr>
<tr>
<td>Student conduct (misbehavior)</td>
<td>.15</td>
<td>.41</td>
</tr>
<tr>
<td>Poor student attendance (truancy)</td>
<td>.44</td>
<td>.01*</td>
</tr>
<tr>
<td>Poor student achievement</td>
<td>-.17</td>
<td>.35</td>
</tr>
<tr>
<td>Technology misuse (cell phones, ipods: noncheating)</td>
<td>.25</td>
<td>.17</td>
</tr>
<tr>
<td>Student bullying (threats, harassment)</td>
<td>-.06</td>
<td>.75</td>
</tr>
<tr>
<td>Substance Abuse (drugs and/or alcohol)</td>
<td>-.02</td>
<td>.91</td>
</tr>
</tbody>
</table>

*Significant at p<.05

**Summary**

Chapter 4 reported the findings from the survey data based on the responses from high school administrators. The data were analyzed to examine the relationship of: (a) academic expectations of a high school to the frequency of academic dishonesty, and (b) the implementation of a high school’s honor code to the frequency of academic dishonesty. Additional research questions were examined to identify: (a) what high school administrators perceive as the most important causes of academic dishonesty, and (b) to what degree do high school administrators perceive academic dishonesty as an important problem in high schools. Regression analyses, analyses of correlation coefficients, and descriptive statistics were utilized to analyze the data. There was a weak relationship between the academic expectations of a high school as a contributing factor to academic dishonesty. There was no relationship found between the implementation of an honor code and the frequency of academic dishonesty. There were significant differences between the means for contributing factors to academic dishonesty as
reported by principals. Specifically, the academic expectations of the school and teacher and lack of and enforcement of an honor code were the least likely to be contributing factors as perceived by principals. Several causes of cheating were identified as important including a fear of failure, laziness or procrastination, and the ease of cheating. In comparison to other disciplinary problems, the high school administrators ranked cheating as less of a problem to address than other issues.
CHAPTER 5 DISCUSSION

This chapter includes a summary of the findings from the study along with a discussion of interpretations of the findings. The chapter also includes the limitations and delimitations and recommendations for further research.

Research Questions

The purpose of this study was to examine the relationship between the academic expectations of a high school and the frequency of academic dishonesty as reported by public high school administrators. The survey was completed by high school principals and assistant principals in public schools in the Commonwealth of Virginia. Recruitment and collection of survey data took place in two waves: June 2011 and February 2012. The study was designed to address the following four research questions:

1. To what extent are the academic expectations of a high school related to the frequency of academic dishonesty as reported by high school administrators?
2. To what extent is the implementation of an honor code at a high school related to the frequency of academic dishonesty as reported by high school administrators?
3. What do high school administrators perceive as the most important causes of academic dishonesty?
4. To what degree do high school administrators perceive academic dishonesty as an important problem in high schools?

Overview of the Study

The survey was e-mailed to 267 Virginia public high school administrators representing 97% of the 133 school divisions in the state. The initial response rate was 58.4% (n=156). Of
the 156 responses, 48.3% (n=129) were useable as 24 respondents declined to participate in the survey, one returned an unusable survey with missing data, and two were excluded because of duplication. School divisions or districts and school administrators perceive academic dishonesty as a controversial topic. McCabe et al. (2012) identified several possible explanations for administrators’ reactions to the topic including that principals feel the need to get their superintendents approval, have fear of negative publicity and parental concerns, and worry that if a problem is identified they would have to address it. Three school divisions responded to the initial e-mails sent to principals indicating the division required a research application to conduct research in the schools. Documentation was submitted by the researcher; nevertheless the three divisions elected not to have their administrators participate in the research study. The divisions indicated that participation in the study did not appear to have any direct benefits for the division as a whole. In addition, 24 principals from other divisions returned their surveys and indicated they voluntarily elected not to participate in the study. Another 38 principals indicated they did not serve in the position of principal during the 2009-2010 school year; however, they were given the opportunity to forward the survey to an assistant principal in their school who had served in the capacity of assistant principal during that time. While the reasons for not participating could have been lack of time or interest, it is possible that many potential participants did not find academic dishonesty a worthwhile area of research worthy of their time. The exclusion of two large and one medium size school division declining to participate in the research also suggests that academic dishonesty may be either too controversial or not an important area for consideration when approving studies to be conducted in the division.


**Academic Expectations and Academic Dishonesty**

The first research question sought to ascertain the extent to which the academic expectations of a high school related to the frequency of academic dishonesty as perceived by high school administrators. To address this question, the following two independent variables were used: (a) the ratio of rigorous exams to total senior population (AE1), and (b) percent of seniors enrolled in college post-graduation (AE 2). A regression analysis for both variables revealed no relationship between the academic expectations of a high school and total cheating, the dependent variable. A Pearson correlation analysis was conducted for all schools using the contributing factors to academic dishonesty and the academic expectations of the school (AE1). This analysis was also conducted for those schools in the fourth quartile for academic expectations. For all schools, the analysis revealed a positive correlation (r=.20) that was significant [P(r) =.02] for the academic expectations of the school as a contributing factor to academic dishonesty as the academic expectations increased. For those schools in the fourth quartile, the correlation, (r=.08) was not found to be a contributing factor . For all schools, the regression analysis found a correlation of .17 which approached significance [P(r) =.05] for laziness or procrastination suggesting it as a possible contributing factor to academic dishonesty and the academic expectations of the school. For schools that fell into the fourth quartile, the analysis showed a significant, negative correlation of ease of cheating, [P(r) =.02] with academic expectations and a correlation approaching significance between a fear of failure [P(r) =.05] and academic expectations. These findings corroborate the findings of research conducted by Schab (1991) that identified both a fear of failure, laziness or procrastination and the ease of cheating as three of the five causes of student cheating. The fear of failure as a factor is also supported by prior research studies (Bowers 1964, Whitley, 1998). However, Schab’s study (1991) was only
citing reasons for students cheating based on student responses and did not establish direct causation. The present study reports reasons as reported by school administrators and also does not establish direct causation. The other causes for student cheating identified by Schab (1991) (a parent demanding good grades and a desire to keep up with others) were not as strongly supported by the results of the survey responses from principals reported here. Based on research from colleges, it was found that perception of peers’ behavior was identified as the most influential contextual variable for academic dishonesty (Bowers, 1964, McCabe & Trevino, 1993). Analysis of the survey responses of the high school principals in this study (i.e., the desire to keep with others) indicated no significant correlation with academic dishonesty [P(r) = .52] and, therefore, do not support the Bowers or McCabe and Trevino results. This analysis was limited by the relative lack of participation from principals with schools that meet the criteria of high academic expectations. The cut off for the fourth quartile of academic expectations included schools with a ratio of rigorous exams to total graduating seniors greater than 1.75. The number of schools participating with high academic expectations as defined by the variable (AE1) was impacted by the school divisions that elected not to participate which had many high schools with a high ratio of rigorous exams to graduating seniors.

**Honor Codes and Academic Dishonesty**

The second research question was designed to ascertain the extent to which implementation of honor codes is related to the frequency of academic dishonesty as reported by high school administrators. The analysis of the total sample clearly demonstrated that principals do not perceive a relationship between the implementation of stronger honor codes and the frequency of academic dishonesty. This is also demonstrated by respondents rating of causes of academic dishonesty since they indicated the lack of an honor code and the insufficient
enforcement of an honor code as the least important causes of academic dishonesty. Principals viewed these two factors considerably less critical to serving as contributing factors in comparison to other factors. Whether these results are supported by the literature is unclear since most of the research on honor codes has been conducted at the college and university level. One study by Evans and Craig (1990) did report prevention techniques, such as honor codes, may be ineffective if students do not believe an honor system would work. Also, if cheating goes undetected in an honor code environment, there may be a false impression that it is working when it is not. In regards to the effectiveness of honor codes, McCabe et al (2012) reported that honor code school have consistently shown lower levels of self-reported cheating than no code schools. Lang (2013) does not support McCabe’s position regarding honor codes and is therefore not convinced on their effectiveness. This study did not observe any significant findings or support based on the perceptions of principals for the effectiveness of the use of honor codes as a possible strategy to deter cheating. In contrast, there was a significant difference between the means for lack of and enforcement of an honor code as contributing factors. This demonstrates administrators included in this study perceived that honor codes are not an effective means to address cheating. The findings in this survey also did not find any significant differences between the type of honor code and cheating, although the small sample size may have impacted these results. Whether an honor code deters cheating or other contextual factors influence cheating behavior is not made clear from the research.

**Principals’ Perceptions of Contributing Factors to Academic Dishonesty**

In the third research question, principals and assistant principals were asked to respond to a series of questions regarding their perceptions of the factors contributing to academic dishonesty. Respondents rated academic expectations of the teacher and school, lack of an honor
code, and insufficient enforcement of an honor code as the least important causes. The responses of administrators regarding the contributing factors to cheating clearly identified the students, parents, and societal behaviors as more likely to account for incidences of academic dishonesty than the expectations of the teacher or implementation of an honor code. The two highest rated factors, laziness or procrastination and a fear of failure, are both student behaviors. The expectations of others, a desire to keep up with others, and parental demands for good grades also were perceived by a high percentage of principals as contributing factors of academic dishonesty. Additionally changing societal norms was viewed by principals as an important contributing factor to academic dishonesty. The misuse of technology and ease of cheating were perceived by principals as vehicles in which students may elect to engage in cheating. It appears that the expectations of academic dishonesty established by the principal and classroom teacher are perceived by the principals as having little influence in curbing the incidences of academic dishonesty. Perhaps principals see themselves as having little to no control over this issue.

Principals rated both the lack of an honor code and/or the insufficient enforcement of an honor code as the factor that contributes least to academic dishonesty. The principals perceive these two factors as playing a very minor role in cheating and they disagree that an honor code is a possible deterrent to cheating. Apparently, the perception of principals is that external factors, individual factors, as well as societal, home and peer influences, are much more likely to be contributing factors to cheating than the academic environment and expectations within the school itself. Schab (1991) indicated laziness or procrastination and a fear of failure as reasons for cheating based on student responses, but did not establish direct causation in his study. Other contextual factors such as parents’ demands for good grades, a desire to keep up with others, the misuse of technology, and changing societal norms were rated more heavily as contributing
factors than the academic expectations established by the school or implementation of school-wide honor code. This is shown in the significant mean differences between the factors contributing to cheating in Table 11.

For schools in the fourth quartile, the ease of cheating, as a contributing factor, had a moderate relationship and is a contributing factor that school administrators may perceive to directly impact the likelihood of cheating and on which school policies may have an impact. McCabe (1999) conducted a focus group of high school students which revealed students are influenced by both individual and contextual factors. The responses from the focus group of students reported students are influenced by school rules and expectations; however, the prevailing attitude is that they generally make little to no difference in whether or not a student will cheat. There is evidence in this study that attributes the academic expectations of the school and teacher as well as the lack of and enforcement of an honor code as the least contributing factors as perceived by principals. The responses from principals indicated they were not attributing cheating to the school or academic environment, which is similar to the response of students and administrators that the existence of an honor code or efforts to combat cheating at the high school level have little to no effect in curbing the problem.

**Principals’ Perceptions of Academic Dishonesty Compared to Other Problems**

In the final research question, principals were asked a series of questions to rank academic dishonesty relative to other problems they confront. All of the issues were ranked by the school administrators as considerably higher than academic dishonesty. The research on academic dishonesty indicates cheating is a prevalent problem, since cheating is viewed by society as a significant issue throughout the research. McCabe et al. (2012) revealed that 82% of high school students admitted to engaging in some form of cheating. This is supported by other
studies conducted on the prevalence of cheating at the high school level (Josephson, 2002, 2008, 2012; Schab, 1991). Based on these responses from principals in this study, perceived rate of cheating (mean = 1.99) indicated it occurs occasionally in schools. The majority of principals (72, 56%) rated cheating as occurring between the range of occasionally or frequently in their schools; however a large number (55, 40%) rated it as only occurring rarely to occasionally. It is noteworthy that, when asked to rank cheating relative to other problems in schools, cheating was not ranked as prevalent a problem as the research suggests. The other issues that were considered greater problems, such as school violence, bullying, and substance abuse, suggest that when principals prioritize these challenges they do not consider academic dishonesty as serious of an issue. The study does show a significant relationship between the various discipline problems in the study as rated by principals relative to cheating. Overall, based on the responses from principals, cheating was viewed as less of a problem compared to other matters addressed at the school level. While cheating was not perceived as a large issue to address, it was reported to occur either occasionally or frequently by school administrators, there is indication from principals that it is an issue to be addressed. Administrators reported that cheating occurred very frequently in this study on homework in comparison to other types of assignments. The only type of assignment for which multiple respondents reported that academic dishonesty occurs very frequently was homework. There are a number of possible explanations for these responses. First, principals may expect a certain amount of academic dishonesty and, therefore, it is not perceived as important to address as other school issues because it is not viewed as a serious threat to the school. Second, incidences of academic dishonesty may not be viewed as too serious a matter by the classroom teacher (McCabe, 1999), or it is viewed as an opportunity to educate students on academic integrity (McCabe, 2012). It is therefore dealt with by the
individual classroom teacher and the academic violations may not be directly reported to the principal. Third, principals may wish to address academic dishonesty but have not had enough training or experience in how to tackle such a controversial issue (Whitley, 2002).

The response from principals regarding the use of an honor codes revealed that a majority of participating schools had a level one, no honor code (n=16, 12%), or a level two, an honor code with minimal sanctions (n=56, 43%). McCabe at al. (2012), reporting on the nature of honor codes at the secondary level, indicated that schools described an honor code that was typically a listing of penalties and statement of goals. McCabe (1999) asked a focus group of high school students about their attitudes regarding cheating and found that school policies on cheating were rarely discussed as a common theme from the study. McCabe et al. (2012) supported the use of an honor code as an effective tool to address cheating; however, they also acknowledge the difficulty in implementing them at the high school level. Lang (2013) disagreed with McCabe and states, “institutions do not need an honor code in order to foster the kind of campus discussion that will reduce cheating; they can achieve that same end through other types of campus dialogues” (p. 172). Principals either are not placing high priority on tackling instances of academic dishonesty or feel that academic dishonesty is not significant relative to other issues to respond to in a more serious manner.

In response to question 11, responses from schools in the fourth quartile of academic expectations the only discipline problem where a relationship did exist was poor student attendance. The fact that a significant positive relationship did exist for poor student attendance as a contributing factor to cheating and academic expectations may indicate this is a significant issue for schools in this quartile to address and is viewed by schools in this quartile as more serious of an issue to address than academic dishonesty. Other than poor student attendance
[r=.44, P(r) = .01], there were no significant correlations between any of the school discipline
problems examined and principals in the fourth quartile. Like the entire sample of
administrators, those in schools with high academic expectations consider academic dishonesty a
minor problem relative to other issues they face.

**Delimitations and Limitations**

There are a number of delimitations to this study. First, the convenience sample of high
school principals from the Commonwealth of Virginia rather than throughout the country is a
delimitation. Second, the selection of high schools as the area of interest is another delimitation
since academic dishonesty is relevant at all academic levels as reported by Anderman and
Murdock (2007). Third, the exclusion of private schools from the study is another delimitation,
since many children in Virginia attend private high schools and often the academic expectations
for these schools is very high. Fourth, limiting factors that impact academic dishonesty to a
schools’ academic expectations and school honor codes is a delimitation since there may be other
factors that impact academic dishonesty worthy of inclusion. These delimitations were
necessary to define clear boundaries for this research study on academic dishonesty.

There are also several limitations evident in this research study. First, the incidence of
academic dishonesty was self-reported by participating school administrators who may have felt
the need to minimize the degree of cheating or be unaware of the prevalence of cheating within
their schools (Bowers, 1964). Second, the impact of non-response sampling error, which may
impact the variance in cheating based on which schools responded to the survey, is another
limitation (Dillman, 2009). Even though all principals were invited to participate in the survey,
participation was contingent upon factors such as the time or level of interest an individual
principal may have had in the research. The survey was also administered originally to
principals; however, due to low response rate principals were provided the option to allow an assistant principal to complete the survey for their school. Third, the fact that three school divisions opted out of the research is a limitation. These school divisions represent two large and one medium size school district in the Commonwealth of Virginia and their inclusion may have had an impact on the results of the study. Finally, the survey questionnaire was created and piloted for validity and clarity; however, the instrument had not undergone rigorous testing in a research study, which is a limitation in assessing the results of the study.

**Recommendations for Further Research**

Recommendations for further research include:

1. Academic dishonesty is a broad topic and encompasses many factors. With the advancements in technology specific research on the role and impact of technology on cheating is definitely a topic for consideration. Specifically, with the increased emphasis on distance learning and on-line classes, the role of academic dishonesty in this new learning environment is an area for further research (Lathrop & Foss, 2005).

2. The role of a school honor code is another topic for consideration. This study devoted one research question to the implementation of honor codes. A follow-up study on the creation, implementation, and enforcement of honor codes at the high school level may add insight into how to deter cheating. Conducting research on schools with an honor code would be interesting to determine the degree they perceive it as being effective in curbing incidences of academic dishonesty. The adoption of effective honor codes previously used may be an effective response to academic dishonesty (McCabe et al., 2012).
3. A regional or nationwide study of academic dishonesty at those schools with a high ratio of exams to graduation seniors is another possible area for further research. Conducting research that includes only those schools with a high score on the Challenge Index (Matthews, 2005) or higher on the variable AE1, ratio of rigorous exams to graduating seniors, may provide further insight into the incidence of cheating at high performing schools.

4. Another area for further consideration is the role of the classroom teacher and academic dishonesty. While this study focused on the academic expectations of the school as a whole, a study of the role and climate of the individual classroom expectations may provide insight into what factors promote or deter cheating within the context of the individual classroom (Murdock, 2004). Evans and Craig (1990) studied cheating and found students associated cheating with their classrooms and teachers.

5. Finally, a follow-up study of principals investigating both the importance they place on combating academic dishonesty and their efforts to combat cheating may provide practitioners with assistance in identifying what realistically can be done to prevent cheating in high schools.

6. Why principals rank cheating as a lower problem relative to other school issues is another area of research for further consideration. Additionally, how cheating is ranked and categorized as a discipline problem in relationship to the other discipline problems administrators face is worthy for further research.

These recommendations are just some of the areas for consideration for further research in this field. The controversial nature of the topic and challenges in conducting research with
students has left a gap in research on academic dishonesty. There is definitely a tremendous need for further research to assist school administrators in gaining understanding and strategies to curb incidences of academic dishonesty at all levels of education.

**Recommendations for Practice**

Recommendations for practice include the following:

Based on the research, academic dishonesty is highly prevalent in schools. Principals could benefit from identifying, within their individual schools, the root causes of academic dishonesty. Increased emphasis and attention placed on the issue of academic dishonesty would assist teachers, students, and parents in understanding and thus preventing incidences from occurring. Instruction or training for educators on how to deal effectively with cheating through prevention or procedures if a violation is a recommendation (Whitley, 2002).

The implementation and enforcement of an honor code is one area to begin the conversation and dialogue about academic dishonesty within a school or campus (Lang, 2013). Defining what is and is not academic dishonesty as well as clearly defining the consequences for violations are steps in addressing the issue of academic dishonesty at the school level. Forming an academic integrity policy (Whitley, 2002) or honor code committee to review current policies and procedures as well as monitoring implementation is a possible strategy to address issues.

Identifying what preventive measures can be taken within the classroom to deter cheating, such as the use of technology to verify that work is authentic. Additionally, educating students about what constitutes cheating would be helpful in eliminating the most common forms of cheating. Specifically, establishing classroom guidelines on when collaboration is permitted on assignments and how to avoid plagiarism could be helpful strategies (McCabe et al., 2012).
The use of principal leadership in addressing this issue at their individual schools is another recommendation. Based on the results of the survey academic dishonesty is not ranked as one of the most pressing issues principals face; however, greater attention from principals in educating all parties about the issue of academic dishonesty would allow for greater dialogue and enhance strategies to curb academic dishonesty in the schools.

Summary

Academic dishonesty is an important issue for the education community to address. This study investigated academic dishonesty at the high school level to provide a better understanding of this critical issue. The research literature is clear that cheating is a common occurrence in our nation’s schools and that it starts, for most students, at the high school level or earlier (Bowers, 1964; McCabe et al., 2012). This study attempted to determine if the academic expectations of a school were related to the frequency of academic dishonesty as reported by high school administrators. The study did not find any conclusive evidence of a relationship between academic dishonesty and either the academic expectations of a school or implementation of an honor code. The study is important in that it identified high school administrators’ perceptions of the primary causes of student cheating, which were ease of cheating, laziness or procrastination, and a fear of failure. This was consistent with the research findings of Schab (1991). Additionally, the study revealed that high school administrators rank cheating as a lesser issue than other school issues they face.

The need for greater attention paid to this issue is an important one based on the numerous accounts of cheating throughout our society. The clear limitations in conducting research on cheating in all levels of society and accounting for the extent of the problem continues to be an issue (Callahan, 2004). Throughout the duration of this research, stories
pertaining to a growing epidemic of academic cheating were featured in the popular press, in newspapers, and on television. Presently, academic dishonesty is a frequent topic of conversation in schools and throughout society; however, it does not seem that anyone has identified effective prevention techniques. For example, the recent suspension of a high profile professional athlete, such as Alex Rodriguez, for doping in baseball is an example of those willing to cheat to get ahead in their profession. Examples are reported daily in the press of both individuals and institutions engaging in unethical behavior. The reason this topic is so critical is because schools are the starting point for the education for students about the importance of being honest and engaging in ethical behavior. The need to begin education and prevention on this topic is critical, since today’s high school students will be the future role models in our nation. As we begin to advance as a society and gain increasing access to information through technology, how we educate students about ethical issues and integrity is critical. It is up to educational leaders to make this a priority, and begin to devote more attention to effective prevention techniques. This study will hopefully lead to further emphasis and investigation on educating students, parents, and educators about the importance of addressing the issue of academic dishonesty in their schools.
REFERENCES


Mathematica, Version 9.0 [Computer software]. Champaign, IL: Wolfram Research


APPENDICES

Appendix A     Survey
Appendix B     IRB Approval Letters
Appendix C     Postcard Invitation to Participate
Appendix D     2011 E-mail
Appendix E     2011 Follow-up E-mail
Appendix F     2012 E-mail
Appendix A Survey

1. Academic Dishonesty

This survey is being administered to the approximately 300 high school principals in the state of Virginia. The survey may be completed by a principal or assistant principal in the building at an individual high school. The research study is intended to assess the impact of the academic expectations in a school on the frequency of cheating as reported by high school principals. Additionally, based on responses from high school principals the level of importance of the problem of academic dishonesty and potential causes will be investigated.

1. Please return the survey regardless of whether you choose to participate. Check below all applicable items.
   - [ ] I decline to participate in the survey.
   - [ ] I would like a summary of the survey's findings. Please e-mail them to me at the following e-mail address:

   E-mail

2. Were you the principal or an assistant principal in your current school for the 2009-2010 school year?
   - [ ] Yes, please continue
   - [ ] No, stop here and return form

3. How many students attend your school as of September 30, 2009?

4. Approximately what percentage of your students are on Free and Reduced lunch as of September 30, 2009?

5. Approximately what percentage of your students go on to a two or four year college?

6. How many seniors graduated from your school in the 2009-2010 school year?

7. How many AP/IB/Cambridge exams did your school administer in 2009-2010?
   - AP examinations
   - IB examinations
   - Cambridge examinations
   - Dual enrollment
   - Other (please specify)
8. Please select which of the following best describes the honor code at your high school?

There is presently:

- 1. No honor code
- 2. An honor code with minimal sanctions (fail assignment, parental notification, honor contract)
- 3. An honor code with suspension for repeat offenses w/o removal from a program
- 4. An honor code with suspension for first offense w/o removal from a program
- 5. An honor code with removal from the IB/AP/Cambridge or honors program for repeat offenses
- 6. An honor code with removal from the IB/AP/Cambridge or honors program for first offense

Other (please specify):

9. Please select from the following to identify the estimated frequency of incidences of academic dishonesty at your school on the following assignments:

Cheating Occurs on:

<table>
<thead>
<tr>
<th></th>
<th>Rarely</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Tests and/or Quizzes</td>
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<tr>
<td>Labs/Projects</td>
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<tr>
<td>Written Assignments</td>
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<tr>
<td>Overall Incidences of</td>
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<tr>
<td>Academic Dishonesty</td>
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</tbody>
</table>
10. Please rate how much you agree that the following are contributing factors to the incidences of academic dishonesty in your school?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>A fear of failure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Laziness or procrastination</td>
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<tr>
<td>Parent demands for good grades</td>
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<tr>
<td>A desire to keep up with others</td>
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<tr>
<td>The ease of cheating</td>
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<tr>
<td>The misuse of technology</td>
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<td></td>
</tr>
<tr>
<td>Academic expectations of the teacher</td>
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<td></td>
</tr>
<tr>
<td>Academic expectations of the school</td>
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<tr>
<td>The lack of an honor code</td>
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<tr>
<td>The insufficient enforcement of an honor code</td>
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<tr>
<td>Changing societal norms</td>
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<tr>
<td>Other (please specify)</td>
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</tbody>
</table>

11. To what degree do you perceive academic dishonesty as an important problem in high schools relative to the other school issues you encounter? Please make one selection for each issue to indicate if academic dishonesty is more, less, or the same as in importance as the seven school problem that are listed.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Less than</th>
<th>Same as</th>
<th>More than</th>
</tr>
</thead>
<tbody>
<tr>
<td>School violence (fighting)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Student conduct (misbehavior)</td>
<td></td>
<td></td>
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<tr>
<td>Poor student attendance (truancy)</td>
<td></td>
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<td></td>
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<tr>
<td>Poor student achievement</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Technology misuse (cell phones, ipods: non-cheating)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Student bullying (threats, harassment)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Substance abuse (drugs and/or alcohol)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
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</tbody>
</table>

12. Please provide any additional comments on the topic of academic dishonesty:
MEMORANDUM

DATE: May 5, 2011

TO: Walt Mallory

FROM: Virginia Tech Institutional Review Board (FWA0000572, expires October 26, 2013)

PROTOCOL TITLE: The Relationship Between the Academic Expectations of a High School on the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia

IRB NUMBER: 11-388

Effective May 5, 2011, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the new protocol for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/paoss/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: Expedited, under 45 CFR 46.110 category(ies) 7
Protocol Approval Date: 5/5/2011
Protocol Expiration Date: 5/4/2012
Continuing Review Due Date*: 4/20/2012
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:
Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.
MEMORANDUM

DATE: February 15, 2012

TO: Walt Mallory

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)

PROTOCOL TITLE: The Relationship Between the Academic Expectations of a High School on the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia

IRB NUMBER: 11-388

Effective February 15, 2012, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: Expedited, under 45 CFR 46.110 category(ies) 7
Protocol Approval Date: 5/5/2011
Protocol Expiration Date: 5/4/2012
Continuing Review Due Date*: 4/20/2012

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:
Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.
MEMORANDUM

DATE: April 11, 2012

TO: Walt Mallory, Richard Nichols

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires May 31, 2014)

PROTOCOL TITLE: The Relationship Between the Academic Expectations of a High School on the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia

IRB NUMBER: 11-388

Effective May 5, 2012, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the continuation request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: Expedited, under 45 CFR 46.110 category(ies) 7
Protocol Approval Date: 5/5/2012 (protocol’s initial approval date: 5/5/2011)
Protocol Expiration Date: 5/4/2013
Continuing Review Due Date*: 4/20/2013
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:
Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.
MEMORANDUM

DATE: May 5, 2014

TO: Walt Mallory, Richard Duane Nichols, Paul P Parker

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)

PROTOCOL TITLE: The Relationship between the Academic Expectations of a High School on the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia

IRB NUMBER: 11-388

Effective May 5, 2014, the Virginia Tech Institution Review Board (IRB) Chair, David M Moore, approved the Amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

http://www.irb.vt.edu/pages/responsibilities.htm

(Please review responsibilities before the commencement of your research.)

PROTOCOL INFORMATION:

Approved As: Expedited, under 45 CFR 46.110 category(ies) 7
Protocol Approval Date: May 5, 2014
Protocol Expiration Date: May 4, 2015
Continuing Review Due Date*: April 20, 2015

*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY
An equal opportunity, affirmative action institution
Appendix C Postcard Invitation to Participate

May 31, 2011

Dear High School Principal:

I am conducting a research study as part of my doctoral studies at Virginia Tech. My research requires the participation of fellow principals in the state of Virginia. The title of my study is “The Relationship between the Academic Expectations of a High School on the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia.” As one of the high school principals in the state of Virginia you are a part of the population being surveyed.

The survey questionnaire is short, consisting of 12 questions and should take less than ten minutes to complete. The survey may be completed at home, work or wherever you have access to a computer. The survey will be sent to you in approximately one week at your school e-mail address with a link to the survey.

I hope you are willing to participate and please do not hesitate to contact me if you have any questions.

Richard Nichols,
June 7, 2011

Dear Principal:

I am conducting a research study as part of my doctoral studies at Virginia Tech. My research requires the participation of my fellow principals in the state of Virginia. The title of my study is “The Relationship between the Academic Expectations of a High School on the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia.” My research questions will examine whether a relationship exists between the academic expectations of a high school and academic dishonesty. Further, the principal’s perception of the causes of cheating and how large of a problem it is will be investigated. This study will enable educational administrators to assess how the academic expectations of a school impacts academic dishonesty, potential causes for academic dishonesty and the scope of the problem at the high school level.

As one of 308 high school principals in the state of Virginia selected to participate you are a part of the population being surveyed. The survey questionnaire is short, consisting of 12 questions and should take less than ten minutes to complete. The survey may be completed at either home or work, or wherever you have access to a computer.

https://www.surveymonkey.com/s/WXFQ35F

The survey is entirely confidential. There are no risks to completing this survey and all data will be stored confidentially and individual schools will not be identified. If you would like access to the dissertation results I will share them with you upon request once the study is completed. Your participation is voluntary and if you are unsure or uncomfortable answering a question please skip it and continue. This research has been approved and reviewed by the VT Institutional Review Board and if you have questions about your rights as a participant please contact IRB Chair, Dr. David M. Moore at (540) 231-4991 or moord@vt.edu.

By completing the survey administered online you are acknowledging the following: “I have read the consent form and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent.”

Sincerely,

Richard Nichols
Subject: Dissertation Survey

Date: Tue, 14 Jun 2011 08:12:27 -0400

Dear Colleagues,

I am currently enrolled as a doctoral student at Virginia Tech and am conducting a study on Academic Dishonesty. The title of my study is “The Relationship between the Academic Expectations of a High School on the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia.”

I am surveying all of the high school principals in Virginia and would appreciate your support. Attached is an explanation of my study and approval from Virginia Tech IRB to conduct this study. Additionally, I would be happy to answer any questions you may have regarding the survey.

To participate please click the link below. Your survey results will remain anonymous and confidential. It should only take approximately 10 minutes to complete this survey.
http://www.surveymonkey.com/s/WXFQ35F

I appreciate your participation and support,

Richard Nichols
Appendix F 2012 E-mail

Richard Nichols 2/27/2012 9:29 AM >>>

Dear Principal:

I am in need of your support to complete my dissertation. If you do not have time or unable to complete the survey I would appreciate you forwarding it to one of your assistant principals to complete. I have over 100 responses thus far, but am in need of additional participants at this time to close out my survey.

I am currently enrolled as a doctoral student at Virginia Tech and am conducting a study on Academic Dishonesty. The title of my study is The Relationship between the Academic Expectations of a High School on the Frequency of Academic Dishonesty as Reported by High School Principals in Virginia.

I am surveying all of the high school principals (or assistant principal) in Virginia and would appreciate your support. Attached is an explanation of my study and approval from Virginia Tech IRB to conduct this study. Additionally, I would be happy to answer any questions you may have regarding the survey.

To participate please click the link below. Your survey results will remain anonymous and confidential. It should only take approximately :10-:15 minutes to complete this survey.

http://www.surveymonkey.com/s/WXFQ35F

I appreciate your participation and support,

Richard Nichols