Moral Foundations and Student Perceptions of Academic Dishonesty: A Mixed Methods Study

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Digital Object Identifier: https://doi.org/10.13023/etd.2023.253

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MORAL FOUNDATIONS AND STUDENT PERCEPTIONS OF ACADEMIC
DISHONESTY: A MIXED METHODS STUDY

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DISSERTATION

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A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Education in the
College of Education
at the University of Kentucky

By
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Lexington, Kentucky
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2023

ABSTRACT OF DISSERTATION

MORAL FOUNDATIONS AND STUDENT PERCEPTIONS OF ACADEMIC
DISHONESTY: A MIXED METHODS STUDY

This mixed methods study explored students' hypothetical choices of behavior in a series of ten academic vignettes. In addition, it examined student judgments of academic behaviors as acceptable or dishonest. Finally, it compared scores on the Moral Foundations Questionnaire-2 to the importance of factors that might influence student behavioral choices in real world scenarios and explored the differences in perceptions among demographic groups.

Twenty-five undergraduate students participated in the study. In a semi-structured interview, each student discussed ten academic vignettes: predicting their own hypothetical behavioral choice, judging target behaviors as honest or dishonest, and identifying factors that would most influence their choice of behaviors. Students also completed the Moral Foundations Questionnaire-2.

Data analysis showed that most of the ten target behaviors were judged as dishonest by most students; however, some students were willing to engage in behaviors that they had labeled as dishonest. Students' choices of factors that most influenced their behaviors were weakly positively related to their scores on the Moral Foundations Questionnaire-2. Some differences were found between demographic groups in perceptions, choices, and MFQ-2 scores.

KEYWORDS: Academic Dishonesty, Moral Foundations Theory, Concept Formation, Moral Reasoning

Carla Spires Hargus

May 11, 2023
Date

MORAL FOUNDATIONS AND STUDENT PERCEPTIONS OF ACADEMIC
DISHONESTY: A MIXED METHODS STUDY

By

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May 11, 2023
Date

DEDICATION

To my father who was so proud of the educational achievements of his children
To my mother who loved books
To Jeff who loves words as much as he loves cars
To Grant and Hallie who joined me in The Great Conversation
And to Hibiki – my favorite bilingual baby
With much love and many thanks to all of you

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CHAPTER 1: INTRODUCTION

Background

Students in higher education are tasked with behaving in honest and upstanding ways to achieve academic goals. Part of that task includes making choices about behaviors that reside in the hazy space between honesty and dishonesty. How do students make decisions when faced with choices that lead to academic success yet possibly cross moral boundaries? Why do some individuals believe that certain acts are wrong, while other individuals believe that the very same acts are permitted? This concurrent mixed methods study was an exploration of individual moral foundations as described in Moral Foundations Theory (Atari et al., 2022; Graham et al., 2009; Haidt, 2001, 2012; Haidt & Graham, 2007; Haidt & Joseph, 2004), and if/how these moral foundations are related to an individual's judgments regarding academic dishonesty, a concept that can be understood using principles from concept formation (Medin & Schaffer, 1978; Medin & Smith, 1984; Rosch, 1973; Smith & Minda, 1998) .

The aim of this study was to consider the fuzzy nature of academic dishonesty as a concept and to examine the degree to which individual moral worldviews further complicate the ability to attain consensus regarding which academic behaviors are morally acceptable and which are not. The goal was not to arrive at a clear definition of academic dishonesty or to guide students and faculty regarding the appropriateness of specific behaviors. That has been attempted by many researchers with little success (Aaron et al., 2011; Hughes & McCabe, 2006; Schmelkin et al., 2008). Instead, the goal of this research was to explore the fact that fuzzy concepts are difficult to define and that the elusive nature of academic dishonesty as a definable concept makes it difficult for

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faculty and students alike to make decisions regarding the permissibility of various behaviors. Further, the goal of this study was to identify different moral worldviews that students and faculty hold and to examine the ways in which those worldviews are related to individual judgments related to academic dishonesty and their willingness to engage in questionable behaviors. Situated within the constructs of morality research, Moral Foundations Theory, and ideas from concept formation, this mixed-methods study was an attempt to examine how individuals who rely on specific moral foundations to underpin their moral reasoning will judge a variety of academic actions and predict their own hypothetical behavior.

The quantitative strand of this study was partially accomplished by using the Moral Foundations Questionnaire-2 (Atari et al., 2022) to measure each student's most dominant moral foundations. In addition, interview data was quantified by counting responses to an initial behavioral choice and a forced-choice interview question related to moral foundations, and by counting answers to a forced-choice question judging the dishonesty of a specific act. Scores on the MFQ-2 were compared to forced-choice answers to see if a correlation existed between moral foundations and factors that influenced students' choice of academic behaviors. The qualitative strand consisted of the coding and analysis of interview data in order to explore decision making related to academic dishonesty in greater detail and the relationship between moral foundations and academic decision making.

Significance

Academic dishonesty is a recognized problem within academia and has always been so. As far back as ancient China, accounts tell of widespread instances of cheating

related to the civil service exam, where test takers were separated from each other and were searched for unauthorized materials, with the penalty for cheating sometimes being death to both the test taker and administrator (Brickman, 1961; Bushway & Nash, 1977; Danielsen et al., 2006). Suen & Lu (2006) explain that prospective test takers obtained copies of essays that had previously attained passing scores, memorized the essays verbatim, and reproduced them when taking the exam. The Chinese civil service exam took place for hundreds of years, and for the entirety of that period, test takers found ways to cheat, from hiring surrogates to take the exam to sneaking cheat notes inside their clothing (Suen & Yu, 2006).

As early as 1961, university faculty lamented the fact that students engaged in cheating by reading abridged versions of full works, by plagiarizing, by paying ghost students to write papers for them, and by a variety of test cheating methods (Brickman, 1961). Brickman describes faculty who "wink and recall what they got away with in their younger years" (p. 412), acknowledging that even faculty admit to past academic infractions.

The first major American study of academic dishonesty at the college level was done by William Bowers in 1964. Regarding the problem of academic dishonesty, Bowers stated that "although other forms of misconduct may cause problems on the campus and represent failure to maintain standards of conduct, they do not contradict the fundamental values of the institution" (Bowers, 1964 p.1). In Bowers' research, university administrators and student body presidents rated academic dishonesty second only to "drinking, partying, and disorderly conduct" (p.14) as the most significant problem at their universities. Bowers' survey of over 5000 students found that 75%

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admitted to committing some form of academic dishonesty. Thirty years later, McCabe and Trevino used a similar survey and found that 66% of surveyed students admitted to committing dishonest behaviors (McCabe & Trevino, 1993). In both studies, behaviors ranged from very serious (taking an exam for another student) to those that might be considered less serious (plagiarizing a few words). In 2005, McCabe, a Rutgers professor and a leading scholar in the field of academic integrity, completed another study which surveyed more than 80,000 students over three years and found that 20% of college students admitted to committing serious acts of exam cheating, and one-third or more admitted committing less severe types of exam cheating. In addition, he found that up to one-third had committed various types of plagiarism (McCabe, 2005). While substantial, McCabe's 2005 study found less cheating than his previously mentioned research and Bowers' 1964 study. This may be due to the difficulty in defining what academic dishonesty is and in judging severity.

Though it is agreed that academic dishonesty is a serious issue in higher education, research shows that students and faculty alike struggle to define academic dishonesty and to determine which behaviors are or are not allowed. In general, students have a more lenient view than faculty regarding which behaviors are dishonest and what should be done when dishonesty is detected (Aaron et al., 2011; Bens, 2010; Brimble & Stevenson-Clarke, 2005; Hughes & McCabe, 2006; Schmelkin et al., 2008; Stern & Havlicek, 1986). In addition, there is also lack of agreement within the student population and within the faculty population regarding the nature of academic dishonesty and which behaviors are or are honest (Josien et al., 2014; Schmelkin et al., 2008).

What is missing from the literature is research addressing WHY there is a lack of agreement in defining academic dishonesty. There seem to be two main reasons. One is related to the nature of the concept itself and the other is related to individual differences in the understanding of morality among those who are attempting to define the concept. The study of concept formation, from the discipline of cognitive psychology, leads to the assumption that academic dishonesty is a fuzzy concept (Belohlavek & Klir, 2011). Accepting this assumption leads to another assumption - that academic dishonesty as a concept will by nature be difficult to define. When a fuzzy moral concept is being considered by individuals with differing moral worldviews, the understanding of the concept becomes even more varied. In combination, these two factors help explain why it is nearly impossible to arrive at a consensus regarding specific behaviors and whether they are permitted.

This phenomenon also helps to explain why there is such variation in researchers' attempts to quantify how much academic dishonesty is occurring. For example, research done in medical schools asking students if they have committed academic dishonesty has resulted in as few as 5% (Baldwin et al., 1996) admitting to cheating and as many as 58% (Sierles et al., 1980) who claim to have cheated. The wide variations in these percentages can be understood if we realize that individual differences in perceptions lead to equally wide variations in reported rates of cheating. Subjects who have a very broad view of dishonesty may feel that they have cheated, while those with a narrower view may view the exact same actions as permissible, leading them to report that they have NOT cheated. While truthfulness (or lack thereof) in self-reporting may explain some of the enormous

variance in reported rates of cheating, differences in moral perception may also play a major role in the differences in self-reported rates.

Furthermore, variance in attempts to operationalize academic dishonesty and to determine which behaviors are or are not permitted lead to miscommunications between faculty and students and a disconnect in expectations on the part of both faculty and students. An understanding of individual moral foundations and how they affect the perception of academic dishonesty is useful in helping faculty and students alike to understand the perspective of the other. This understanding can aid faculty in developing syllabi that address common student and faculty perceptions and prevent accidental infractions. An awareness that academic dishonesty is a fuzzy concept that is further complicated by varied understandings among individuals can prove helpful in promoting conversations between faculty and their students to reduce the instances of dishonest behaviors in the classroom.

In addition to the lack of literature that attempts to explain the dissensus regarding academic dishonesty, there is also a lack of research that applies Moral Foundations Theory (Haidt, 2012) to the study of academic dishonesty. While a number of studies have been done correlating MFQ scores with a variety of philosophies and behaviors (Amin et al., 2017; Enke, 2020; Graham et al., 2009; Kennedy et al., 2021; Nilsson, 2023; Yi & Tsang, 2020)), almost no research has been done correlating MFQ scores with academic dishonesty. One such study (Sutarimah et al., 2020) used the Moral Foundations Questionnaire developed by Graham et al. (2011) as one of several predictive instruments related to academic dishonesty. Sutarimah et al. (2020) claim that their research "is the first to examine moral foundations as antecedents of academic

dishonesty" (p. 400). The current study is an attempt to add to the limited literature in this area.

To revisit the goal of this research - this dissertation was not an attempt to arrive at a universal definition of academic dishonesty, nor was it an attempt to come to agreement on which behaviors are dishonest and which are not. In contrast, the purpose of this mixed methods study was to explore the lack of consensus in classifying academic behaviors as honest or dishonest and to further understand the nature of that ambiguity as displayed by undergraduate students. A further purpose was to explore how undergraduate students with differing moral worldviews might predict their own academic behaviors, and in doing so, to further understand individual perceptions of identical behaviors.   In this study, the Moral Foundations Questionnaire-2 was used to measure the moral foundations preferred by individual undergraduate students. Concurrently, the views of those students regarding questionable academic behaviors were explored using semi-structured interview vignettes. Responses to the vignettes allowed a better understanding of students' moral thinking and shed light on the ways in which moral foundations were related to moral reasoning.

Research Questions

This study addressed the following questions:

1. Which specific academic behaviors are judged as dishonest by students? Why?
2. Are students willing to engage in behaviors that they have labeled as dishonest? Why?
3. Which foundations from Moral Foundations Theory are most relied on by students when predicting their own behaviors in academic vignettes?
4. Is there a relationship between scores on MFQ-2 subscales and forced choice foundations related to Moral Foundation Theory by students considering academic vignettes, and if so, what is the nature of the relationship?

5. How are demographic categories associated with MFQ-2 scores or with responses to academic vignettes?
6. In what ways do open responses to academic vignettes contribute to a richer understanding of the relationship between preferred moral foundations as measured by the Moral Foundation Questionnaire-2 and reasoning about academic behaviors?

The following section of this paper will situate this research question within three broader frameworks: morality research, Moral Foundations Theory as proposed by Haidt and others, and concept formation principles from cognitive psychology. It will further examine the existing research related to defining academic dishonesty and categorizing behaviors as dishonest or not.

CHAPTER 2: THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Before situating this research within three main contexts - morality research, Haidt's Moral Foundations Theory, and concept formation - it is important to examine previous attempts to define academic dishonesty and previous attempts to determine if specific actions are or are not examples of dishonest behaviors.

Defining Academic Dishonesty

It should be noted that the terms academic dishonesty and cheating are used interchangeably in this paper, which is common in the literature (Aluede et al., 2006). The opposite of academic dishonesty is academic integrity, and academic integrity must be understood in order to understand academic dishonesty (Gallant & Drinan, 2006). The academic ombud page at University of Kentucky, which is where this study took place, describes academic integrity as acknowledging sources, using original ideas, maintaining honesty in exams, collaborating appropriately, and accurately reporting research (https://ombud.uky.edu/students/what-cheating).

Since most universities provide a description of academic integrity, it is surprising that there exists a need to further define academic dishonesty, or to clarify misconceptions that exist, or to resolve discrepancies among individual opinions. However, numerous studies show that there is no clear definition of academic dishonesty that is accepted by faculty and students alike (Aluede et al., 2006; Bates et al., 2005; Schmelkin et al., 2008). In addition, academic dishonesty is defined differently between institutions, and often between departments within the same institution (Bretag et al., 2014; McCabe et al., 2006; Witherspoon et al., 2010). Bretag et al. (2014) argue that it

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is difficult for requirements to be articulated to students when there are varied understandings of what academic dishonesty is.

Student and Faculty Differences

Much of the existing scholarship related to defining academic dishonesty focuses on differing judgments between students and faculty regarding behaviors that might be dishonest. (Aaron et al., 2011; Hughes & McCabe, 2006; Schmelkin et al., 2008; Stern & Havlicek, 1986).   For example, Hughes and McCabe (2006) discovered discrepancies between students and faculty judgments when surveying the seriousness of behaviors that might be considered dishonest. Of 25 behaviors surveyed, students and faculty agreed on 18, but for six of the behaviors, there was disagreement between students and faculty. Faculty felt that the six behaviors were seriously dishonest, while students did not.   In another study, students were less likely to think that gaining access to exam questions in advance was cheating, while faculty generally disagreed (Schmelkin et al., 2008). In fact, most research shows that students have a more lenient view of behaviors that might be considered dishonest than do faculty (Aaron et al., 2011; Bens, 2010; Brimble & Stevenson-Clarke, 2005; Hughes & McCabe, 2006; Schmelkin et al, 2008; Stern & Havlicek, 1986). Research shows, however, that students and faculty tend to have a more similar understanding of dishonesty when behaviors are exam related than when behaviors are related to correct writing practices, such as paraphrasing and proper citations (Barrett & Cox, 2005; Bens, 2010; Park, 2003)). Stern & Havlicek (1986) attribute these differences in opinion to the educational and experiential gulf that exists between students and faculty.

While these findings are significant, ethical research that studies faculty and their understanding of academic dishonesty in their own scholarly practice is equally important. Certainly, a professor's own practice of academic integrity is related to his/her understanding and enforcement of honest student behavior. The research that is available shows that faculty have their own struggles with academic dishonesty, as reflected in "teaching, scholarship, and service" (Tabsh et al., 2012). Faculty members have been found guilty of plagiarism, manipulation of data, and falsifying resumes, among other questionable behaviors (Tabsh et al., 2012).   When surveyed about ethical behaviors, most faculty tend to agree that blatant behaviors are unethical. These include breaching confidentiality, employing unfair grading practices, and presenting student work as their own (Tabachnick et al., 1991).   Less blatant behaviors show more varied opinions (Kidwell & Kidwell, 2008; Robie & Keeping, 2004; Tabachnick et al., 1991). In a survey by Tabachnick et al. (1991) 90% of the 483 respondents admitted to teaching when unprepared and to teaching material that they had not mastered themselves. The faculty members did not, however, universally agree that these admitted behaviors were unethical. Ten items out of the 63-item survey were considered "controversial," with faculty judgment varying widely regarding the ethicality of the action. Perhaps there is a blurring of the line between actions that are unprofessional and/or less than conscientious, and those that are unethical or that constitute academic dishonesty. For instance, in a 2011 survey by Aaron et al., researchers were surprised that radiologic science faculty admitted three times more "unprofessional behaviors" than students admitted (p. 138). Upon closer study, the most common questionable behaviors admitted by faculty were "taking an extended lunch break and stealing hospital scrubs" (p. 138).

While these may not be ethical or professional behaviors, they probably do not fall into the category of academic dishonesty, even though they occur in an academic setting. Tabsh et al. (2012) assert that most of the incidents of unethical practices by faculty are not committed purposefully, but because they do not fully understand that their behaviors are problematic.

It is difficult, however, to dismiss faculty behaviors as accidental when they are blatant and repeated behaviors that contribute to the academic dishonesty of their students. A 2004 study of medical students found that faculty provided test answers to students, allowed textbooks into testing environments, ignored acts of cheating in their classrooms, and passed students who had not earned passing grades (Gitanjali, 2004). These widely varied behaviors do not seem to indicate a misunderstanding of academic dishonesty, but a lack of commitment to ethical behavior.

International Differences

Academic dishonesty is not only an American phenomenon (Bretag et al., 2014). However, to some degree, academic dishonesty is understood differently in different parts of the world (Ehrich et al., 2016; Hu & Lei, 2015; Song-Turner, 2008; Yang, 2016). Defining and perceiving academic dishonesty is influenced by cultural differences (Chien, 2014; McCabe et al., 2008; Moten et al., 2013). For American faculty, an understanding of how their international students view academic integrity is important since research has found that international students cheat at a higher rate than do domestic students (Birchard, 2011; Bretag et al., 2014; Fass-Holmes, 2018; D. L. McCabe et al., 2008; Song-Turner, 2008). A 2015 study found the highest rates of

cheating in male international students majoring in difficult fields such as computer science and engineering (Bertram Gallant et al., 2015).

One interesting observation by researchers is the fact that cheating behaviors are more prevalent in collectivist cultures as compared to individualistic cultures (Chien, 2014; Lin & Wen, 2007; McCabe et al., 2008). In a study comparing American students to Lebanese students, the cheating rate was significantly higher among the Lebanese students (McCabe et al., 2008). The authors argue that Lebanese children are socialized from a young age to help one another solve difficult problems, and this tendency follows them into the classroom. They argue that it is not practical or possible to expect students and faculty from collectivist cultures to share the Western view of collaboration (McCabe et al., 2008).

As in the U.S., there is disagreement among students and faculty in other countries when attempting to define academic dishonesty. In an Australian study, students were in close agreement among themselves regarding which actions were permissible, but students' views were not in agreement with university policy (Brimble & Stevenson-Clarke, 2005). Similar to U.S. findings, Brimble and Stevenson-Clarke (2005) found that students in four Australian universities regarded academic dishonesty less seriously than did faculty. Australian students and faculty particularly disagreed regarding research integrity, with half of students minimizing the seriousness of falsifying research findings, but less than one percent of faculty doing so. In the same study, students recommended less serious penalties for cheating than did faculty (Brimble & Stevenson-Clarke, 2005).

Plagiarism, in particular, is differently viewed in non-Western cultures than in Western cultures (Chien, 2014; Razek, 2014).   In the West, borrowing the words and ideas of others is not an acceptable practice (Simpson, 2016). However, in some countries this practice is considered flattering and changing words is considered offensive (Chien, 2014; Song-Turner, 2008). In addition, citing sources is not expected in Asian cultures as it is in Western cultures. Memorizing, reciting, and copying are encouraged in Asian cultures as a way for students to practice good grammar (Chien, 2014). In China it is common for faculty to encourage students to use the words of others, and Chinese schools do not teach students to cite in the style of Western writing (Zheng & Cheng, 2015). Zheng and Cheng say that when they began study in America, they were intimidated by orientation sessions that described punishments for failure to cite correctly. Hu and Lei suggest that Chinese students can identify "blatant" plagiarism, such as copying text verbatim, but that they do not recognize "subtle" forms of plagiarism, such as paraphrasing without citing (Hu & Lei, 2015).

Students from Spain, the UK, Bulgaria, Croatia, African countries, and Arab countries have also been found guilty of plagiarism (Alghamdi et al., 2018; Pupovac et al., 2008; Teixeira & de Fátima Oliveira Rocha, 2010).   Eastern European students feel less informed regarding plagiarism and its implications than do students in the UK, suggesting that faculty should be aware that students from other countries may require additional support to avoid plagiarizing (Mahmud et al., 2019).

General Definition vs Exemplars

Finally, it is important to recognize that the task of defining academic dishonesty can take two forms.   First, an overall definition of academic dishonesty can be

attempted.   This form of understanding academic dishonesty is related to the classical view of concepts, in which a concept can be understood by the features that define it. Concept formation, as a part of cognitive psychology, will be discussed later in this section of the paper. Second, it is possible to use exemplars to attempt to demonstrate the variety of behaviors that might qualify as examples of academic dishonesty. The second form is related to the fact that academic dishonesty can be viewed as a "fuzzy concept" that can be best understood by showing the variety of examples that can acceptably fit within the parameters of the concept. Again, this will be further explained later in this literature review.

In beginning to define academic dishonesty, it should be acknowledged that humans seem to have an innate fairness-meter that prompts even the youngest of us to recognize and acknowledge unfairness and injustice (Cizek, 2003). Cizek states that when toddlers perceive that toy or snack distribution is unequal, this fairness-meter is activated, and protest ensues. As we age, Cizek says that we continue to recognize when things just are not right, whether it involves reports of unjust scoring in Olympic events or ministers who swipe online sermons from other ministers and present them to their congregations as their own. This innate meter plays an important role in our ability to recognize academic dishonesty, but differences in upbringing and experiences explain the fact that we often disagree on exactly what kinds of behaviors and which behaviors qualify as dishonest, unethical, or simply wrong.

General Definition.

Numerous researchers have attempted to define the concept of academic dishonesty. Cizek (2003) points out that such a definition must be broad and general, as a

specific definition would not be applicable across a wide variety of academic situations. As a result, most definitions of academic dishonesty in higher education involve some or all of the following: (Allemand, 2012; Cizek, 2003; McNair & Haynie, 2017; Raines et al., 2011; Wankel & Wankel, 2012)

- a violation of published standards of integrity
- intentional use of deception
- intent to improve one's own or another's performance or gain an advantage over others
- a decrease in the accuracy of inferences made regarding a student's abilities

So, according to the above features, academic dishonesty involves using deception in order to violate a published standard with the intention of improving performance or gaining an advantage over others, while impeding the ability of an evaluator to accurately infer knowledge or abilities.

This set of features is not without complexities. First, does academic dishonesty by necessity involve intentional deception? For most instances, the answer is probably yes. However, sometimes students do not set out to deceive, but do engage in actions that constitute academic dishonesty. An example of this might be a student who does not understand rules regarding plagiarism yet copies and pastes content into a paper. Secondly, sometimes standards for integrity go unpublished. Does this mean that academic dishonesty cannot occur? There are some universally understood standards that apply in academic situations whether or not those standards are published. Most would agree that unauthorized collaboration, using forbidden resources, or copying sources without attribution is dishonest, even if no published standards exist. Thirdly, any act that impedes an evaluator's ability to make accurate inferences about knowledge or skills

is probably an act of academic dishonesty. However, this cannot be stated with certainty.

Taking a test while feeling ill or after taking medication certainly might impede an

evaluator from accurately inferring a test taker's knowledge but would not be labeled as

academic dishonesty. And finally, the intent to improve performance or gain an

advantage over another does not necessarily constitute dishonesty. Certainly, studying

accomplishes one or both of these ends, and studying would not be considered dishonest.

Any of these criteria in isolation might or might not point to academic dishonesty, but the

more of them that are present in a situation, the more certain one can be that academic

dishonesty has occurred.

Exemplars

A second method for defining academic dishonesty is by using exemplars of

behaviors deemed dishonest. Instead of giving a broad and general definition, a list of

behaviors can give a picture of the wide range of acts that constitute academic

dishonesty. This method is reminiscent of Supreme Court Justice Potter Stewart's

famous 1964 statement that he was unable to accurately define pornography but "I know

it when I see it."   The most mentioned methods of academic dishonesty can be

expressed in general terms such as the following: unauthorized collaboration,

unauthorized use of resources, contract cheating, plagiarism, lack of contribution to group

work, and untrue claims of technical failure (Ladyshewsky, 2015; Moten et al., 2013;

Tolman, 2017).

Ferrell & Daniel developed an Academic Misconduct Survey consisting of 41

behaviors that they considered dishonest in order to gauge the prevalence of cheating

among college students (Ferrell & Daniel, 1995).   This survey was the first attempt to

essentially define cheating by using a list of behaviors (McKibban & Burdsal, 2013).

After conducting a significant study using a revised version of the Academic Misconduct

Survey with over 4,000 respondents, McKibban & Burdsal (2013) classified dishonest

academic behaviors into five categories: cheating on exams, taking credit for others'

work, making false personal excuses, interactive cheating, and creative padding.

Many other research studies attempting to define academic dishonesty do so by

listing behaviors and asking survey respondents to label them as dishonest (or not) and/or

to rate the severity of the behaviors (Aaron et al., 2011; Arhin & Jones, 2009; Burgason

et al., 2019; Dille, 2011; Jones, 2011; Jones et al., 2013; Josien et al., 2014). This results

in an overall sense of the types of behaviors that students and faculty perceive as

dishonest. In most studies of this type, students and faculty have differing perceptions of

which behaviors are dishonest and to what degree.   In general, students have a more

lenient view toward naming behaviors as dishonest and also toward assessing their

severity (Aaron et al., 2011; Bens, 2010; Brimble & Stevenson-Clarke, 2005; Dille, 2011;

Hughes & McCabe, 2006; Schmelkin et al., 2008; Stern & Havlicek, 1986).

To summarize, there is a lack of consensus regarding the nature of academic

dishonesty and regarding specific behaviors that are or are not dishonest. This dissensus

not only exists between students and faculty, but also among students and among faculty.

In addition, there are international differences in defining and recognizing academic

dishonesty. Finally, the difficult task of defining academic dishonesty can be attempted

as a general definition or by classifying exemplars.

Theoretical Framework

The following sections of this literature review serve to situate this study of academic dishonesty within three frameworks. The first and most broad framework is the view of academic dishonesty research within the larger field of morality research. This is accomplished by using a social psychology-based review of morality literature conducted by Ellemers et al. in 2019, in which they identify five main categories of morality research. Narrowing from the broad framework of morality research, is the specific view of morality developed by Haidt and colleagues and known as Moral Foundations Theory (MFT). MFT attempts to understand the moral reasoning of individuals based on the primary foundations that those individuals use to make moral decisions, and this study attempts to relate Haidt's moral foundations to judgments regarding academic behaviors. Because MFT posits that morality varies from person to person, it provides a framework for understanding how individuals develop different understandings of moral behaviors. Finally, academic dishonesty as a concept can be understood using concept formation ideas from cognitive psychology. Concept formation is an attempt to explain how humans come to understand and define all phenomena, including academic dishonesty. Academic dishonesty can be understood within concept formation terminology as a "fuzzy set" which means that it is a difficult concept to define and understand.

Morality Research

An exploration of academic dishonesty can be viewed as one research area within the broader discipline of morality research. Traditionally, morality has been studied as a subdiscipline within child development, largely based on the work of Piaget and

Kohlberg (Wendorf, 2001). Wendorf notes that the emphasis of Piaget's and Kohlberg's work was the process by which children develop moral thinking.

In contrast, for this study, the use of morality research as a theoretical framework for a study of academic dishonesty was based on a literature review from a social psychology perspective by Ellemers, van der Toorn, Paunov, and van Leeuwen (2019). Ellemers and colleagues conducted an exhaustive literature review looking at over 1200 articles related to morality from a social psychology perspective. These articles were published between 1940 and 2017 and were limited to articles published in journals of psychology which the authors deemed relevant to morality. Since Ellemers and her colleagues approach the topic of morality from the discipline of social psychology rather than from developmental psychology, they view morality as having an important role in maintaining order in society. They recognize three principles from social psychology that aid in understanding morality from this perspective.

Three Social Psychology Principles Related to Morality

The first principle is that morality is a social construct that is partially defined by culture, meaning that morality is defined differently in different cultures. This principle has been established by Haidt and a number of different colleagues (Haidt, 2001; Haidt & Graham, 2007; Haidt & Kesebir, 2010). Haidt and others have theorized that moral ideas vary based on cultural context (Haidt et al., 1993; Haidt & Graham, 2007) and that individuals learn cultural norms and expectations through socialization (Haidt, 2001).

A second principle is that individuals develop a moral self-view, and they are motivated to preserve a positive moral view of self, even if they must distance themselves

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from their actions to do so. Pagliaro et al. (2016) state that individuals care what others think of them in a moral sense, and that what individuals think of themselves is also important. In fact, they say that individuals are more concerned with what others think of them morally than what others think of them in terms of competence (Pagliaro et al., 2016). Because of this, it is important for individuals to maintain and protect their moral reputations. Ellemers et al. (2019) posit that this tendency to justify and reframe our own behaviors may present important considerations for researchers, since participants may or may not report their thoughts and behaviors accurately.

The final principle that Ellemers et al. (2019) mention in the literature review is that there is a complex interaction between thoughts, emotions, and behaviors. Again, Haidt is a primary researcher in this area. His seminal article (2001) introduces the idea that moral intuition comes first, followed by reasoning. Haidt concludes that intuition influences judgments and behaviors, which are later rationalized using reasoning. In addition to antecedent intuition, emotions following behaviors serve as gauges that help us reflect on the morality of our chosen actions. Tangney et al. (2007) equate emotions to the reinforcement and punishment concepts from behaviorism that serve as consequences for chosen behaviors. They posit that guilt, shame, and embarrassment are punishers, while satisfaction, gratitude, and even pride are reinforcers (Tangney et al., 2007). These self-administered consequences shape our future behavioral choices.

Ellemers et al. (2019) used these three moral principles from social psychology as guiding approaches when examining the literature related to morality. In each article reviewed, the researchers looked to see how the study addressed the social nature of morality, how the study considered the moral self-view and how that view relates to

moral behavior and thought, and whether the study addressed how thoughts and emotions connect to real life experience.

Ellemers et al. Five Moral Research Themes

In the Ellemers et al. literature review, the researchers coded the 1278 morality studies into five themes: moral reasoning, judgments, behavior, emotions, and self-views. They place moral behaviors at the center of their research model, with moral reasoning and moral judgments seen as antecedents to behaviors, and emotions and self-views seen as consequences of behaviors. Figure 2.1 below is a diagram produced by Ellemers et al. (p. 338) showing the five themes and how they are related in an iterative fashion, with behaviors, emotions, and self-views being subsequent to reasoning and judgments but with self-views feeding back into reasoning and judgments to influence future thought, judgments, behavior, and self-views. The diagram also illustrates how reasoning and judgments not only influence behavior, but also influence each other and both can directly influence self-views.

Figure 2.1

Ellemers et al. Themes
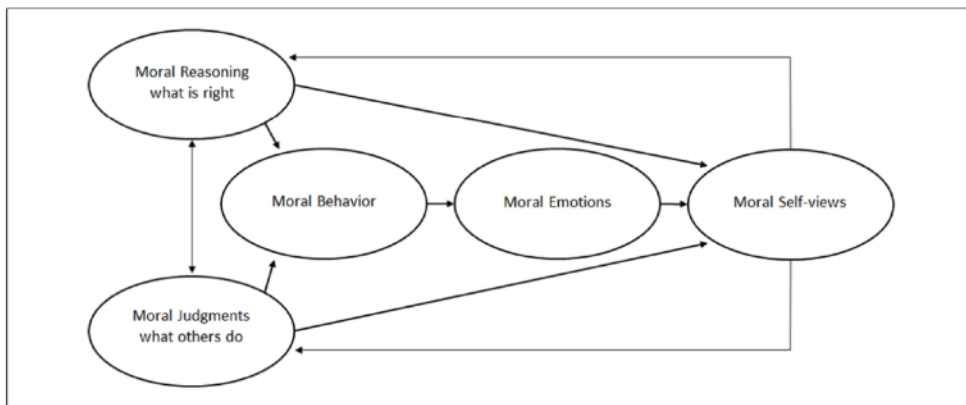
In this paragraph, each of these themes will be defined more clearly. Moral behaviors are just what they seem - an individual's or group's chosen course of action in each situation. Moral reasoning concerns a person's or group's moral principles or standards that guide their moral choices. Moral judgments involve evaluations made of other people's or groups' actions and/or characteristics as right or wrong, and how those actions and/or characteristics lead to social norms that influence the behaviors of others. Moral emotions are the responses individuals feel regarding their own behavior choices or the choices of others. Finally, moral self-views are the ways individuals think of themselves and the groups they are associated with and how they attempt to reflect upon and rationalize their behavioral choices.

The authors found that most empirical studies on morality (41%) are related to moral reasoning. Moral judgments (23%) and moral behavior (20%) follow in second and third place. Farther behind are moral self-views (8%) and moral emotions (7%) in fourth and fifth place, respectively (Ellemers et al., 2019).

Academic Dishonesty and Ellemers et al. Moral Research Themes

Academic dishonesty research may be situated within any of these five themes, depending on the research questions. Studies that focus on defining academic dishonesty or that examine student attitudes regarding specific behaviors would fall into the category of moral reasoning. For example, an anthology of research related to academic dishonesty compiled by Anderman and Murdock in 2011 has a chapter entitled "Is Cheating Wrong? Students' Reasoning About Academic Dishonesty." This chapter of the anthology is devoted to a discussion of student reasoning about specific behaviors, how student reasoning affects their choices, and how students think about and justify their own actions

(Anderman & Murdock, 2011). Many studies related to academic dishonesty are moral reasoning studies.

Moral judgments, the second theme found by Ellemers et al. (2019), can also be found in research focused on academic dishonesty. Research exploring moral judgments and academic dishonesty examines students' assessments of the behavior of other students. There were no articles found that specifically studied student formation of judgements of other students' cheating behaviors. However, a recent study found that peer influence was a greater influence on individual students' decisions to cheat than either student personality or an honor code (Malesky et al., 2022). Carrell, Malmstrom, and West found that when peers accept cheating, the rate of cheating increases (Carrell et al., 2008). Nora and Zhang found that cheating was lessened when classmates disapproved of cheating and when classmates reported cheating to teachers (Nora & Zhang, 2010). While these studies do not explore the ways that students form judgments related to the academic dishonesty of others, they show that students do form such judgments and that these judgments affect the cheating behaviors of their peers. There is some blurring between moral reasoning and moral judgment, since often individuals are asked to reason about actions from a third-party perspective, which in essence is engaging in judgment.

The third theme from the Ellemers et al. (2019) literature review is moral behavior. Ellemers et al. see this as the central theme, since it deals directly with chosen behaviors, and their other themes serve as either antecedents or consequences of behaviors. There are numerous studies conducted that ask students to report their own dishonest behaviors (Jensen et al., 2002; McCabe & Trevino, 1996). Of course, self-

reports are subject to bias, and there is always the possibility that students are not reporting behaviors truthfully. Other studies related to moral behaviors describe common methods of cheating and ways faculty can deter such behaviors (Faucher & Caves, 2009). In all these studies, there is the possibility that there exists a significant lack of consensus between individuals regarding which behaviors are dishonest and which are permitted.

Moral emotions are the fourth moral research theme found by Ellemers and colleagues. Moral emotions commonly studied are shame and guilt resulting from immoral behavior or satisfaction and pleasure resulting from moral choices. There is limited research examining academic dishonesty and emotions, though a few studies can be found (Septiana, 2017; Thomas, 2017).

Finally, Ellemers and colleagues name moral self-view as the final theme found in moral research. Moral self-view is the result of moral actions and their resulting emotions. The combination of our actions and our feelings about those actions lead to a view of ourselves as a moral or immoral person. There is a paucity of research examining academic dishonesty and moral self-view. The studies that were found focused on narcissistic students and the measures they take to preserve their self-view, including their tendency to not experience guilt after behaving in dishonest ways and their tendency to feel entitled, which leads to a diminished sense of social responsibility (Brunell et al., 2011; Menon & Sharland, 2011).

Ellemers and her colleagues note that an ongoing weakness in morality research is the lack of overlap among the themes. For instance, they note that much research exists that studies moral reasoning and research also exists that studies moral behaviors, but there is a lack of research examining the link between the two, and the research that does

exist often fails to predict with any degree of success whether a person who holds a certain moral standard will act consistently with the held standard. Regarding academic dishonesty, then, simply knowing that a student is opposed to cheating might not predict whether the student would be willing to cheat. This study is an attempt to add to the limited research in this area in exploring whether a student's moral foundations are related to the student's assessments of academic behaviors and their willingness to engage in them.

This study of academic dishonesty is situated within the broad range of morality research as primarily a moral reasoning study, with possible overlap into moral judgment and moral behavior. Since the purpose of the study was to explore individual moral foundations and perceptions of behaviors as either honest or dishonest, it required an examination of the moral reasoning of individuals and their judgments of the actions of themselves and others. It also required participants to predict their course of action in a moral situation, which crosses into the moral behavior theme.

Also related to the Ellemers et al. literature review, this study views academic dishonesty in a social context as it relates to the moral foundations from Haidt's moral foundations theory. These social contexts are examined in detail in the following paragraphs.

Moral Foundations Theory

Background

A second perspective that was chosen to situate this research is Moral Foundations Theory (MFT) as conceptualized by Jonathan Haidt and others (Graham et al., 2009; Haidt, 2001, 2012; Haidt & Graham, 2007; Haidt & Joseph, 2004). In his

2012 book titled *The Righteous Mind*, Haidt explains how he met Richard Shweder, an anthropologist at The University of Chicago, whose work introduced him to the idea that cultural differences influence moral thinking. Shweder posited that societies are either individualistic or sociocentric in emphasis - either emphasizing the individual or the group. Shweder's view is that most cultures around the world are sociocentric, while Western cultures tend to be individualistic. This emphasis on either the individual or the group is reflected in the moral beliefs of the culture (Shweder et al., 1990).

Shweder proposed three main moral themes that influence moral thinking (Shweder et al., 1997). The first theme is the ethic of autonomy - or the freedom of individuals to pursue the things they want and need. The second theme is the ethic of community - or the notion that people are members of groups and have obligations to those groups. The third theme is the ethic of divinity - or the idea that there is something sacred which exists beyond the human physical body. Haidt (2012) proposes that people who are WEIRD (Western, educated, industrialized, rich, and democratic) develop the ethic of autonomy, while those from other cultural groups see morality from a more sociocentric perspective.

Expanding on Shweder's three ethics and based on studies of morality in different cultures, Jonathan Haidt and Craig Joseph (2004) collaborated to initially propose Moral Foundations Theory (MFT), which Haidt later developed more fully, and which has been recently revised by Atari et al. in 2022.

Haidt's 2001 article titled The Emotional Dog and Its Rational Tail explained his idea that much of moral thinking is intuitive and is based on automatic responses - that is, it arises automatically and instantly with no effort on an individual's part. As was stated

previously, Haidt argues that moral intuition precedes reasoning. When we consider the morality of a given act, Haidt says that we have a quick and automatic right-or-wrong response, and we subsequently apply post hoc reasoning to justify our initial intuition. This is the basis for Haidt's "emotional dog and its rational tail" analogy. Haidt and Joseph (2004) postulate that humans are hardwired to feel these automatic emotional moral responses, but that our culture shapes the extent to which they are expressed. These innate foundations interact with the cultural environment in which we are reared to create our unique set of accepted virtues (Graham, Haidt, & Nosek, 2009). In MFT, Haidt (2012) proposed five moral foundations that prompt our intuitive responses - care, fairness, loyalty, authority, and purity.

Cannon, Schnall, and White (2011) tested Haidt's notion of innate emotional responses by measuring the facial responses of subjects as they considered moral statements. They found that subjects considering moral statements that violated the moral foundations of purity and fairness showed facial responses of disgust (curled upper lip) while statements that violated the care foundation were associated with facial responses showing anger (furrowed brow.) These facial responses were immediate, and the researchers found that more intense muscular responses led to more severe judgments against the considered behaviors. Statements linked to loyalty and authority were not associated with facial responses of either disgust or anger. However, the researchers found that positive behaviors related to loyalty were associated with a positive facial response, activating muscles associated with smiling (Cannon et al., 2011).

The following paragraphs explain Haidt's five moral foundations as developed in the original version of MFT (Haidt, 2012). Atari et al. (2022) have since revised these initial five foundations, but that revision will be discussed later. It should also be explained that Haidt and colleagues (Graham, Haidt, & Nosek, 2009) later grouped the original five foundations into two major themes. Care/harm and fairness/injustice are grouped together by Haidt and colleagues as the "individualizing" foundations, since they deal with interactions between individuals (Graham, Haidt, & Nosek, 2009). Graham, Haidt, & Nosek (2009) group the foundations of in-group loyalty, respect for authority, and purity as "binding" foundations, since they are concerned with behaviors that bind humans into groups.

Care/Harm. The first foundation is care. Its opposite side is harm. Most humans agree that actions that demonstrate care for others are seen as moral, while actions that harm others are immoral. This holds true whether the "other" is human or animal. Haidt (2012) says that the evolutionary origin of this foundation is the universal instinct to care for and protect the young of a species, but that in humans this instinct has generalized to include all organisms that are vulnerable in some way. This foundation is expressed through acts of compassion, care, and kindness, and it is violated through acts that cause physical or emotional pain. When we consider an act that shows either care or harm, our instinct is to react with either a positive or negative emotional response.

Fairness/Injustice. The second foundation is fairness. Its opposite side is injustice. Haidt (2012) states that the value of fairness originated in the recognized benefits of reciprocal relationships as a source of help. Humans tend to reciprocate

cooperation to enjoy the benefits of collective action. However, when one individual

takes advantage of or betrays the cooperative efforts of another individual, most humans

feel that the offending individual has behaved immorally. Humans seek to reward those

who cooperate and avoid or punish those who cheat. This foundation supports efforts

toward equality and justice for all. Our automatic reaction to unfairness is to feel

indignation or another negative emotional response. This foundation was recently revised

and subdivided into two separate foundations, equality and proportionality (Atari et al.,

2022; Haidt, 2012; Skurka et al., 2019). Equality can be best thought of as social

equality, or the appreciation for the basic value of other humans and concern for their

social outcomes. Proportionality concerns the fairness of outcomes as proportional to

inputs. When humans receive an outcome that they do not deserve or have not earned,

proportionality has been violated (Atari et al., 2022; Haidt, 2012; Skurka et al., 2019).

Atari et al. (2022) state that equality and proportionality are not opposite ends of

the same spectrum, but that an individual could score high or low in both measures. That

is, individuals could score high in equality by being concerned with social equality, while

also seeing the importance of merit in outcomes. Atari et al. (2022) cite the example of

those who are "economically conservative" but "socially liberal" as an example of

individuals who might score high on both measures (p. 8).

Group Loyalty/Betrayal. The third foundation is group loyalty, and its antithesis is

betrayal. Haidt (2012) believes that humans are innately prewired to belong to groups, to

be loyal to those groups, and to feel competitive toward other groups. Whether family,

school, religion, political party, or nation, belonging to a group gives humans a sense of

identity and inclusion. People view acts of loyalty to the group as moral and acts of

betrayal as immoral. We react positively to those who are loyal to or make sacrifices for the in-group and negatively to those who betray groups that are important to us.

Authority/Subversion. The fourth moral foundation is authority, and its opposite is subversion. Haidt (2012) states that humans have an innate tendency to submit to authority figures that they admire or respect. Having hierarchical forms of authority serves to maintain societal order. Humans expect those in leadership positions to act in a benevolent manner toward those in their care, and not to oppress them, but to lead and protect. Haidt (2012) says that this moral foundation is bidirectional - we expect those who lead us to protect us and our interests, and we expect those who follow us to show appropriate respect and loyalty. When the expected and accepted hierarchy functions appropriately, we experience a positive innate response. When a person subverts the hierarchy, our instinctual reaction is negative. This includes showing disrespect to authority figures and the established traditions of society.

Purity/Degradation. The fifth foundation for morality is purity as opposed to degradation. Purity is sometimes listed as sanctity, both words conveying a need to avoid things that contaminate, either physically or spiritually. Haidt (2012) views this foundation as evolutionary protection against sickness and disease. Humans view certain things as disgusting and refuse to touch or eat them. This tendency served early humans well in preventing contamination (Haidt & Joseph, 2004). This sense of disgust has evolved to include acts or items that might not cause harm, but which are seen as distasteful, such as incest or bestiality. Purity, then, has come to include both physical and spiritual contamination. For example, Haidt, Koller, & Dias (1993) found that students reacted with disgust when asked about a family choosing to eat their pet dog

who had died, or about a man choosing to have sexual intercourse with a store-bought chicken before cooking it. When asked to explain their initial feelings of disgust, most could not immediately articulate exactly why the actions were repulsive to them. Haidt (2012) claims that our sense of purity leads us to avoid those things which instinctually seem disgusting to us and to protect those things we deem sacred. Gray and colleagues (Gray et al., 2022) critique Haidt's notion of purity as a moral foundation, saying that it is nearly impossible to define and apply as a basis for moral judgment. In their review of purity related literature, they conclude that purity violations usually involve actions viewed as disgusting but that are not harmful in an interpersonal way (e.g., sexual relations with a store-bought chicken). Disgust is the primary identifier of a violation of the purity foundation.

To summarize, Haidt and colleagues originally created five moral foundations: care, fairness, group loyalty, authority, and purity. Recent work by Atari et al. (2022) has divided fairness into two distinct foundations, so that there are now six moral foundations: care, equality, proportionality, group loyalty, authority, and purity. It should be mentioned that Haidt and Graham, who did much of the seminal work around MFT, were among the researchers who worked with Atari to revise the foundations and the instrument used to measure them. Basic definitions of the revised foundations are shown in the chart below, produced by Atari et al. (2022, p. 12).

Figure 2.2

Atari et al. Definitions

Foundation	Definition
Care	Intuitions about avoiding emotional and physical damage to another individual.
Equality	Intuitions about equal treatment and equal outcome for individuals.
Proportionality	Intuitions about individuals getting rewarded in proportion to their merit or contribution.
Loyalty	Intuitions about cooperating with ingroups and competing with outgroups.
Authority	Intuitions about deference toward legitimate authorities and the defense of traditions, all of which are seen as providing stability and fending off chaos.
Purity	Intuitions about avoiding bodily and spiritual contamination and degradation.

Group Differences in Moral Foundations

Shweder's three ethics - autonomy, community, divinity - and the way they are expressed differently by individualist societies as compared to sociocentric societies, prompted Haidt to examine the original five moral foundations in a similar fashion. What Haidt and his colleagues found is that those espousing an individualist view of the world place more value on care/harm and fairness/cheating (the individualist foundations) when making moral decisions. Those who have more of a sociocentric worldview value all five of the original moral foundations in their decision making (Graham et al., 2009, 2011; Haidt, 2012).

In Haidt's (2012) opinion, this difference in world view explains the different moral stances adopted by American liberals and conservatives. Liberals tend to be

WEIRD (Western, educated, industrialized, rich, and democratic) and view morality as

an issue of treating other humans with care and fairness (individualist foundations). In

contrast, conservatives are more loyal to groups, more concerned with respect for

authority, and more likely to have strong feelings about purity (binding foundations).

Conservatives are interested in care and fairness, but they are also equally if not more

concerned with loyalty, authority, and sanctity (Haidt, 2012). Regarding the newly

divided fairness foundation, both Atari et al. (2022) and Skurka et al. (2019) found that

liberals value equality more than conservatives do, which they say is not surprising given

the tendency for liberals to be more concerned about social justice. Both liberals and

conservatives value proportionality, but conservatives tend to value it more highly than

do liberals.

Graham et al. (2011) found differences in reliance on moral foundations among

other groups as well. They found that Eastern cultures (mostly East and South Asia) rely

more on ingroup loyalty and purity in moral thinking than Western cultures (US, UK,

Canada, Europe). In fact, after extensive study on a variety of cultures, Atari et al. (2022)

state that "purity and loyalty may be considered least WEIRD of the moral foundations"

(p.56) since they are relied on significantly more in non-WEIRD communities. Atari et

al. (2022) further studied non-WEIRD cultures and found that proportionality is more

central in non-WEIRD cultures, while equality was relied upon in WEIRD cultures.

Graham et al. (2011) also found gender differences, with women scoring higher on care,

fairness, and purity than men.   Atari et al. (2022) concurred with these findings, though

they specifically found that women score higher than men on purity and equality, while

men score higher than women on loyalty, authority, and proportionality. Religiosity was

also found to be related to moral foundations. Atari et al. (2022) found that those who

hold more tightly to religion score lower on care and proportionality, and higher on

loyalty, authority, purity, and equality.

Castilla-Estévez and Blázquez-Rincón (2021) found that age has little correlation

with moral foundations, except for the fact that many individuals increase their emphasis

on the three binding foundations (group loyalty, authority, and purity) slightly as they

age. Overall, moral foundations appear to be stable across the lifespan (Castilla-Estévez

& Blázquez-Rincón, 2021). Recent Pew research does show that younger generations

are more liberal than older generations and even that younger conservatives are more

liberal than older conservatives (Mitchell, 2019) which certainly may affect their moral

foundations outcomes.

Academic Dishonesty and Moral Foundations Theory

Academic dishonesty can be viewed through the lens of MFT. An individual's

primary moral foundation(s) may be related to the individual's perception of specific

behaviors and whether those behaviors are viewed as moral or immoral.

*Care. A*cademic dishonesty can violate or uphold the care/harm foundation of

morality in several ways. In Haidt's (2012) view, this foundation presents moral acts as

those that show compassion, while immoral acts are harmful. Cizek (2003) claims that

academic dishonesty can be seen as a harmful act toward the self, by limiting the mastery

of important knowledge and skills. Students who cheat on exams, submit work done by

someone else, or fail to participate in group work have not learned the material they

should have learned. In addition to harming themselves, they potentially harm their

classmates by affecting their grades. If assignments are graded on a curve, those who cheat may put themselves at an advantage while penalizing others. On a more serious note, students who cheat may be subjecting their future patients, clients, and students to significant harm if they are not well prepared for a career.   And finally, those who plagiarize harm the owners of intellectual property by preventing them from receiving deserved recognition or income (Cizek, 2003).

On the other side of the care/harm spectrum is the notion of care. Students from collectivist cultures and even Western students from group-oriented backgrounds see many forms of cheating as giving necessary help to those in their in-group (Pulfrey et al., 2018). Students with this view see helping other in-group members as a responsibility that overrides any course rules or expectations. Pulfrey, Duressel, and Butera state that for some students benevolence to the in-group can be considered "more moral than other types of morality" (Pulfrey et al., 2018), p. 778).   This leads some students to justify collective cheating, which helps the in-group, even when they would be unwilling to engage in individual cheating, which would only help themselves.   In addition to cheating as a form of care for others, it can at a very basic level show care for self. If a student's main goal is a performance goal (earning a grade) as opposed to a mastery goal (learning content), a cheating student may view his actions as a form of care for his own self-interests (Anderman & Won, 2019).

Fairness. Regarding the second foundation of Moral Foundations Theory - fairness/injustice - much can be said about academic dishonesty, especially considering the separation of fairness into equality and proportionality by Atari et al. (2022). Proportionality is an especially salient foundation as related to academic dishonesty.

Academic dishonesty can be viewed as unfair to classmates and a violation of proportionality since students who cheat earn an outcome that is disproportionate to their input. In other words, they get something for nothing. Students who cheat gain an unfair advantage over students who do not. Students engaged in group work often resent those who do not do their share of the work and feel exploited, becoming bitter if all group members receive identical grades. Research on student attitudes toward group work finds that the presence of a "free rider" is a main complaint (Gottschall & García-Bayonas, 2008; Pfaff & Huddleston, 2003).

Another interesting way that fairness/injustice is interpreted by those who cheat is that students sometimes believe that courses are too difficult, require an unreasonable amount of work, and are poorly managed or taught. When students dislike a course or the instructor who teaches it, or when they feel that assignments are unreasonable or meaningless, they are more likely to feel that the course and/or the instructor are treating them unfairly and may use this belief to justify cheating (Anderman & Won, 2019; Comas-Forgas & Sureda-Negre, 2010). This may relate to the recently added equality side of fairness, since there is a power differential between faculty and students and students may feel that they have little ability to succeed without resorting to dishonest means. When individuals feel that they are considered "less than" they feel justified in using whatever means necessary to level the playing field. It can also be viewed as a violation of proportionality, since students may feel that their outcome may be disproportionate to their investment. In other words, they are unable to achieve an outcome that they have prepared for, as the test or course is unfair, and preparation does not result in success.

Group Loyalty. The third moral foundation postulated by Haidt (2012) is in-group loyalty as opposed to betrayal. This foundation concerns the importance of allegiance to a group to which one belongs. As stated earlier regarding care/harm, allegiance to the in-group can be seen as an important form of care (Pulfrey et al., 2018). For this reason, it can be difficult to discern care from group loyalty. This is seen in school settings when students feel responsible for the success of teammates, fraternity brothers, or other peers with close ties. Loyalty to in-group members can overpower institutional rules or expectations, especially when there is competition between groups (Hildreth et al., 2016; Pulfrey et al., 2018).

Authority. Respect for authority is the fourth moral foundation in Haidt's theory. According to Haidt (2012), when leaders are competent and benevolent, those who follow feel obligated to respect them. When individuals find themselves in a leadership role, they expect loyalty and respect from their followers. This hierarchy exerts significant pressure on followers if they are encouraged to engage in academic dishonesty by those who lead them. Respect for authority seems to go hand in hand with in-group loyalty. For example, if college students identify strongly with a Greek organization, they may be loyal to the organization and its leadership when asked to act in academically dishonest ways to help the organization obtain a higher group GPA. In contrast, if a student group emphasizes academic integrity and honesty and exerts pressure on members to behave accordingly, members may resist the urge to behave dishonestly (Hildreth et al., 2016).

Following rules set forth by a professor is another form of respect for authority related to academic dishonesty. Students who are unwilling to violate a professor's

expressed rules about collaboration or students who refrain from cheating because they are worried about a professor's opinion of them are likely valuing respect for authority as an important moral pillar.

Purity. Finally, Haidt (2012) identified a fifth moral foundation - purity vs. degradation. At first glance, there is little about academic dishonesty that offends our sense of purity. However, as mentioned earlier regarding authority and in-group loyalty, members of tightly knit college communities may view brotherhood/sisterhood or loyalty to the team as "sacred pillars" of the community that cannot be violated, requiring members to act in ways that aid other members. Members who desecrate these sacred pillars may be viewed as immoral. Along those same lines, members of other communities, such as religious organizations, may view honesty and integrity as sacred and see any form of academic dishonesty as a moral line that can never be crossed (Haidt, 2012). Gray et al., (2022) operationalize purity more concretely by naming nine categories related to purity. They are listed as follows:

1. Pathogen avoidance
2. Maintaining natural order
3. Maintaining chastity/avoiding sexual taboos
4. Elicitors of disgust
5. Self-control
6. General immorality
7. Not thinking immoral thoughts
8. Spiritual integrity
9. Respecting God

It may be a far reach to say that academic violations elicit a "disgust" response in the same way that physical and spiritual violations do. If sanctity/degradation violations involve acts that are disgusting yet harmless (Gray et al., 2022), it is difficult to think of academic behaviors that fit within these parameters. However, by referring to the Gray

et al. (2022) list above, it might be possible to fit academic behaviors within the categories of self-control, general immorality, spiritual integrity, and respecting God. This vague notion of disgust toward non-physical behaviors is reminiscent of a scene in War and Peace (Tolstoy et al., 1942) when Princess Mary, after thinking unkind thoughts toward her father, is said to feel "a feeling of revulsion against herself" (p.1812).

While morality research and Moral Foundations Theory provide frameworks in which to situate academic dishonesty as a form of morality, an understanding of concept formation from cognitive psychology clarifies why the concept of academic dishonesty is by nature difficult to define.

Concept Formation

The third and final conceptual model that will provide context for this study is the theory of concept formation from cognitive psychology. Concept formation in its simplest form describes the process of deciding if a particular item or event can be included in a category (Medin & Smith, 1984). For example, humans hold ideas regarding what it means to classify an organism as a cat as opposed to classifying it as a dog.

Classical View

Some of the earliest work on concept formation was done by Bruner, Goodnow, and Austin (Bruner et al., 1956). They address the issues encountered in attempts to categorize objects or events. This seemingly simple activity is much more complex than it appears at first glance. Bruner et al. (1956) concluded that concepts are understood by a process of trial and error. Learners attempt to guess which features of the concept are

essential and which are correlational. For example, are wheels essential for something to

be classified as a "vehicle?" Learners may say "yes" until they think about sleds or

boats, for example, which carry people or cargo without the use of wheels. In this

example, wheels are correlational - that is, they are often present in vehicles, but they are

not necessary for the object in question to belong to the category. Merriam-Webster

defines a vehicle as "a means of carrying or transporting something" - which makes all

other features correlational (Merriam-Webster, n.d.).

This view of concepts as categorized using defining features and correlational

features is known as the classical view of concepts (Medin & Smith, 1984).   This view

allows inclusion into a category on an "all-or-none" basis. That is, either the object/event

is a member of the category, or it is not.   People who are or have been University of

Kentucky men's basketball head coaches form a category that can be understood using

the classical view. Either a person fits into the category, or he/she does not. This view

works well for clear cut categories but runs into problems when categories are less clear.

Prototypes

In instances that are less well defined, the classical view is not always effective in

helping learners correctly classify objects or events. Rosch (1973) postulated that

humans understand some categories by using "prototypes" or the most typical members

of a widely varied category. For example, if one is asked to think of a cat, one probably

imagines a four-legged creature with fur and pointy ears that emits a meow type sound.

We average, or abstract, every cat we've encountered into a typical image of a cat. This

typical cat is known as a prototype. The more similar a new instance is to a prototype,

the more easily and quickly one can categorize it (Rosch, 1973).   For example, we

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recognize that a hairless cat is still a cat, but we do not do so as effortlessly as when classifying a more typical cat.

Exemplars

In categories that do not lend themselves to a typical example, such as the category of fruit, learners tend to keep a mental catalog of examples of the variation in the category. If one is asked to think of a typical fruit, he would have a difficult time coming up with one member of the category that embodies the characteristics common to most fruits. Fruits have a wide variety of skins, flesh inside, seeds, juice, and sizes. In order to understand if a new object is a fruit, learners can use exemplars (Medin & Schaffer, 1978).   In contrast to comparing a new item to the average member of the category (prototype), learners mentally sift through their catalog of previously known examples (exemplars) to see if a new item seems close enough to one of the exemplars to justify its admission into the category (Smith & Minda, 1998).

Ill-Defined Concepts

Related to the prototype theory and the exemplar theory of concept formation is the notion of ill-defined concepts.   While classical theory works for well-defined concepts, such as UK head men's basketball coaches, it is limited in helping learners with ill-defined categories. When categories contain diverse and unrelated items, such as "things to take from one's home during a fire" or "ways to make friends," they likely have "graded structure" (Barsalou, 1983, p. 213). This means that rather than "all-or-none" membership in the category, there are degrees of fit for the category or even disagreement over whether an item, event, or action fits (Barsalou, 1983). For example,

children are probably a strong fit for the "things to take from one's home during a fire" category, whereas one's worn-out house slippers are probably a weaker fit unless they have sentimental meaning. Depending on the items a person values, two individuals might choose completely different things to save from a fire.

Belohlavek & Klir (2011) are editors of a book titled *Concepts and Fuzzy Logic*, which attempts to combine the fuzzy logic model from mathematics with concept formation theory from psychology. The editors contrast fuzzy logic with classical logic. Classical logic, like the classical view of concept formation, assumes that something is either true or false. Fuzzy logic, and its associated fuzzy sets, allow for members of sets to be "true, false, very true, more or less true, very false, and the like" (Belohlavek & Klir, 2011, p. 3). Belohlavek & Klir cite mathematician Lotfi Zadeh, the recognized author of fuzzy logic, who wrote in 1965 that many categories do not have well defined parameters. Fuzzy sets, then, are categories that are not clearly defined (Belohlavek & Klir, 2011). Membership in fuzzy sets is a matter of degree rather than an all or nothing inclusion (Rosch, 2011). While Rosch raises questions about the appropriateness of applying the mathematical operations of fuzzy logic to the psychological study of concept formation, she does believe that the term "fuzzy sets" is an accurate one when referring to concepts whose members show degrees of membership. But she says that psychology was already using the terms "degrees of membership" and "graded structure" to express the same idea as "fuzzy sets." Both psychological terms refer to the fact that some members of a category are strong examples while others are less typical of the category, and we tend to mentally organize category members by this continuum (Barsalou, 1983).

Ideas from concept formation theory can clarify the difficulty in defining

academic dishonesty. Concept formation in general is the process of classifying objects,

ideas, or events into appropriate categories (Medin & Smith, 1984). As was stated earlier,

some categories are well-defined, and members are either included or they are not. Less

clearly bounded concepts can be labeled as fuzzy sets, graded structure, or degrees of

membership. These labels may be used interchangeably to note that these categories may

contain some members that are perfect fits and other members that are less perfect yet

can be considered acceptable members. When assessing potentially dishonest academic

behaviors, those doing the categorizing may experience disagreement as to the goodness

of fit and even if the behavior belongs in the category of academic dishonesty at all.

Summary of Theoretical Framework and Literature Review

This review of the literature examined previous attempts to define academic

dishonesty. Research shows that academic dishonesty does not have a universally

accepted definition, nor is there agreement regarding specific behaviors and whether they

are permitted.   Attempts to arrive at a common definition and/or categorize behaviors

have largely failed. The goal of this research is to attempt to understand these failures,

and, in contrast, to view them not as failures, but as the natural differences in perception

among humans attempting to understand a fuzzy concept from a variety of moral

worldviews.

Very generally, this study can be situated within the broad context of moral

reasoning and/or moral judgment research. More specifically, it can be understood

through the lens of Haidt's Moral Foundations Theory (MFT). And finally, academic

dishonesty as a construct can be understood using principles from cognitive psychology

as a fuzzy concept, which by nature is difficult to define.

CHAPTER 3: METHODOLOGY

The purpose of this concurrent mixed methods study was to examine students' judgments regarding the dishonesty of specific actions and their willingness to engage in such behaviors. A further purpose was to measure the moral foundation(s) relied upon by individual students and to see if the measured moral foundations were related to the students' assessment of academic behaviors as connected to the six revised moral foundations developed by Haidt and others (Atari et al., 2022; Haidt, 2012). In addition, demographic categories were examined in comparison with MFQ-2 scores and responses to academic vignettes. Below are the research questions, which were originally listed in Chapter 1:

1. Which specific academic behaviors are judged as dishonest by students? Why?
2. Are students willing to engage in behaviors that they have labeled as dishonest? Why?
3. Which foundations from Moral Foundations Theory are most relied on by students when predicting their own behaviors in academic vignettes?
4. Is there a relationship between scores on MFQ-2 subscales and forced choice foundations related to Moral Foundation Theory by students considering academic vignettes, and if so, what is the nature of the relationship?
5. How are demographic categories associated with MFQ-2 scores or with responses to academic vignettes?
6. In what ways do open responses to academic vignettes contribute to a richer understanding of the relationship between preferred moral foundations as measured by the Moral Foundation Questionnaire-2 and reasoning about academic behaviors?

Participants

Participants for this study were a voluntary response sample of undergraduate students at a large Southeastern university. University participants were solicited mainly through posters placed in selected campus locations. Because responses were sparse, participants were also solicited through a mass e-mail sent to academic orientation

courses at the university and by a small number of faculty who encouraged their students to participate. Students were offered fast food or Amazon gift cards in exchange for participation. These gift cards were funded independently by the researcher. The research purpose and procedures were clearly explained to participants, and they were informed that participation was voluntary and that they could discontinue participation at any time. Since participants were not physically present for the interview, consent was obtained via a Qualtrics consent form.

Participants were solicited until data saturation occurred. A preliminary estimate of 20-25 participants was expected and the actual number of participants was 25. The sample was 80% female. Student age ranged from 18-23, with a mean age of 19.92 years. Twenty-four of the twenty-five students were American citizens, and one was a citizen of Costa Rica. Seventeen participants had a GPA of 3.0-3.99 (68%); four had a 2.0-2.99 GPA (16%); two had a 4.0 (8%) GPA; and two preferred not to give their GPA (8%). In terms of political views, 28% of the students self-identified as conservative, 24% as liberal, 20% as moderate, 12% preferred not to say, 12% as other, and 4% as apolitical. Political party affiliation was not asked, only political views. In terms of self-identified religiosity, most participants (n=17) were moderately religious (68%); four were not at all religious (16%); two were extremely religious (8%) and two identified as other (8%). Two additional categories were offered (opposed to religion and prefer not to say) but both had no responses. Participants were not asked to which religion they subscribed, but only how they would describe themselves based on the previous categories. Age, college major, GPA, and country of citizenship were also gathered, but not analyzed in the study. Descriptive data are shown in the tables below.

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Table 3.1

Gender

Gender	Frequency	Percent
Female	20	80
Male	5	20
Total	25	100

Table 3. 2

Political Views

Political Views	Frequency	Percent
Conservative	7	28
Moderate	5	20
Liberal	6	24
Apolitical	1	4
Other	3	12
Prefer not to say	3	12
Total	25	100

Table 3.3

Religiosity

Degree	Frequency	Percent
Not religious	4	16
Moderately religious	17	68
Extremely religious	2	8
Opposed to religion	0	0
Other	2	8
Prefer not to say	0	0
Total	25	100

This demographic data was gathered as the final section of the MFQ-2 portion of

the study. Once participants finished the 36 MFQ-2 items, they were asked to provide

demographic information and their assigned participant number so that the MFQ-2 scores

and demographic data could be linked to their interview responses. Since the MFT

foundations are often related to demographic groups, it was important to include

demographic categories for later comparison to both MFQ-2 scores and themes from the academic dishonesty vignettes.

Research Design

A concurrent triangulation mixed methods approach was chosen to address the "fuzzy concept" of academic dishonesty from an interpretivist/constructivist paradigm (Tracy, 2013) which allows participants to share their own unique understandings of the concept. Tracy (2013) explains that "phronetic" qualitative research (research that yields practical knowledge) is well suited for questions related to morality and that the contextual data that is obtained is valuable in understanding the concept being studied and in producing useful findings (p. 4). Combining both types of data makes it more likely that "the strength of the study is greater than either qualitative or quantitative research" (Creswell, 2007, p. 23).

Instruments

Data was gathered concurrently by two means: a created set of vignettes administered on Zoom via semi-structured interview and an established measuring instrument (MFQ-2) administered via Google Forms. The academic vignette interviews yielded both quantitative data (counted responses to forced choice and open-ended questions) and qualitative data (responses to open-ended questions). The MFQ-2 yielded quantitative data - a series of six subscale scores for Haidt's moral foundations. Slootman argues that both quantitative and qualitative data can be used within an interpretivist/constructivist study (Slootman, 2018). When doing so, the quantitative data is handled in a traditionally quantitative way but used together with the qualitative data to contribute to the understanding of a concept.

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A diagram for the methodology is shown below.

Figure 3.4

Methodology Diagram


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        ┌─────────────┐              ┌─────────────┐
        │    QUAN     │              │    QUAL     │
        └─────────────┘              └─────────────┘

   ┌──────────┬──────────┐        ┌──────────────┐
   │  QUAN    │  QUAN    │        │    QUAL      │
   │  Data    │  Data    │   +    │    Data      │
   │Collection│Collection│        │ Collection   │
   │          │          │        │              │
   │          │ Academic │        │  Academic    │
   │ MFQ-2 and│ Vignette │        │  Vignette    │
   │Demographic│Interview│        │  Interview   │
   │   data   │Q1,Q2 & Q3│        │  Q1 & Q4     │
   ├──────────┼──────────┤        ├──────────────┤
   │  QUAN    │  QUAN    │        │    QUAL      │
   │  Data    │  Data    │        │    Data      │
   │ Analysis │ Analysis │        │  Analysis    │
   │          │          │        │              │
   │Mean, SD, │          │        │              │
   │Alpha     │ Counted  │        │Coded         │
   │for MFQ-2.│responses │        │responses     │
   │Descriptive│from     │        │from Q1 and Q4│
   │stats from│Q1, Q2    │        │              │
   │demographic│and Q3   │        │              │
   │  data    │          │        │              │
   └──────────┴──────────┴────────┴──────────────┘
   ┌──────────────────────────────────────────────┐
   │           Mixed Methods Analysis              │
   │  Compare and contrast quantitative and        │
   │           qualitative results                 │
   └──────────────────────────────────────────────┘
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Academic Integrity Vignettes

The first method of data collection was the use of ten academic vignettes, which were presented as Google Slides on Zoom. Zoom was chosen as the medium to provide convenience for students and for ease of transcription. Interviews took approximately thirty minutes. The vignettes and interview script can be found in Appendix 3 and Appendix 4. The vignettes were accompanied by the following questions and additional probing questions as appropriate.

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1. What do you think you would do and why?
2. In looking at the scenario, do you consider _____ to be dishonest in this context or is it OK? Why?
3. I'm going to ask you about two specific factors that might influence your decision in this scenario. Of these two factors, tell me which would be more important to you in considering a decision.
4. Are there other factors that might be more important to you than either of these two in considering a decision?

Development of Vignettes. Mah et al. (2014) state that vignettes have numerous affordances in interview research. First, they are a non-threatening way to discuss topics that might be considered sensitive. Academic dishonesty is such a topic. Vignettes allow participants to maintain some distance from potentially threatening or condemning disclosures. In short, vignettes often produce more honest and candid responses due to the seeming distance between the participant and sensitive situation (Mah et al., 2014).

The ten vignettes composed for this study were written after considering several existing measuring instruments for academic integrity, some of which involved vignettes (Barrett & Cox, 2005; Clifford et al., 2015; Ferrell & Daniel, 1995; Josien & Broderick, 2013; McCabe, 2005). Clifford et al. (2015) created a series of 132 vignettes to tap Moral Foundations Theory foundation violations. Following the procedures from the Clifford et al. (2015) creation of moral violation vignettes, an attempt was made to ensure that vignettes for this research were varied, yet widely relevant, in content. Also noted by Clifford et al. (2015) was the importance of avoiding political content, references to specific social groups, and content that might require cultural knowledge. Avoiding political topics lessens the chance of tapping political or social opinions, rather than moral reasoning. Avoiding references to specific groups and content that requires prior knowledge increases the likelihood that all participants can relate to the vignettes.

In addition to general guidelines used by Clifford et al. (2015) in creating vignettes, they also discuss considerations for tapping specific moral foundations. It should be noted that the Clifford et al. (2015) research was based on the original five moral foundations with consideration for "liberty" as a possible sixth foundation. Clifford et al. (2015) state that vignettes that violate care should show either emotional or physical harm to a person or animal. Vignettes that violate fairness should show cheating or "free riding." Since the fairness foundation had not been sub-divided in 2015, there is no mention of violating equality. The researchers do, however, mention that they chose to focus on cheating behaviors and not on unfairness that would be considered political or social. In essence, then, Clifford et al. (2015) limited fairness to its proportionality form. Clifford et al. (2015) chose loyalty violations in which actors promoted their own interests above those of the groups to which they belonged. They note that the choice was made to require public behaviors by obvious group members that damaged the reputation of the group to avoid crossing into the care foundation. Violation of authority was measured by disobedience to authority figures or disregard for traditions. Finally, purity was violated by acts of deviance and degradation, all of which had an element of physical disgust. Clifford et al (2015) chose not to include acts of degradation toward holy or sacred objects or ideas.

Though the Clifford et al. (2015) vignettes provided a launching point for the creation of academic vignettes, several notable differences are important. First, Clifford et al. (2015) included only violations of moral foundations. They included only vices and no virtues. In contrast, the academic vignettes created for this study present behaviors that might be considered on either side of the moral foundation, depending upon the

participant's view. For instance, cheating to help a friend might be considered a positive moral behavior, if giving help is more highly regarded than keeping a professor's rule.

This leads to a second difference. Clifford et al. (2015) tested their brief items to ensure that they only related to one moral foundation. In constructing lengthier and more complex academic vignettes, it was impossible to write them in such a way that only one moral foundation could be considered, and part of the intent of the academic vignettes was to allow participants to prioritize moral foundations to reveal which was most relied upon. Clifford et al. (2015) state that when devising violations of the care foundation, they purposely avoided scenarios that involved known others, to prevent confusing care with loyalty. Such measures were not taken in devising the academic vignettes for this study, and these vignettes should purposely allow for multiple foundations to be considered.

Thirdly, since the Clifford et al. (2015) vignettes were varied examples related to each foundation, they had more room for expressing different facets of the foundations. Since the vignettes created for this research were limited to the context of academia, some foundations were more difficult to represent than others. It was difficult to think of vice or virtue vignettes for the purity foundation that related to deviant or degrading behaviors in an academic context. For that reason, unlike Clifford et al. (2015), moral pillars that many hold sacred (such as honesty, trustworthiness, humility, or kindness) were considered as related to the purity foundation.

As was stated earlier, one of the interview questions for each vignette was a forced response regarding whether the proposed action was dishonest, and another was a forced choice between two moral foundations. These items allowed quantitative data to

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be extracted from the interviews. However, on the latter item, it was possible that the two offered foundations did not capture a particular student's moral thinking regarding the vignette, so participants were offered the opportunity to share other reasons for their choice. Similarly, on the dishonesty item, students could qualify their yes/no response with contingencies that were noted.

In constructing academic vignettes, consideration was given to wording the vignettes in a way that would not influence responses. When research involves discussing a sensitive topic, respondents may not be truthful. One issue that might influence participant truthfulness is the nature of the items themselves. For example, students might be more likely to answer truthfully when considering vignettes written in third person, where the students consider the behavior choices of others, than when considering second person vignettes, where students are asked about their own possible behaviors. Even though the vignettes are hypothetical, students might tend to give socially desirable responses to vignettes written from a second person perspective, asking them to assess what they would do in a situation. However, Winters & Weitz-Shapiro (2013) studied whether second person narrative items lead to more socially desirable answers when asking about sensitive topics. They found little difference in responses on moderately sensitive topics when surveys were presented with second-person or third-person items (Winters & Weitz-Shapiro, 2013). They mention that second-person items can be briefer and more direct while third-person items are longer and more complicated. Based on these findings, the vignettes constructed for this research were presented in second person perspective and ended with the statement, "What do you think you would do and why?" Ending with this question allowed students to speculate and speak in

tentative terms, which should have relieved any stress caused by the sensitive nature of the questions and should have alleviated any feelings of being interrogated (Cresswell, 2009).

Another consideration when discussing sensitive topics is the tendency of respondents to give socially desirable answers when the interviewer/surveyor knows the identity of the participants (Simpser, 2017). Simpser found that survey respondents care what a researcher thinks of them and their responses, causing respondents to be more likely to give socially desirable answers. One way to guard against socially desirable answers is by making responses written and anonymous, which leads to more honest responses. However, in the case of these interviews, it would have prevented probing for more in-depth responses that might better show which, if any, of the moral foundations led to the choice. LaDonna et al.caution that written open response answers do not yield data that is as rich as that obtained through in-person interviews, since participants rarely elaborate extensively when writing (LaDonna et al., 2018). In this research, the need for rich qualitative data seemed to outweigh the possibility that students might be less than truthful due to social desirability.

The vignettes produced for this research were an attempt to present complex scenarios that related to multiple moral foundations. Mah et al., (2014) recommends that vignettes should contain just enough information to prompt a rich response from a participant. They state that the wise use of detail is necessary to ensure that the vignette conveys a story yet leaves plenty of unstated details so that participants can fill in gaps with their own details (Mah, et al., 2014). Mah et al. (2014) also caution that vignettes

must seem authentic and must be believable so that participants are able to envision the scenario and imagine how they might act in it.

The ten vignettes for this study were sent to a sample of current and former university students for feedback. This student feedback led to subtle but important changes in the vignettes. For example, several vignettes referred to a "student club" in order to measure the importance of group loyalty, but after feedback that the term "club" is not used by current students, the terminology was changed to "student organization." Student feedback also confirmed that the vignettes were relevant to typical students, understandable, and clear.

The vignettes produced for this study are in Appendix 2. By involving multiple foundations, it was hoped to examine whether the preferred foundations from the MFQ were related to student responses to the vignettes. For instance, if a student scored higher on care than on purity when taking the MFQ, the student would be expected to choose a vignette response linked to care over a response linked to purity. In addition to representing all moral foundations, vignettes were designed to cover a wide range of academic behaviors that might or might not be considered dishonest.

Below is an example vignette:

> Only the top ten percent of students in a course can go on to take a higher-level course. You are in the top ten percent and your friend is almost there, except for one other student. You can give your friend online test answers to help your friend move ahead of the other student and into the top 10%. This will prevent the other student from moving on to the next course. What do you think you would do and why?

To answer this vignette, the student could choose between showing care for the friend by giving the friend answers or showing proportionality (a form of fairness in which rewards are commensurate with effort) to the other student by not giving the answers. Students might also suggest an alternate behavior to giving answers or not giving answers, such as talking to a professor or petitioning to change the rules. Once the student expressed a behavior choice, the student was asked whether the target behavior in the vignette would be dishonest or acceptable in this context. Then, the student was asked to determine which of two pre-selected moral foundations would be more important in their reasoning (in this case, care for the friend or unfairness toward the other student). Once these questions were completed, participants were invited to name any other factors that might influence their behavior choice in the scenario, since it was possible that a student might be motivated by some other moral foundation that was neither care nor proportionality. Giving the opportunity to explain their choices allowed students to reveal other moral foundations used for reasoning.

Moral Foundations Questionnaire-2

The second instrument used for data collection was the Moral Foundations Questionnaire-2 (Atari et al., 2022; Graham et al., 2009), which measured each subject's moral foundations in terms of preference/use. Permission was granted from Mohammad Atari, main author of the MFQ-2, to use the instrument. The MFQ-2 was transcribed from the downloaded document to a Google Form. The following paragraphs explain the reasons for choosing the newly developed MFQ-2 instead of the existing MFQ-1.

MFQ-1 vs MFQ-2. The original MFQ consists of two sections, the first of which asks participants to rate how relevant a particular moral principle is when they are

considering right and wrong. For example, participants are asked to rate statements such as the following statement according to its relevance when they are making moral decisions: *Whether or not some people were treated differently than others*. Likert style ratings range from "Not at all relevant" to "Extremely relevant." Graham et al. (2011) refer to these fourteen items as the Relevance section. Citing issues with internal consistency and confusion in administration, Atari et al. (2022) removed the Relevance questions from the MFQ-2.

The second section of the original MFQ asks participants to make judgements on statements related to morality using a Likert type rating from "strongly disagree" to "strongly agree." For example, the following item is included: *Compassion for those who are suffering is the most crucial virtue*. Graham et al. (2011) refer to these fourteen items as the Judgment section. After removing the Relevance items, Atari et al. (2022) expanded this section of the test to 36 items.

In addition to developing new test items, Atari et al. (2022) addressed cross-cultural validity, revisited group differences, and established convergent and discriminant validity. In addition, scoring options changed from a Likert type rating ranging from 0-5 to a Likert type rating ranging from 1-5. Rigorous testing found the MFQ-2 to be psychometrically superior to the original MFQ across a variety of populations, particularly populations that are non-WEIRD (western, educated, industrial, rich, and democratic). Nilsson calls the development of the MFQ-2 a "major advance" (Nilsson, 2023). Zakharin and Bates state that the MFQ-2 is reliable and valid (Zakharin & Bates, 2021). Since the MFQ-2 is psychometrically superior to the MFQ, since Fairness was separated into Equality and Proportionality (see details in the literature review), and since

the Relevance items were removed in favor of additional Judgment items, a decision was made to use the MFQ-2 for this dissertation instead of the original MFQ. The MFQ-2 can be found in Appendix 1. The MFQ-2 yields six sub scores - one for each of the moral foundations - and no overall score.

Procedure

Once students responded to the study poster, which included giving consent for the study, they were allowed to select an interview appointment using Calendly. Each interview began by assigning students a participant number so that their MFQ-2 scores and demographic data could be matched with interview data. An agreed location for gift card transfer was also established.

Interviews took place prior to administering the MFQ-2 to prevent the MFQ-2 items from influencing interview responses. O'Grady and Vandegrift state that making commitments to moral foundations by taking the MFQ can lead to a priming effect which may influence subsequent decision making (O'Grady & Vandegrift, 2019). Since the interviews occurred first, the interviewer was not aware of the students' MFQ-2 scores so that the MFQ-2 scores would not bias the interview process or influence the coding of responses. The researcher did not access MFQ-2 results until after the participant's interview had been coded.

During the interview, vignettes were read aloud by the researcher, to ensure that no misreading occurred. Participants were able to follow along using the shared Google Slides and were encouraged to refer back to the vignette as they considered their answers. The four standardized questions were not printed on the slides. Participants were first

asked what they would do in the scenario and why. Following this, participants were asked to judge whether the target behavior in the scenario (for example, producing graphs and charts in Vignette 7) would be dishonest or acceptable. After participants gave a predicted behavior choice and a judgment of honest/dishonest for the target behavior, they were presented with two factors that might influence their choice of behaviors in the hypothetical scenario. For example, in Vignette 7 (producing charts and graphs for a friend's project) students were asked whether obeying the instructor's rules against collaboration or helping a friend would be more important to them in deciding what to do. From their choice of factors, the student's moral foundation could be inferred. In the case of Vignette 7, choosing the instructor's rules as more important implied that authority was the more valued foundation, while choosing helping a friend as more important implied that care was more valued. Finally, students responded to the final standardized question, which invited them to identify any additional factors that might impact their behavioral decision. These standardized questions were augmented with probing questions as appropriate.

Once students were finished with the ten vignettes, a QR code was provided on the shared screen which linked students to the MFQ-2 and the demographic questions. The MFQ-2 was presented via a Google Form and participant answers plus demographic data automatically populated into a Google Sheet.

To summarize the study methodology, participants completed a semi-structured interview via Zoom containing ten academic vignettes which asked them to choose and explain a course of action and describe their reasoning in making choices. At the end of

the interview, respondents completed the MFQ-2, an established instrument for measuring moral foundations. They also provided demographic data.

Data Analysis

Data was collected concurrently through semi-structured interviews containing vignettes related to academic dishonesty and through the MFQ-2 instrument. Qualitative and quantitative data were weighted equally in importance and in relevance to the research questions. The qualitative and quantitative data was integrated (Creswell, 2009) by transforming a portion of the qualitative data into quantitative data using the behavioral choice, the forced-choice foundation question, and the forced-choice dishonesty question.

Qualitative Analysis

Interview transcriptions were retrieved from Zoom cloud recordings. Transcriptions are created automatically when Zoom calls are saved to the cloud. At this point, counts were performed to transform some of the qualitative data into quantitative data for later analysis. Non-transformed qualitative data was later used for triangulation and deeper understanding (Creswell, 2007).   Numerical and text data was transferred from the Zoom transcript into a Google spreadsheet for coding and identification of themes

Consistent with constructivist grounded theory, interviews were coded while additional interviews were still ongoing (Charmaz, 1990). This allowed the researcher to improve questioning ability and to begin examining the data for emerging patterns.

Interviews were initially coded using line-by-line analysis (Charmaz, 1990) followed by holistic coding.

Coding for Question 1 (the chosen course of action) consisted of recording the behavioral choice and any associated reasoning. For example, for Vignette 7, the behavioral choice was either creating charts and graphs, not creating charts and graphs, or another choice. Some responses contained complexities rather than simple behavioral choices. These complexities were noted on the spreadsheet and coded as contingencies if appropriate. Significant quotes were entered as such on the spreadsheet. Holistic coding was patterned after Graham, Haidt, & Nosek's study of sermon content (Graham et al., 2009). The MFQ Dictionary 2.0 (Frimer et al., 2019) was used to guide coding. This dictionary was based on MFQ-1, so words related to fairness needed to be reallocated to either equality or proportionality as appropriate. This was done on a case-by-case basis rather than re-coding the dictionary. As in the Graham et al. (2009) sermon analyses, keywords were identified within student responses, then read in context to confirm that they were related to one of the moral foundations. For instance, Graham et al. (2009) found numerous instances of words related to authority, but upon reading in context, they discovered that the words spoke *against* following authority instead of *in favor* of doing so. Usage of significant keywords cannot be interpreted without considering the words in context. While Graham et al. (2009) and Frimer et al. (2019) used specially developed computer programs for word analysis, the data from these interviews was analyzed using simple manual analysis. This holistic analysis was applied to the "Why" portion of the "What do you think you would do and why?" question. This allowed participants who

chose the same course of action to articulate completely different reasons that were related to completely different moral foundations.

Coding for Question 2 (whether a specific action was dishonest) consisted of recording the honest/dishonest response and reasons for the response. Some responses contained qualifying information, creating a contingency rather than a simple yes or no. As noted for Question 1, these contingencies were noted and coded as such.

Coding for Question 3 (forced choice between two pre-selected moral foundations related to the scenario) involved the coding of the participant's choice of moral foundations as presented by the interviewer and reasons for the choice. The respondent's choice was coded by moral foundation name.

Coding for Question 4 (other factors that influenced the choice of action) was similar to coding for Question 1. Guided by the MFQ Dictionary 2.0, responses were coded first in relation to Haidt's moral foundations, using additional codes as needed for responses that did not fit within Haidt's foundations.

Once the transcripts were coded, Question 1 choices (What would you do and why?) were categorized to show whether students were willing or unwilling to engage in the target behavior, or if they presented an alternate behavior or altered form of the target behavior. These responses were quantified and entered into SPSS with value labels 1, 2 or 3. For example, in Vignette 1, using Chegg was coded as 1, not using Chegg was coded as 2, and presenting a contingency was coded as 3.

Question 2 choices (Is the target behavior dishonest or OK in this context?) were quantified and entered into SPSS with value labels 1, 2, or 3. Judging the behavior as

dishonest was coded as 1, as OK was 2, and as contingent was 3. Similarly, Question 3

choices (Which factor would be more important to you?) were quantified and entered into

SPSS with value labels 1 or 2 depending on the foundation selected for each vignette.

Question 4 responses and all other textual data were holistically coded as they

related to moral foundations or to factors outside the parameters of Moral Foundations

Theory. This approach can be described as both an etic (theory based) approach and an

emic (emerging) approach. That is, Moral Foundations Theory was a starting point in

providing initial themes, while analysis of participant responses occasionally produced

additional codes and/or themes which influenced emerging theory (Tracy, 2013). Any

codes that did not fit under one of the existing moral foundations was examined and

categorized into additional themes as needed. Interviews were re-read multiple times and

coded using a holistic approach. The holistic approach provided an overall look at the

narrative, instead of examining the text word by word. Significant quotes were entered

into the spreadsheet to reflect important content and used to more deeply understand the

"Why" aspect of student decision making.

Quantitative Analysis

First, descriptive data from closed-ended interview items was reported in terms of

frequencies and percentages. This included the number of students who would be willing

or not willing to engage in each target behavior (Question 1); the number of students who

judged target behaviors as dishonest or not dishonest (Question 2); and the average score

for each forced choice foundation question (Question 3). In addition to this data, raw

counts were reported for each vignette showing the two juxtaposed foundations and

resultant scores for each.

The MFQ-2 yielded a score for each of the six moral subscales - care, equality, proportionality, group loyalty, authority, and purity. MFQ-2 averages for the sample were presented.

Next, descriptive data was presented separating MFQ-2 foundation scores and forced choice foundations from the vignettes by gender, political views, and religiosity.

Due to the small sample size, Fisher's exact test or Fisher-Freeman-Halton exact tests were performed in lieu of chi-square analysis to examine the behavioral choice question, the honest/dishonest question and the vignette foundation choice question separated by gender, political views, and religiosity. For quantitative analysis, a p-value of less than .05 denoted statistical significance.

Finally, Pearson correlations were used to compare MFQ-2 subscale scores to counted moral foundation scores from forced choice items. Help was solicited from the University of Kentucky Applied Statistics Laboratory to make sure the appropriate procedures were completed and interpreted correctly, related to both the Pearson correlations and the exact tests.

Summary of Analyses

In summary, interview responses were considered a measure of moral foundations as they are used in real-world academic situations, while the scores from the MFQ-2 were a measurement of beliefs regarding morality in general. Forced-choice interview items were quantified in order to explore student willingness to engage in target behaviors, to examine student judgments regarding dishonesty of target behaviors, and to examine student use of moral foundations in a variety of situations. Looking for a

correlation between MFQ-2 scores and forced-choice foundations shed light on each

student's moral beliefs and how they were connected to the student's real-world

judgments related to academic dishonesty. Qualitative data provided meaningful

information related to each student's choice of behaviors in a hypothetical scenario and

additional insight into why the students might behave and reason the way they did.

CHAPTER 4: FINDINGS

Research Question 1

Which specific academic behaviors are judged as dishonest by students? Why?

The number and percentage of students who viewed behavior choices as dishonest or not dishonest are shown in Figure 4.1 and Table 4.1. In Table 4.1, participants in the conditional category added a condition of some sort to their judgment.

Figure 4.1

Percentage of Students Who Found Behaviors Dishonest
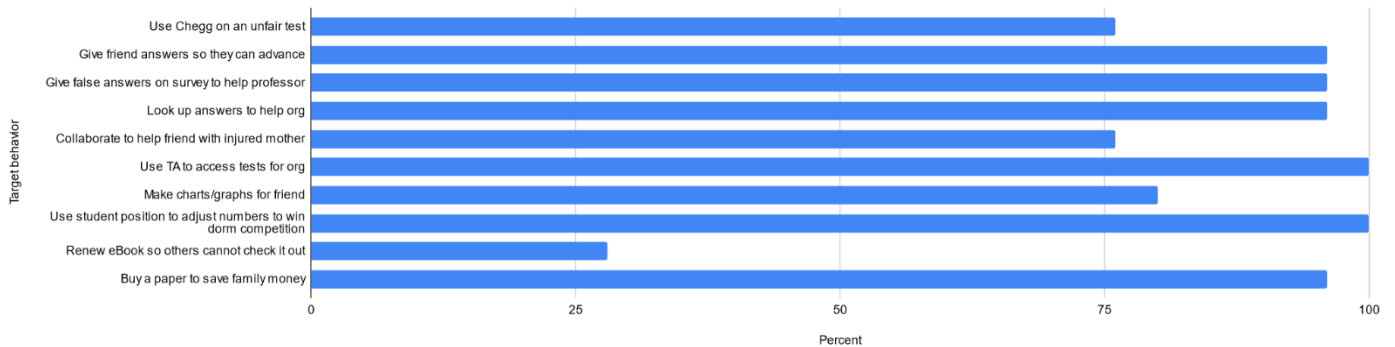
Table 4.1

Dishonesty Views of Specific Behaviors

Behavior	Dishonest	%	Acceptable	%	Conditional	%
Use Chegg on an unfair test	19	76	3	12	3	12
Give friend answers so they can advance	24	96	0	0	1	4
Give false answers on survey to help professor	24	96	1	4	0	0
Look up answers to help org	24	96	1	4	0	0

Collaborate to help friend with injured mother	19	76	4	16	2	8
Use TA to access tests for org	25	100	0	0	0	0
Make charts/graphs for friend	20	80	1	4	4	16
Use student position to adjust numbers to win dorm competition	25	100	0	0	0	0
Renew eBook so others cannot check it out	7	28	14	56	4	16
Buy a paper to save family money	24	96	1	4	0	0

As Table 4.1 shows, every questionable behavior presented to the students, except for renewing an eBook to prevent others from using it, was considered dishonest by most students. Two of the behaviors (using a TA relationship to access tests and using a student position to adjust competition points) were considered dishonest by 100% of students. Four of the ten behaviors were considered dishonest by 96% of the participants, meaning that only one student had a dissenting perception. Three behaviors were considered dishonest by 76-80% of participants. To summarize, nine out of the ten behaviors were considered dishonest by three-fourths of participants or higher.

While all vignettes contained complexities that students had to consider, the three behaviors that were considered dishonest by 76-80% of students contained complexities that made students question whether the behaviors were dishonest or not. For these three scenarios, one fifth or more of the participants were not sure if the behaviors were dishonest. For example, in Vignette 1, students had the choice of using Chegg to obtain answers on a test that they perceived as unfair, since the test contained material that had

not been covered in class. The fact that the test seemed unfair affected student evaluation of possible responses. Some judged that using Chegg would be dishonest but said that they felt justified in doing so on an unfair test, while others said that due to the test being unfair, using Chegg would not be dishonest in this context. A second item that provoked a mixed response from participants was the scenario that involved a friend whose mother was injured and who had not had time to study for a test.   Some respondents felt that, though giving answers would normally be dishonest, the friend's situation made doing so acceptable in this context. Finally, the item that asked students whether they would produce charts and graphs for a friend's project generated a variety of responses from participants. Many felt that producing the graphs and charts for the friend would be dishonest, but that showing the friend how to produce the graphs and charts himself would be acceptable. Like the earlier discussion of dishonesty as a "fuzzy concept," student perceptions of what constituted collaboration in the graphs and charts scenario seemed equally fuzzy.

The item that garnered the lowest dishonesty rating was the scenario that involved holding onto an eBook so that other students could not check it out. Only seven students (28%) felt that keeping the eBook was dishonest, though others qualified their response by statements such as, "It would not be dishonest, but it would be a jerk move" or "It would not be dishonest. It's definitely scummy but it's not dishonest."

Though two behaviors were universally regarded as dishonest, most showed less than complete agreement. This is consistent with the theory of "fuzzy sets" discussed in the literature review in which items show generally good fit for a category, but with differences in individual opinions. The complexities embedded in the vignettes served to

make the behavioral dilemmas even more likely to be "fuzzy," since students often

mentioned a particular contingency as a mitigating factor in determining whether a

behavior was dishonest or not. For example, regarding Vignette 7 (producing charts and

graphs for a friend's project where collaboration has been forbidden) one student stated

that she would give guidance to her friend, but not produce the work for the friend. Her

thought was that giving guidance is walking "kind of a thin line" between dishonesty and

appropriate behavior, further stating that giving guidance is just "a little bit of

collaboration." This implies that students may see collaborating as having degrees of

seriousness, as opposed to being an "all or nothing" concept. Another student's thoughts

about using Chegg in Vignette 1 (finding test items on Chegg) were that "if you copy

verbatim then it's morally more incorrect than if you were to look at how to solve the

problem or try to understand how that answer was reached." Again, this shows that

students view different ways of using Chegg as behaviors that show differing degrees of

dishonesty, with some uses of Chegg possibly not regarded as dishonest at all. Regarding

Vignette 9 (holding an eBook so that others cannot access it) one student qualified her

opinion by stating that the motive for holding the eBook would determine whether the

action was dishonest: "Your motive can be very different – from slow reading to being a

very thorough note taker." This implies that motive affects behavioral judgment –

having a legitimate reason for keeping the book makes holding onto it acceptable, while

simply keeping it to prevent others from using it is perceived as either rude or dishonest.

Research Question 2
Are students willing to engage in behaviors that they have judged to be dishonest? Why or why not?

The number and percentage of students who would be willing to engage in each behavior are shown in Figure 4.2 and Table 4.2. In Table 4.2, those in the contingent category either proposed an alternative behavior choice or amended the presented choice to some degree. Numbers in the "Yes" column show students who would be willing to engage in that behavior. Those in the "No" category would not. Those in the contingent category might be willing to engage in the behavior under certain conditions.

Figure 4.2

Percentage of Students Who Were Willing to Engage
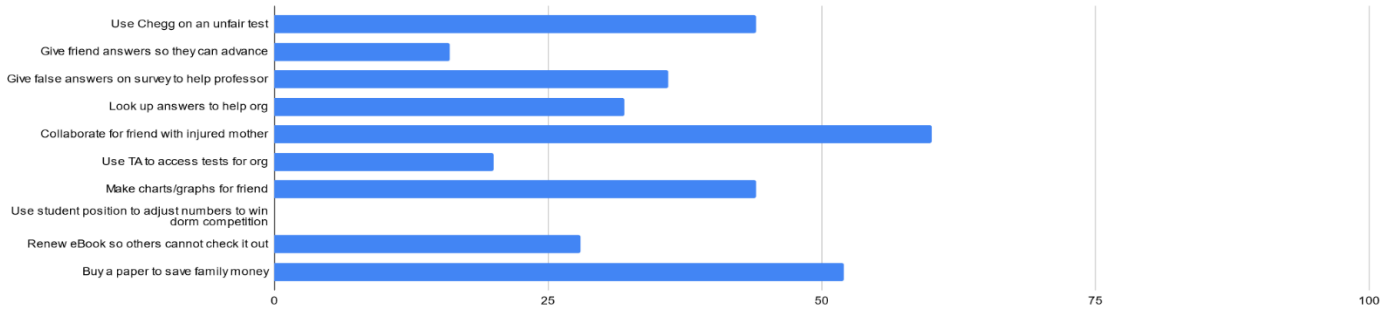
Table 4.2

Vignette Topics and Student Willingness to Engage

Vignette Topic	Yes	%	No	%	Contingent	%
Use Chegg on an unfair test	11	44	9	36	5	20
Give friend answers so they can advance	4	16	19	76	2	8
Give false answers on survey to help professor	9	36	16	64	0	0
Look up answers to help org	8	32	14	56	3	12
Collaborate for friend with injured mother	15	60	8	32	2	8

Use TA to access tests for org	5	20	16	64	4	16
Make charts/graphs for friend	11	44	9	36	5	25
Use student position to adjust numbers to win dorm competition	0	0	24	96	1	4
Renew eBook so others cannot check it out	7	28	17	68	1	4
Buy a paper to save family money	13	52	11	44	1	4

Findings from Research Question 1 showed that nine out of the ten target behaviors were seen as dishonest by most participants. That does not, however, mean that students would not be willing to engage in the behaviors. In fact, multiple students shared that they thought a behavior was dishonest but that they would be willing to engage in the behavior. The only behavior that that had no willing participants was using a student position to alter numbers so that their dorm floor could win an end-of-year award. Interestingly, this scenario involved a behavior that, even though it occurred in an academic setting, would probably not be considered academic dishonesty, as it does not directly involve schoolwork. It was included in the vignettes due to the difficulty of constructing varied academic items to measure group loyalty. The one student who provided a contingency for that scenario said that it would depend on the consequences for getting caught. The student provided the following contingency: "If this is a situation that if I got caught, I could somehow get [accused of] academic dishonesty or fraud or whatever ...then no, I would probably just accept the fate. But if this is just some silly little dorm competition and they're just kind of keeping track of numbers and there's not really any consequence other than the prize, then, yeah, I think I would do it."   This was

in direct contrast to other students, who stated that the competition was of such little importance to them that they would not care whether their dorm floor won or lost.

The items that the highest percentage of students were willing to engage in were as follows:

- Collaborate on a test with a friend whose mother was in the hospital (60%)
- Purchase a paper in order to save a scholarship to help family finances (52%)
- Use Chegg to look up answers on a test perceived as unfair (44%)
- Produce charts and graphs for a friend's project (44%)

Over half of the students were willing to engage in two of these behaviors. The top item involved giving test answers to a friend whose mother was in the hospital following a car accident. This vignette was designed to pit the care foundation against the authority foundation, since the choice was to help the friend or follow the professor's rules against collaboration. Sixty percent of participants were willing to help their friend in spite of the rules about collaboration. This is consistent with students' overall scores being highest on the care foundation, both on the vignette forced choices and on the MFQ-2. However, several students mentioned that the friend's situation was the factor that led to their decision to give the friend answers. They stated that they would not be willing to do so for a friend who simply chose not to study. Consistent with Haidt's view of care as showing compassion for one who is vulnerable in some way, students were willing to show care for a friend in a difficult situation when otherwise they would likely respect the instructor's rules against collaborating.

The item that 52% of students were willing to engage in involved purchasing a paper to retain their scholarship in order to save their family money (Vignette 10). The

scenario stated that the consequence of submitting a purchased paper was possibly disappointing a professor who could later help them find a job. Again, the hardship embedded in the vignette seemed to be the factor that influenced students' willingness to purchase a paper. Students often mentioned that they were only willing to engage in the target behavior because they and their family stood to suffer a significant loss by not doing so.

While Vignette 10 was designed to pit group loyalty (to family) against authority (professor's opinion of them), holistic analysis found that most students were motivated out of care for the family more than by loyalty. They generally stated that it would upset them to cause hardship for their family. None of the participants mentioned words that would suggest group loyalty. This is consistent with student forced choices and MFQ-2 scores showing care as their most important moral foundation. It also shows the difficulty in constructing vignettes that discriminate between care and loyalty.

The items that the fewest students would be willing to engage in were the following:

- Use student position to adjust numbers to win a dorm competition (0%)
- Give a friend answers so the friend can advance to a higher-level course (16%)
- Use a relationship with a TA to access exams for an organization (20%)

Participants were consistent in stating that using a student position to adjust numbers in order to win a dorm competition was dishonest and in stating that they would not participate in such a behavior. Only one student gave a contingency in which he might be tempted to participate and that was based on the consequences of getting caught. Most students stated that they would not care enough about a dorm competition

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to consider cheating and that in that scenario, it would not be fair for a harder working group to be denied their prize. This is consistent with the higher scores on proportionality than on group loyalty in the forced choices and on the MFQ-2. A few students added that if the prize were significant enough (for example, all hallmates would receive free housing for the next school year) they would be tempted to adjust the numbers in order to win, although no one specifically said that they would do so. This implies that if a personal payoff is significant enough, students might be willing to cheat, when they would not do so for an insignificant payoff.

The next lowest scoring item in terms of willingness to engage in a behavior was giving a friend answers to help the friend progress to a higher-level course. This vignette was designed to pit care (for the friend) against proportionality (rewards commensurate with effort). Most students answered that it would not be fair to another student to help the friend move ahead when the friend did not deserve to do so. This is one of only two scenarios in which care lost to another foundation, in this case proportionality. Eighteen of the 25 students stated that fairness to a deserving student was more important to them than care for their friend. In fact, one stated, "That would keep me up at night knowing that there is somebody who could have deserved it more." It is also possible that they felt a combination of proportionality and care in this vignette since they seemed to feel both compassion and injustice toward the plight of the deserving student. In combination, these outweighed care for the friend.

It is interesting to note that some students showed care for themselves by being either willing or unwilling to give the friend answers. For example, one student was unwilling to give the friend answers because "if I help my friend then it would mean I'd

probably have to help them throughout the whole next course." In contrast, another student was willing to give the friend answers so that they could advance together: "If you were to help your friend then you would benefit because you have a friend in the [next] class. So, it's also for [my] benefit because I want them to be in the higher-level course with me." In similar fashion, a third student saw the potential for mutual benefit, "It is more than just helping my friend this way, you know. Let's say I'm willing to share the test answers with this friend; maybe this friend is also willing to help me in the [next] course." These latter students were more concerned with the benefit that they stood to gain by helping or not helping the friend advance, and these responses were coded as care responses [for self] since all forms of the word "benefit" are coded as care virtues in the MFQ Dictionary 2.0.

A consistent thread running through student responses was that when the costs of failure were high enough, such as risking a scholarship or a failing grade, students were willing to engage in behaviors even though they judged them to be dishonest. For instance, one student stated that she would engage in dishonest behaviors "because GPA is something that's heavily focused on, especially in my major and it's a hard major. So, I'm going to do whatever I have to to make sure I get through." Some students, however, were admittedly upset by the fact that they would be willing to engage in certain behaviors. For instance, regarding Vignette 10 (purchasing a paper to save a scholarship that would affect family finances) one student admitted, "In this scenario, I'd probably buy the paper. I would probably buy the paper. I hate that. I hate that. But if I just had those two options (buying a paper or losing a scholarship) I would buy a paper." When asked why she would be willing to do so, the student replied, "Because education means

a lot to me and not being able to complete my education would be really upsetting.... like insurmountably upsetting." She then qualified her choice of behaviors to say "but if I just bought a paper from somebody, I would probably just write my own paper based on that and then turn it in. Like I'm not going to just turn in a reused paper." As Ellemers et al. (2019) discussed in their review of morality articles, humans engage in actions to mitigate their feelings of guilt and improve their moral self-view when engaging in questionable behaviors. This student has neutralized her actions to some degree by modifying her behavior to make it less reprehensible to herself.

Research Question 3

Which foundations from Moral Foundations Theory are most relied on by students when predicting their own behaviors in academic vignettes?

The figures and tables in this section represent the forced choice moral foundations from the interview vignettes. Participants were offered two moral foundations that might weigh into their behavior choice and asked which of the two would be more influential. For example, in Vignette 1, students were asked if their parents' opinion of them (authority) or the fact that the test was unfair (proportionality) would weigh more significantly in their decision to use Chegg or not. Foundations were not mentioned by name to participants, so the choice of foundation was inferred from the factor that participants claimed was most important to them.

Figure 4.3 and Table 4.3 show the overall averages of the six moral foundations. The highest scoring forced choice foundations were care, proportionality, and authority in that order. This means that the care foundation factored into students' decisions more often than any other foundation, followed by proportionality and authority. The lowest

three foundations overall were group loyalty, purity, and equality respectively, and all were considerably lower than the top three foundations. The "points possible" column in Table 4.3 shows the number of vignettes that targeted each foundation. It is important to note the number of vignettes that contained each foundation, since they are not equal. For example, purity and equality are the lowest scoring of the forced choice foundations, but they also had only one related vignette each. Group loyalty only averaged .76, though it was represented in four vignettes.

Figure 4.3

Vignette Forced Choice Foundation Overall Averages
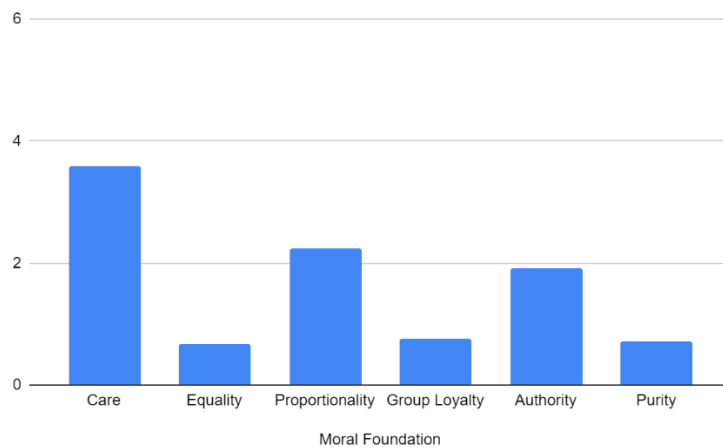
Table 4.3

Vignette Forced Choice Foundation Overall Averages

Moral Foundation	Mean	Points possible
Care	3.60	5
Equality	0.68	1
Proportionality	2.24	3
Group Loyalty	0.76	4
Authority	1.92	6
Purity	0.72	1

Figure 4.4 and Table 4.4 show the item counts for the forced choice for each of the ten vignettes. In Figure 4.4, vignette numbers are listed on the x-axis and forced choice count totals on the y-axis. The colored bars show which two foundations were in consideration and their relative scores. For example, in Vignette 1, the yellow bar represents proportionality, and the orange bar represents authority. In Table 4.4, each vignette is listed on the left by number. The columns in the table show which two foundations each vignette was designed to tap and the number of students who chose each foundation. In most vignettes, one foundation usually had about double the responses of the other foundation. Vignette 8 (student employee altering numbers to win a competition) showed the most difference between two foundations, with proportionality being cited by 22 students, while group loyalty was only cited by three students.

Care was represented in five vignettes and was chosen in three of the vignettes as more important than the other foundation. Care was outranked in Vignette 2 (in favor of proportionality) and in Vignette 9 (in favor of equality). Proportionality was represented in three vignettes (numbers 1, 2 and 8) and was chosen as more important in all three. Group loyalty was represented in four vignettes and was only chosen as more important in one (Vignette 10). Upon holistic analysis, it was determined that the actual foundation being relied upon in Vignette 10 was care, rather than group loyalty. Authority was represented in six vignettes (numbers 1,3,4,5,7, and 10). The only vignette in which authority scored more important than its counterpart was Vignette 4, where it was more important to students than group loyalty.

Figure 4.4

Forced Choice Foundation Counts per Vignette
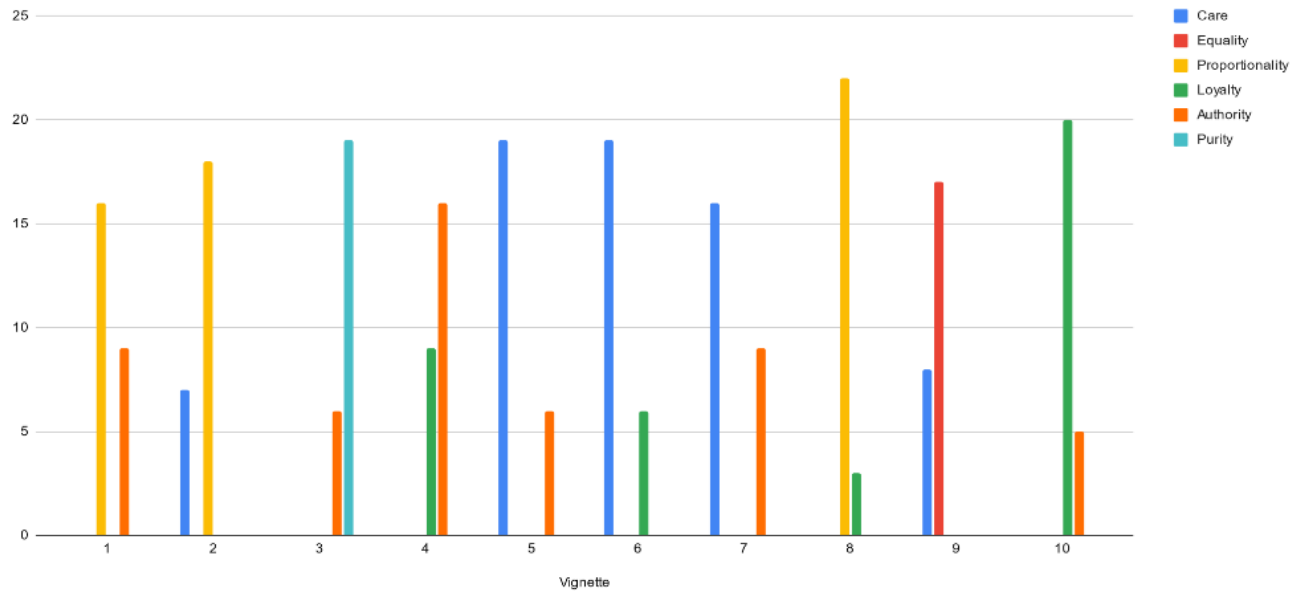
Table 4.4

Forced Choice Foundation Counts per Vignette

Vignette	Care	Equality	Proportionality	Loyalty	Authority	Purity
1			16		9	
2	7		18			
3					6	19
4				9	16	
5	19				6	
6	19			6		
7	16				9	
8			22	3		
9	8	17				
10				20	5	

Research Question 4

Is there a relationship between scores on MFQ-2 subscales and forced choice decisions related to Moral Foundation Theory by students considering academic vignettes, and if so, what is the nature of the relationship?

Figure 4.5 and Table 4.5 show the results of the MFQ-2. The highest averages were scored by care, proportionality, and authority in that order. These were followed by group loyalty, equality, and purity respectively.

Figure 4.5

MFQ-2 Overall Scores

Table 4.5

MFQ-2 Overall Scores

Moral Foundation	Mean
Care	4.46
Equality	2.76
Proportionality	4.12
Group Loyalty	3.43
Authority	3.67
Purity	2.58

Table 4.6 shows the Pearson correlations between forced choice foundations and MFQ-2 scores.

Table 4.6

Pearson correlations

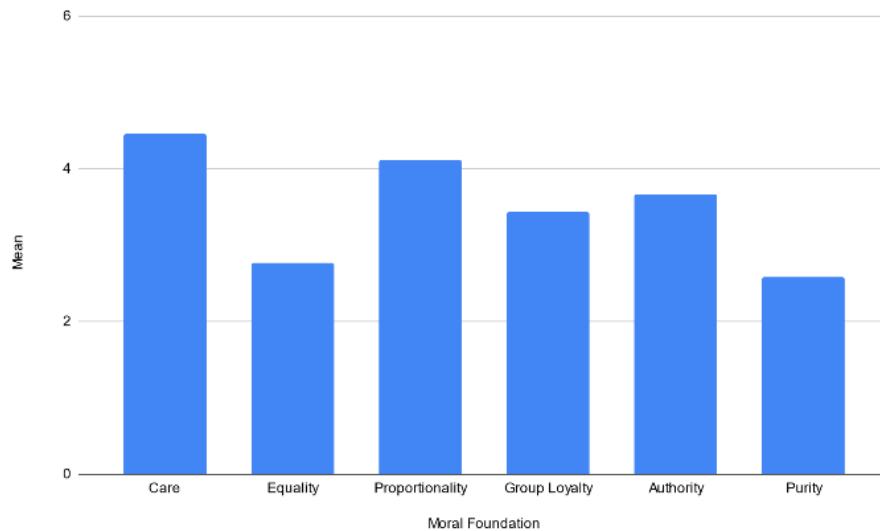|	MFQ-2 Care	MFQ-2 Equality	MFQ-2 Prop	MFQ-2 Loyalty	MFQ-2 Authority	MFQ-2 Purity
FC Care	**.232**	.227	.088	-.202	-.361	-.536**
FC Equality	-.073	**.169**	-.065	.063	.064	.061
FC Prop	-.308	-.267	**.394**	.142	.140	.206
FC Loyalty	.101	.128	-.061	**.153**	.076	-.032
FC Authority	.123	-.026	-.161	-.041	**.194**	.194
FC Purity	-.226	-.272	-.064	.023	.009	**.310**

 **Significant at 0.05 (2-tailed)

Correlations were not impressive between MFQ-2 scores and forced choice foundations from the vignettes. Each MFQ-2 score correlated positively with its matching category of forced choice responses, but none of the positive correlations were statistically significant. In order of strength of correlation, the proportionality scores are most strongly correlated, followed by purity, care, authority, equality, and finally loyalty. It should be noted again that the MFQ-2 contains an equal number of items (6) for each foundation, while the vignettes were unequal in representing each foundation. For example, both purity and equality were only represented in one vignette each.

The only statistically significant correlation was -.536 between forced choice care and MFQ-2 purity. This implies that a high care score would likely be accompanied by a low purity score and a low care score would be accompanied by a high purity score. When examined from the opposite direction, the purity/care correlation is still negative, but less strong (-.226). It seems that FC Care is more strongly correlated with MFQ-2

Purity than FC Purity is correlated with MFQ-2 Care. Perhaps this is because there was only one vignette that targeted purity and, in that vignette, purity was positioned against authority. In contrast, there were five vignettes that targeted care, none of which positioned care against purity. The weak correlations here are not unlike the findings of Sutarimah et al. (2020), who found that MFQ-2 scores had little predictive validity toward academic behaviors.

The pattern of scores between the MFQ-2 and the vignettes was comparable, but some of the lower scores should be mentioned specifically. In-group loyalty was in the lower half of foundation scores, both on the MFQ-2 and in the vignettes. This may have been partially because all participants were US citizens except for one student from Costa Rica, still considered a WEIRD culture. Research has shown that students from collectivist cultures are more likely to view in-group loyalty as particularly important and may be more willing to cheat to help their group (Pulfrey et al, 2018). In contrast, a number of students in this research stated that their group was not important enough to them that they would cheat to help the group. As was stated earlier, Atari et al., (2022) stated that "purity and loyalty may be considered least WEIRD of the moral foundations (p. 56). The findings in this study were consistent with this statement.   In the vignettes, few respondents were willing to cheat in order to help their organization, suggesting that group loyalty is weaker than other moral foundations. When separated by gender, however, it was surprising to see the degree to which males regarded in-group loyalty as important, especially as compared to females, where group loyalty was the lowest scoring foundation in the academic vignettes.

Purity was the lowest scoring moral foundation on the MFQ-2 and second lowest in the forced choice responses. This is not surprising given that the population was college students between 18-24 and the MFQ-2 questions deal with behaviors such as using foul language, sexual purity, and natural health. However, since most participants (n=19) claimed to be either moderately or extremely religious and since 28% claimed to be politically conservative, the purity score might be higher than it would have otherwise been. Since this university is in the south, the number of students that are both conservative and religious is not surprising. Using a very broad understanding of purity, responses indicating truthfulness on Vignette 3 (being truthful on an anonymous survey) were coded as a purity response since students held to a personal moral pillar. Having only one vignette related to purity certainly biased scores, since participants had little choice to choose a purity response. Vignette 6 (using a relationship with a TA) was designed to possibly elicit a purity response to an inappropriate sexual relationship; however, all students who mentioned the inappropriate relationship implied that it violated authority more than purity due to the power differential between TAs and students.

Research Question 5

How are demographic categories associated with MFQ-2 scores or with responses to academic vignettes?

Gender

Figures 4.6 and 4.7 and Table 4.7 show forced choice average scores and MFQ-2 averages separated by gender. The top three foundations are

care/proportionality/authority for all except the forced choice male results which are
care/proportionality/group loyalty.

Figure 4.6   **Figure 4.7**
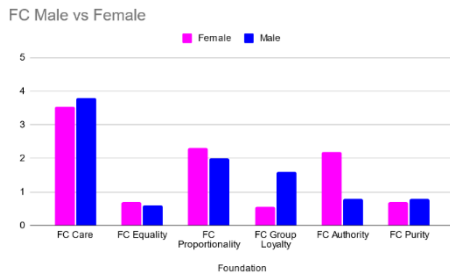
FC by Gender   *MFQ-2 by Gender*
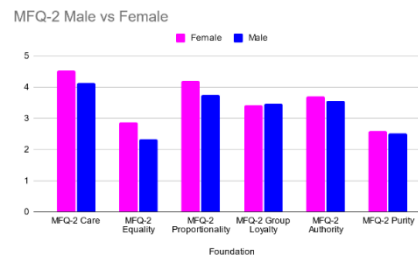
Table 4.7

Scores by Gender

Foundation	Female Mean (n=20)	Male Mean (n=5)
FC Care	3.55	3.80
FC Equality	.70	.60
FC Proportionality	2.30	2.00
FC Group Loyalty	.55	1.60
FC Authority	2.20	.80
FC Purity	.70	.80
MFQ-2 Care	4.54	4.13
MFQ-2 Equality	2.87	2.32
MFQ-2 Proportionality	4.21	3.76
MFQ-2 Group Loyalty	3.42	3.46
MFQ-2 Authority	3.70	3.56
MFQ-2 Purity	2.59	2.53

The first item that stands out in these results is the difference between group
loyalty and authority between males and females in the vignettes. While females valued
authority at a higher rate than they valued group loyalty, males were just the opposite.

This suggests that females would be more likely to obey faculty or parental rules rather than help a group, while males would be more likely to help a group than defer to an authority figure. All other foundations, whether in vignettes or on the MFQ-2 are much more similar between males and females.

The male group loyalty score for the forced choice items is the most removed from the typical scoring pattern of care/proportionality/authority. While group loyalty was the fourth highest score for males on the MFQ-2, ahead of only purity and equality, it was third highest in forced choice foundations and considerably ahead of the lower three foundations. Males were also much more likely than females to engage in dishonest behavior in order to help a group.

Political Views

Figures 4.8 and 4.9 and Table 4.8 show forced choice average scores and MFQ-2 scores separated by political views. In the forced choice section, conservatives and moderates follow the care/proportionality/authority pattern, while liberals do not. In MFQ-2 results, moderates follow the care/proportionality/authority pattern while both conservatives and liberals do not.
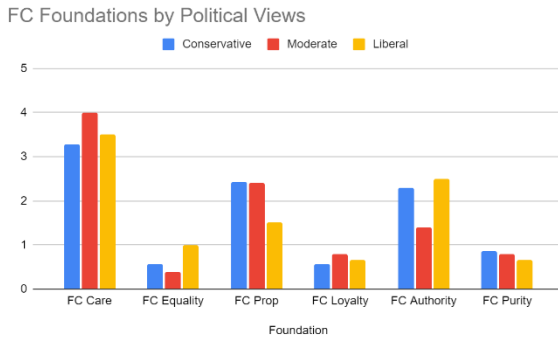
Figure 4.8

FC by Political Views

FC Foundations by Political Views

■ Conservative ■ Moderate ■ Liberal

Figure 4.9

MFQ-2 by Political Views

MFQ-2 Foundations by Political View

■ Conservative ■ Moderate ■ Liberal
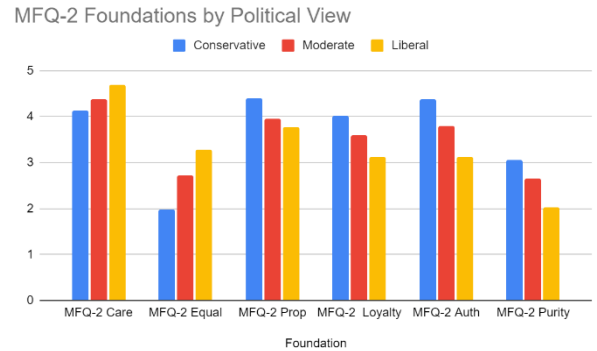
Table 4.8

Scores by Political Views

	Conservative (n=7)	Moderate (n=5)	Liberal (n=6)	Apolitical (n=1)	Other (n=3)	PNTS (n=3)
FC Care	3.29	4.00	3.50	4.00	3.33	4.00
FC Equality	.57	.40	1.00	1.00	.67	.67
FC Prop	2.43	2.40	1.50	3.00	2.33	2.67
FC Loyalty	.57	.80	.67	.00	2.00	.33
FC Authority	2.29	1.40	2.50	1.00	1.33	1.67
FC Purity	.86	.80	.67	1.00	.33	.67
MFQ-2 Care	4.14	4.39	4.69	4.00	4.55	4.88
MFQ-2 Equality	1.99	2.73	3.27	2.66	3.33	3.05
MFQ-2 Prop	4.40	3.96	3.77	4.66	3.88	4.49
MFQ-2 Loyalty	4.02	3.59	3.13	3.16	2.99	2.88
MFQ-2 Auth	4.37	3.79	3.13	3.33	3.55	3.16
MFQ-2 Purity	3.06	2.66	2.02	2.00	2.72	2.49

It is difficult to make inferences about the latter three political groups, since nothing is known about their actual views. For this reason, little attention was given to them in analyzing data. In most previous research, participants have rated themselves on a dichotomous scale from extremely liberal to extremely conservative instead of

identifying with a specific category. Because of this, moderates and other categories have not typically been studied.

Conservative Participants

Looking at the overall MFQ-2 pattern, conservatives scored more equally across the foundations than did liberals or moderates. This is consistent with other research results showing that conservatives typically score high in all foundations (Kivikangas et al., 2021). The exception to this is the MFQ-2 equality score for conservatives, which is the lowest foundation of all regardless of political category. While all other conservative scores are over 3 or 4, equality is 1.99. Equality as a concept includes equal opportunity and equal value for individuals, which conservatives value less than the other form of fairness, proportionality, which involves outcomes that are commensurate with inputs (Atari et al., 2022; Skurka et al., 2019).

As stated previously, Pew research shows that Gen Z (born after 1996) individuals are more liberal in most areas than older generations (Mitchell, 2019). Even Gen Z persons who identify as conservative are more liberal than conservatives in older generations. For this reason, it would be expected that MFQ-2 scores would lean toward care and the fairness foundations, as is typical for liberals, so it is somewhat surprising that conservative students scored higher on both proportionality (4.40) and authority (4.37) than on care (4.14).

FC scores for conservatives are notable in that they are not nearly as equal as would be expected from previous research. However, since students did not have equal opportunity to select every foundation in the vignettes, it would be impossible to have

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near equal scores across all foundations. For example, purity and equality each had only one chance to be chosen. MFQ-2 scores for conservatives follow the more typical pattern

Liberal Participants

Liberal students did not follow the typical MFQ-2 pattern of valuing the individualizing foundations (care and fairness) much more than the three binding foundations (loyalty, authority, and purity). This is difficult to assess with the separating of fairness into equality and proportionality. As has been stated earlier, liberals tend to rely on equality while conservatives are more likely to rely on proportionality. In this sample, however, liberal students scored higher on proportionality than on equality.

On the FC foundation items, the main discrepant finding for liberals was their high score on authority. It is not typical for liberals to outscore conservatives on this foundation. This suggests that in the vignettes, liberals found deference to authority and adherence to rules as more important than did conservatives or moderates.

The highest of all scores among the three main political groups was the care score for liberals (4.69). This is consistent with previous research showing that liberals score higher on care and fairness, while conservatives score higher on group loyalty, authority and purity (Atari et al., 2021; Graham, Haidt, & Nosek, 2009; Kivikangas et al., 2021). When all six political categories are examined, care scores are above 4.00 in all, with the "prefer not to say" category scoring even higher than liberals.

When looking at the three main political groups on the MFQ-2 graph, the first two foundations (care and equality) show increasing scores as political views move from conservative to liberal. On the final four foundations, scores trend in the opposite direction. Both of these trends are consistent with previous findings.

Religiosity

Figures 4.10 and 4.11 and Table 4.9 show forced choice average scores and MFQ-2 averages separated by religiosity. The overall care/proportionality/authority pattern is matched here in forced choices only by the moderately religious, who form the bulk of the sample. Regarding MFQ-2 scores, the care/proportionality/authority pattern is also matched by only the moderately religious.

Figure 4.10

FC by Religiosity

FC Foundations by Religiosity
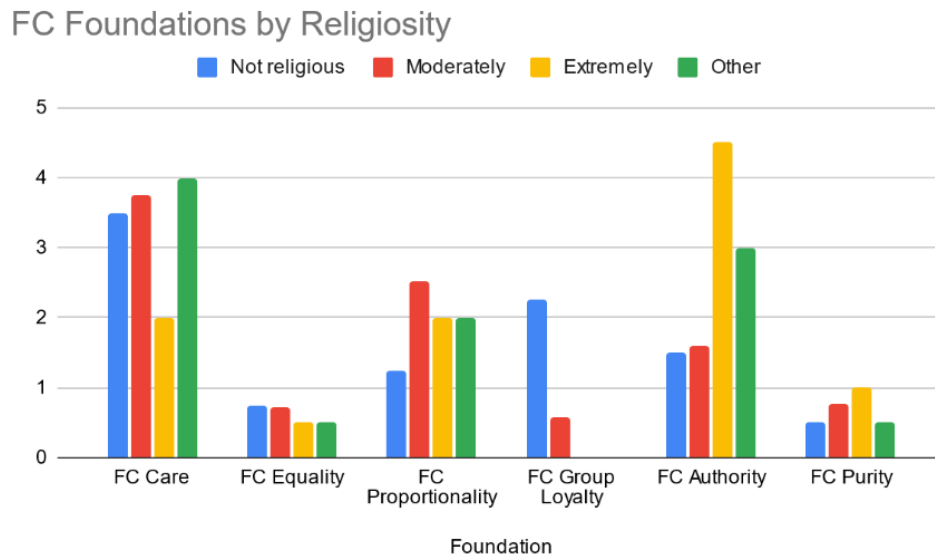
Figure 4.11

MFQ by Religiosity

MFQ-2 Scores by Religiosity
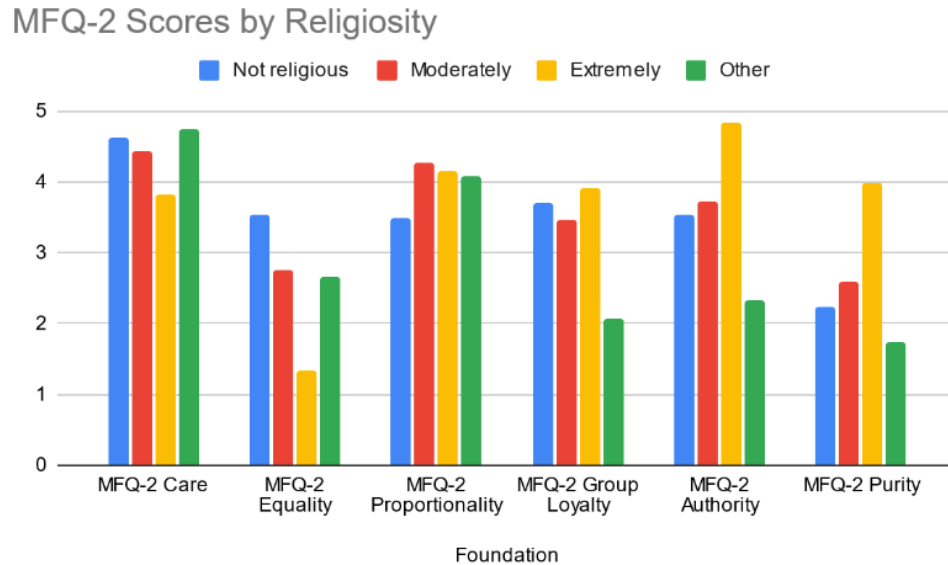
Table 4.9

Scores by Religiosity

	Not religious (n=4)	Moderately Religious (n=17)	Extremely Religious (n=2)	Other (n=2)
FC Care	3.50	3.76	2.00	4.00
FC Equality	.75	.71	.50	.50
FC Proportionality	1.25	2.53	2.00	2.00
FC Group Loyalty	2.25	.59	.00	.00
FC Authority	1.50	1.59	4.50	3.00
FC Purity	.50	.76	1.00	.50
MFQ-2 Care	4.62	4.45	3.83	4.75
MFQ-2 Equality	3.53	2.76	1.33	2.66
MFQ-2 Proportionality	3.49	4.27	4.16	4.08
MFQ-2 Group Loyalty	3.70	3.46	3.91	2.08
MFQ-2 Authority	3.53	3.73	4.83	2.33
MFQ-2 Purity	2.24	2.59	3.99	1.75

Care was judged to be the most used moral foundation in the vignettes for every

demographic group except those who were extremely religious. For the extremely

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religious, authority (4.50) was more important than care (2.00) or proportionality (2.00). This may imply that extremely religious students are more likely to obey rules than to help a fellow student; however, there were only two participants in this category. For all other groups, students may choose to show compassion for a friend even if it means breaking a rule. The two extremely religious students were unwilling to engage in any of the target behaviors with the exception of holding an eBook to prevent others from using it, which one student was willing to do. The student who was willing to hold the book asserted that she was prompt enough to get the book first and that she felt no compunction to hurry or compromise the quality of her work just to provide others with the opportunity to use the book. She did go on to state that it would be rude to keep the book once she had finished with it, though she did not label doing so as dishonest. Based on this research, it may be that extremely religious students are the least likely students to engage in academic dishonesty due to the degree to which they respect authority and obey rules. Not only was authority the highest FC score for the extremely religious, but it was also their highest scoring foundation on the MFQ-2.

The extremely religious students had the highest FC purity score of all groups. There was only one vignette that measured purity (honesty on a survey) and both extremely religious participants chose the purity option. They also had a higher purity score on the MFQ-2 than any other group and it was their third highest MFQ-2 foundation behind authority (4.83) and proportionality (4.16).

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Demographic categories and student choices on the first three interview questions were further analyzed by using the Fisher's exact test or Fisher-Freeman-Halton exact test. These tests are used in lieu of the chi-square test when a sample size is small. Significant p-values were .05 or less.

Demographic categories and honest/dishonest judgments

Gender and honest/dishonest judgments were further analyzed using Fisher's exact or Fisher-Freeman-Halton exact test and only Vignette 5 (giving test answers to a friend whose mother is in the hospital) showed a significant difference ($p =.049$). While all males judged giving test answers to the friend to be either dishonest in this context or dependent upon some contingency, twenty percent of the females judged helping the friend as acceptable in this context.

Fisher-Freeman-Halton comparisons of religiosity and honest/dishonest judgments led to one significant difference ($p =.010$) on Vignette 1 (using Chegg to look up answers on an unfair test). Instead of judging the behavior as honest or dishonest, both of the extremely religious students presented a contingency. One of the extremely religious students stated that she would not look up answers on Chegg, but that doing so would only be dishonest if the teacher specifically said not to do so. The other extremely religious student similarly stated that she would not use Chegg, but it would only be dishonest if the professor specified that the exam was "closed note." She went on to say, "If the professor said it was open note…. then it's open to anything I guess." Interestingly, the two extremely religious students made exactly the same judgments

regarding honest/dishonest actions in all ten vignettes. They judged holding the eBook in

Vignette 9 as not dishonest, using Chegg in Vignette 1 and creating charts and graphs in

Vignette 7 as possibly dishonest depending on the situation, and they judged the target

behavior from every other Vignette as dishonest.

When political views and honest/dishonest judgments were further analyzed using

Fisher-Freeman-Halton Exact, no significant differences were found between groups.

Demographic categories and FC moral foundations

When analyzed by gender using Fisher's exact test, only Vignette 4 (using a

phone to look up answers in order to help an organization) showed a significant gender

difference in foundation choice ($p = .040$). While only 20% of females chose group

loyalty over obedience to authority in Vignette 4, 80% of males chose group loyalty.

This is consistent with Table 4.7, which shows that group loyalty is the third highest

forced choice count for males, second only to care and proportionality. In contrast, group

loyalty is the lowest count for females in the forced choices.

When the Fisher-Freeman-Halton exact test was conducted with religious views

and forced choice of moral foundation, only Vignette 5 (giving test answers to a friend

whose mother was hospitalized) showed a significant difference ($p = .002$). Those who

chose care were willing to give answers to a friend even though it violated a professor's

rule against collaborating. Those who chose authority were not willing to break a

professor's rule in order to help a friend. Students who identified as non-religious and

those who were moderately religious largely chose care over authority while those who

identified as extremely religious or "other" chose authority over care.   This is consistent

with the counts in Table 4.9 in which authority is the single highest foundation for the extremely religious. Authority is also the highest score on the MFQ-2 for the extremely religious. In contrast, in the vignette counts, authority ranks third among the moderately religious and the non-religious.

Finally, the Fisher-Freeman-Halton analysis of political views and forced choice of foundation on vignettes showed no significant differences between groups.

Demographic Categories and FC Behavioral Choices

When the Fisher-Freeman-Halton exact test was applied to gender and behavioral choice, the results were similar to Fisher's exact results for gender and foundation choice. The only vignette to show a significant result was Vignette 4 (using a phone to look up answers in order to help an organization). In response to Vignette 4, 80% of males would look up answers on a phone to help their group, while only 20% of females would do so ($p = .031$). This is consistent with the results from the foundation choice, showing that men were more likely to choose the group loyalty foundation while females tended to choose obedience to authority as more important to them.

Related to religiosity and behavioral choice, the Fisher-Freeman-Halton exact test showed no significant differences. However, the results were interesting. There were only two extremely religious participants. They were unwilling to engage in any of the behaviors with the exception of one behavior. One extremely religious person was willing to keep an eBook (Vignette 9) which would prevent others from using it. This is also the one behavior that only 28% of students found to be dishonest. Neither of the extremely religious students found keeping the eBook to be dishonest.

When applying the Fisher-Freeman-Halton Exact test to political views and behavior choice, no significant differences were found.

Research Question 6

In what ways do open responses to academic vignettes contribute to a richer understanding of the relationship between preferred moral foundations as measured by the Moral Foundation Questionnaire-2 and reasoning about academic behaviors?

Open responses to interview questions provided valuable insight into participants' thoughts about academic behaviors that could not have been gleaned from closed ended questions. Some of those insights are discussed below.

Proposed alternatives

First, students proposed a variety of alternate behaviors in addition to those proposed by the vignettes. Rather than simply answer that they would or would not engage in a behavior, they generated alternate options. For example, in Vignette 1, the implied alternatives are for the student to look up test answers on Chegg or to not look up test answers on Chegg. The students, however, generated other possible alternatives by statements such as, "I don't think I would look them up on Chegg. But I will definitely meet with the professor and point out [that] certain materials that are not covered in class are on the exam. And if it's unfair, I think I will probably speak to somebody above them." Similarly, on Vignette 5 (giving test answers to a friend whose mother was in the hospital) one student stated, "I'd probably offer to help my friend study or catch up. I don't think I could give her the answers though because that would be wrong. Maybe I could write an email for her to the professor or speak on her behalf, but I don't think I could help her with the test."

These proposed alternatives relate to the Ellemers et al. (2019) theme of moral self-view and the need for humans to feel good about themselves morally. Some students were not willing to engage in questionable behaviors, instead opting for solutions that were morally acceptable to them, but that still resulted in a positive outcome. These alternatives also often reconciled the two foundations presented in the dilemma. The second student in the paragraph above offered to help the friend study or negotiate with the professor (both actions showing care) while still not giving test answers (obeying authority) and by doing so did not violate either moral foundation.

Reasons for choosing behaviors

In addition to proposing alternative behavior choices, students often elaborated on the reasons they would be willing or unwilling to engage in certain behaviors. These reasons would not have been discerned without the open responses. For example, "I would study for the exam [instead of looking up answers on Chegg] because I would still want to know the information."   Another student, considering the same choice said, "I am a Christian, so honesty is important to me, so I don't think I'd look." Yet another said, "Honesty is important [to my parents] but they also understand that students cannot do well on this exam, so I honestly think I would [look up answers on Chegg]".   It is valuable to not only know what the student's behavior choice would be, but also to know the varied reasons behind the behavioral choices. Students may make the identical choice to engage or not engage in a behavior, but they may do so for entirely different reasons. Often, examining the "why" that students expressed gave insight into the moral foundation upon which they relied.

Cheating as a Last Resort

Some students were willing to engage in questionable behaviors, but only when other options had been exhausted. This trend also could not have been uncovered using closed ended questions alone. Regarding Vignette 1, this student stated that she would use Chegg only as a last resort, "I think I would talk to my parents about the difficulty level of the exams and see if they had any tips and try that first and then just make sure that they know that you are giving it your all. Then if you get to the exam and you have tried everything and you're still not 100% sure, then you could look on Chegg. I would do that just so that you could know for yourself and for your parents that you're still trying your hardest." Considering whether she would purchase a paper to save her scholarship, one student said, "It definitely wouldn't be a first resort, but if it came down to it and it was all or nothing, I think I would [purchase a paper]."

Decision to help based on recipient's effort and circumstance

One interesting observation was the fact that students considering whether to give dishonest help to a friend often based their decision to help on the friend's past effort or circumstance. For instance, when considering Vignette 2 (giving answers to help a friend advance to the next course) one student stated, "I would probably evaluate how hard my friend is working. If I felt like my friend is not working hard enough, then it's not fair to take that spot from someone else that is working hard and wants it." The student went on to say that she would give test answers to the friend if she judged that the friend's past effort had been sufficient. Likewise, regarding Vignette 5 (giving test help to a friend

whose mother is in the hospital) one subject said, "This is a friend who just went through some traumatic life event, as opposed to another friend who just doesn't show up to class or doesn't really try in the class or we're not even that good of friends. In that case I wouldn't care as much."   This student went on to sympathize that if the "academic system" wouldn't allow leniency for a student going through a difficult situation, he was willing to help "someone who could use a little bit of a boost right now." These responses show that students value proportionality (rewards commensurate with effort) and sometimes mitigate their willingness to show care by considering fairness first.

Lack of Loyalty to Organizations

Very few students were willing to take a risk in order to help their organizations. One even said that she would consider quitting the organization. "It would really suck to not be in an organization anymore but it's not worth lying and it's not worth the risk of doing bad on a test so I wouldn't look up answers [on my phone]. If it's for your organization, maybe they should try harder." A second student stated that "my integrity and my future is more important than my organization." Another student had a different perspective, saying, "I would probably look up the answers on my phone. I don't want to be the one person that tanks the whole thing." Feeling this responsibility to save the organization was not a common response and is more typical of collectivist cultures (Pulfrey et al., 2018). The third student quoted above was male while the previous two were female. Male students were much more likely to show group loyalty than were female students. Perhaps the male tendency to be loyal to their organizations is somehow related to a feeling of responsibility for the success of the organization.

Thoughts about Vignette 7 were widely varied with regards to the nature of forbidden collaboration on a project. One student stated that she would not produce the charts if the professor had "explicitly prohibited collaboration." She went on to say, "I guess you could always email the professor and ask if just making charts would count [as collaboration] because it's not really intellectual work. It's just more the grunt work side of the project. But if the professor was like 'No, you can't help them' then I wouldn't [produce graphs and charts.]" Discussing Vignette 5 (giving answers to a friend whose mother was in the hospital) one student mused, "Ok, so collaboration is forbidden, right? So, what's the definition of the word collaborate? You can find a loophole somewhere. Like notes…. are they collaborating? Shared space that just happens to be in the room during the same time?" This student demonstrates that collaboration can be understood in different ways by different faculty and students and that students may use the ambiguity to justify their actions.

Students seem to feel that collaboration when taking online tests is normal, even if forbidden. One student stated, "I would 100% do this. This is something that I would do even for people who [aren't in a difficult situation] regardless of it being forbidden." She also stated, "I would totally do it. I've done this without having any kind of [situational] reasoning. I think if teachers aren't going to do it on lockdown browser, then they shouldn't expect people not to collaborate."

Willingness to buy a paper

Even students who were unlikely to engage in other behaviors admitted that they would purchase a paper if their scholarship were on the line. Over half of the participants were willing to do so. Their reasoning gives insight into their thoughts. One stated, "If the only repercussion is that my professor is disappointed in me and I had my scholarship and academic future on the line, I would fully purchase the paper." Another said she would be willing to purchase a paper because "I have a lot on the line, and I'd be losing a lot of things." A third student stated, "I probably would buy it because there's so much benefit in the short term. If it was like my family was gonna be evicted, then I'm like ok."

Other factors that might influence behavior

When asked what factors other than the two offered moral foundations might weigh into a participant's behavioral choice, risk and consequences were often mentioned. Numerous students admitted that they would engage in a dishonest behavior if the risk of being caught were low or if consequences were not overly harsh. Numerous others stated that the risk and consequences of being caught would cause them not to engage in the behavior. One stated, "As long as it wasn't being proctored or there was no cameras on, I would look up answers [on my phone]. If there was more of a risk of being caught, I don't think I would." Regarding creating graphs and charts for a friend's project, one student said, "There's less risk of it being traced back to me [than other forms of cheating] so I definitely think I would do this." In considering whether to use Chegg, one student stated, "I wouldn't want to be caught for cheating because the punishment for that is way more severe than not doing well on the exam. The punishment

is important because I might get a C on an exam if I don't cheat but if I cheat and get caught that's a 0 and a 0 looks way worse than a C." When looking at Question 4 responses (other factors that would influence the behavior choice) some form of risk assessment was the most common response. To some degree, it seems that students may engage in behaviors that they think they can get away with or manage the consequences of, regardless of their judgment of the acts as dishonest or their moral foundations.

The other common response to Question 4 (other factors that might influence the behavior choice) was the importance of grades. When student success was on the line, grades were a significant factor in a student's decision to engage in an act or not. One said, "GPA is something that's heavily focused on….so I'm going to do whatever I have to." Another, after choosing between the two forced choice foundations, said "between those two factors, [I would choose] following the rules, but getting a good grade on the exam would be above both of those for me."

CHAPTER 5: DISCUSSION

The purpose of this study was to explore moral perceptions of students related to their imagined behaviors in hypothetical situations. More specifically, areas of interest included which behaviors students would judge as dishonest; which questionable behaviors students would be willing to engage in; and whether there would be any relationship between student moral foundation scores and their predicted hypothetical behaviors. Given the lack of existing research applying Moral Foundations Theory to academic behaviors, this project was largely exploratory in nature.

Research Question 1
Which specific academic behaviors are judged as dishonest by students? Why?

A main focus of existing academic dishonesty literature has been specific behaviors and their degree of dishonesty or whether they are dishonest at all (Aaron et al., 2011; Hughes & McCabe, 2006; Josien et al., 2004; Schmelkin et al., 2008). Based on previous research, it was expected that there would be substantial disagreement regarding the target behaviors in the vignettes. While there was not unanimous agreement as to whether the behaviors were dishonest or not, there was considerable agreement. This amount of agreement brings into question the general assumption that students are not sure which actions are dishonest and which are not. Whether they were willing to engage in the behaviors or not, students seemed to agree that most of the target behaviors were dishonest.

This finding raises questions about the specific items and why some of them were unanimously judged as dishonest while others were not. Two vignettes were judged as

dishonest by every participant. These were Vignette 6 (using a relationship with a TA to gain access to exams) and Vignette 8 (using a campus job to adjust numbers in order to win a dorm competition). Participants seemed to interpret these two vignettes as tantamount to stealing. In Vignette 6, the TA allowed access to a departmental office in order for exams to be taken and shared with a group. In Vignette 8, the scenario involved using a student position in order to gain access to and manipulate data. Students tended to react strongly to these two scenarios in ways that were more extreme than the scenarios that involved looking up answers online, sharing answers with friends, or even purchasing a paper, suggesting that these latter behaviors are seen as more normal and less egregious than those in Vignettes 6 and 8. One participant said, "Yes, I would use Chegg and yes, I would use Google, but I don't think I would actually break into anywhere." This implies that the dishonesty of specific behaviors is seen on a continuum, and even though behaviors may be seen as dishonest, some are more dishonest than others. This is consistent with the Rosch (2011) ideas about "fuzzy sets" and the fact that some members of a category are better fits than other members. Barsalou (1983) stated that we tend to think in continuous terms when fitting concepts into categories, which is what participants seem to have done here.

A closer look should also be taken at the vignettes that raised the most dissention among students. There were four vignettes that led to a variety of opinions. Two of these involved cheating on exams by obtaining answers or giving answers. The third involved making charts/graphs for a friend's project. The last was continuing to renew an eBook so that others could not check it out. Each of these vignettes contained a confounding feature that seemed to complicate the judgment of participants. In Vignette

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1, the unfair test seemed to temper the judgment of using Chegg; in Vignette 5, the injured mother in the hospital lessened the dishonesty of giving test help; in Vignette 7, varying understandings of collaboration affected judgment of the target behavior; and in Vignette 9, dissention between dishonesty and rudeness complicated judgment. The common thread in Vignettes 1 and 3 was a situation that triggered compassion or proportionality toward the self (unfair test) or another (injured mother) that allowed students to soften their judgement of a questionable behavior. This is evidence that there may be more involved in moral decision making than simply an individual's preferred moral foundations. As has been mentioned, other factors relevant to the situation may mediate which moral foundation is employed or if another factor, such as risk or reward, overwhelms all moral foundations. Context, then, seems to be an important factor in judging acts as dishonest or not.

Vignettes 7 and 9 seem more related to the fuzzy nature of a concept, given that Vignette 7 generated varied views of collaboration and Vignette 9 did the same regarding dishonesty vs rudeness. Vignettes 7 and 9, then, relate to the cognitive psychology concept of fuzzy sets. Participants seemed unsure how to define collaboration and dishonesty and which acts were included in the categories. Regarding collaboration, the lack of agreement may be due to previous faculty having different expectations or understandings. Perhaps if individual faculty explain their understanding of collaboration, specifying what is acceptable and what is not, students will develop an understanding that matches that of each instructor and in doing so, will eliminate some instances of dishonesty. The varied understandings of the word dishonesty in these vignettes seemed to relate to a general use of the term, which is giving a false answer to a

direct question. Participants who limited the definition of dishonesty to this understanding often felt that academic behaviors should not be labeled as dishonesty, since they did not involve outright lying.

One factor that may have led to the high degree of consensus regarding the target behaviors is the fact that all participants were from Western cultures. As was stated earlier, students from collectivist cultures are unlikely to share the same view of collaboration or plagiarism as do students from Western cultures (Chien, 2014; Lin & Wen, 2007; McCabe et al., 2008). If this sample had included students from more diverse cultures, judgments of the dishonesty of the target behaviors may have been more varied.

Research Question 2
Are students willing to engage in behaviors that they have judged to be dishonest? Why or why not?

McCabe (2006) speculated that academic dishonesty is a fluctuating concept, changing with time. While this may lead to varying understandings of academic dishonesty, it may have little bearing on students' willingness to engage in questionable behaviors. In his 2005 study, McCabe found that numerous behaviors were seen as dishonest by most participants, yet over 20% of the participants had engaged in the behaviors. The current study corroborates that finding. The participants in this study judged the target behaviors in most of the vignettes as dishonest, but this did not mean that they would not be willing to engage in the behaviors.   In the textbook *Psychology of Academic Cheating*, the authors of Chapter 10 cite numerous studies showing that moral reasoning and moral behaviors are often unrelated. In these studies, even students who

had very strict moral judgments engaged in dishonest behaviors when they had a significant need. (Anderman & Murdock, 2011)

There does seem to be some relation between the perception of dishonesty and the willingness to engage. For example, Vignettes 6 and 8 were judged dishonest by 100% of students. They were also the two vignettes with the lowest number of students willing to engage in the act (5% and 0% respectively).

While there are a variety of reasons that students would or would not engage in behaviors that they have deemed dishonest, the most commonly cited reasons among the participants in this study were the lack of risk/consequences and the importance of grades. One student was willing to engage in a questionable act because of the "lack of risk since the test isn't proctored. That's a big [reason]" After mentioning risk as a factor for not engaging in most of the presented acts, one participant finally said, 'Risk is probably going to be a factor for me in general. I'm a very low risk taker."

Regarding grades, most participants in this study had a GPA of 3.0 or above and many commented that grades are important enough to them that they would be willing to engage in dishonest behaviors, especially when there is little chance of being caught or if consequences are minor. There seemed to be a balance between the need for a good grade and the severity of possible consequences when considering actions.

It may also be true that even though students judge an act to be dishonest, they also perceive it to be normal. One student stated about Vignette 7, "I think it is dishonest, but I think it has been so normalized that I don't find it morally wrong."   She went on to say, "I would 100% do this. This is something that I would do even for people that aren't

[in a difficult situation] regardless of it being forbidden." Researchers have found that when students perceive that their peers are cheating, they are more likely to cheat themselves (McCabe & Trevino, 1996; McCabe et al., 2012).

As Sutarimah et al., (2019) discovered, moral foundations and academic behaviors are very weakly correlated. This research corroborated those findings. While students may rely on moral foundations in making moral judgments independent of a specific situation, their actual moral behaviors seem to be based on other contextual factors. When they have much to lose and the risk is manageable, students are often willing to engage in questionable behaviors.

Research Question 3

Which foundations from Moral Foundations Theory are most relied on by students when predicting their own behaviors in academic vignettes?

The most relied upon foundations in the ten vignettes were care, proportionality, and authority in that order. It was not surprising that care was the most used foundation, since it is typically a much used foundation for individuals from all demographic groups. What was more surprising is that other foundations did not necessarily score in proportion to the number of vignettes in which they were represented.

Unequal representation was a major flaw in the research design. Because some foundations were difficult to incorporate into academic vignettes and because the original fairness foundation was separated during the course of this research, poor representation in the vignettes did not allow some foundations the same chance at being chosen as others. Since equality and purity were only represented in one vignette each, they were at

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an automatic disadvantage. However, authority was represented in six vignettes, but was

rarely chosen, except by males. In contrast, proportionality was represented in three

vignettes and was chosen in nearly every one.

It is tempting to say that proportionality (outcomes commensurate with inputs) is

more relevant to students than authority (following rules), since proportionality outscored

authority despite being represented in fewer vignettes. In reality, such a statement cannot

confidently be made without each foundation being equally represented within the

vignettes. Perhaps the proportionality vignettes were especially relevant, while the

authority vignettes, for some reason, were not.

Research Question 4

**Is there a relationship between scores on MFQ-2 subscales and forced choice
decisions related to Moral Foundation Theory by students considering academic
vignettes, and if so, what is the nature of the relationship?**

In their 2020 study, Sutarimah et al. expected the fairness and sanctity

foundations to predict dishonest academic behaviors, but neither did. Sutarimah et al.

(2020) found that Haidt's moral foundations had little connection with specific types of

academic dishonesty and only Haidt's authority foundation had any predictive value.

The current research was limited to simple correlations between MFQ-2 foundation

scores and forced choice foundation scores. The intent was to examine whether scores on

the MFQ-2 foundations were related to choices made in real world scenarios. The

current study is consistent with the Sutarimah et al. (2020) findings that there is little

correlation between MFQ scores and actual academic behavior and is also consistent with

the Ellemers et al. (2019) statement that an individual's moral standards weakly predict

moral behaviors. In their literature review, Ellemers et al. (2019) note that there is little research combining moral themes. They particularly state that research showing that moral reasoning affects actual moral behavior is lacking. From the weak correlations shown in this study, it seems that moral reasoning may have little predictive value toward academic behavior, or at least toward hypothetical behavioral choices.

The negative correlations between care and purity agree with the findings of Haidt and others that liberals are more likely to be high in care and low in purity but contradicts the tendency for conservatives to score high in both care and purity (Atari et al., 2020; Haidt, 2012). Since conservatives comprised a bigger percentage of the sample than either liberals or conservatives, this finding is surprising. This may be explained by the fact that moderates and liberals combined (n=44) significantly outnumber conservatives (n=28) and moderates may score more similarly to liberals than to conservatives. This may also be explained by Pew statistics that show that Gen Z individuals (born after 1996) are more liberal, even if they identify as conservative, than individuals from older generations (Mitchell, 2019). If this is true, Gen Z students may show a care vs purity pattern that is more typical of liberals than of conservatives.

Overall, the highest scored foundations on both the MFQ-2 and the forced choice responses were care, proportionality, and authority in that order. It is not unusual for care to be the most used moral foundation among all demographics, but because this sample of students was overwhelmingly female, it is even more expected (Graham et al., 2011). When considering academic scenarios, it is also not surprising that proportionality and authority were more used than equality, loyalty, or purity. Students expect to receive an outcome proportional to the effort they have expended. When they invest a significant

amount of time and effort, they expect a good result. They feel that the system is unfair when a student receives a reward that he/she does not deserve. In addition, authority is important because of the power differential between faculty and student. Students defer to the rules and wishes of their faculty since they stand to gain by doing so and since there are often consequences for not doing so.

The low equality score in the vignettes can partially be attributed to the fact that there was only one vignette that targeted equality. It might be surprising that equality was a low scoring category on the MFQ-2 since college students are generally more socially liberal than older generations (Mitchell, 2019).   However, when thinking about academics, students do not feel that equal outcomes are fair to those who work harder than others. The equality questions on the MFQ-2 are items such as the following:

- The world would be a better place if everyone made the same amount of money.
- When people work together toward a common goal, they should share the rewards equally, even if some worked harder on it.

While these items might generally appeal to a student's sense of social justice, they do not generate the same reaction academically. Those who created the MFQ-2 (Atari et al., 2022) state that proportionality and equality are not opposite ends of a spectrum, but the questions on the MFQ-2 seem to present them as such. The equality questions largely address equal outcomes, and the proportionality questions largely address outcomes proportional to inputs. Since the questions for equality and proportionality are always adjacent to one another on the MFQ-2, it seems rare for a participant to agree or disagree with both, though researchers say that this should be possible (Atari, et al., 2022). Since the vignettes were discussed before students

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completed the MFQ-2, it is possible that the academic mindset primed students to lean more toward proportionality than equality on the MFQ-2. Also, since the vignettes were constructed before Atari et al. (2022) separated the fairness foundation into equality and proportionality, it was determined that Vignette 9 (holding on to an eBook so that others could not access it) was the only vignette that violated equality, so students had little opportunity to express equality as a relevant foundation. The other three fairness related vignettes are related to the proportionality form of fairness.

<div align="center">

Research Question 5

How are demographic categories associated with MFQ-2 scores or with responses to academic vignettes?

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Haidt and others found that reliance on moral foundations differs between demographic groups. Demographic categories such as gender, political views, and religiosity are related to moral values (Atari, et al., 2022; Graham et al., 2011; Haidt, 2012). For example, liberals tend to rely more on care and equality, while conservatives rely on all foundations more equally. In addition, those who are more religious score higher on the purity foundation than those who are not religious. And finally, females tend to rely on care more than males do. To what degree do these same demographic differences correlate with student views of academic dishonesty?

A surprising result was the willingness by males to prioritize group loyalty and act upon that prioritization.   Males do typically score higher than females in the three binding foundations (loyalty, authority, purity) but 80% of males said that helping a group was more important to them than other foundations. In contrast, only 20% of females chose group loyalty. This is a finding that is worthy of additional research. Are males more likely to act in dishonest ways in order to help a group? Since there were so

few males in the sample, these findings have little generalizability, but if this is a valid

finding, how can institutions benefit from knowing this?

Also interesting was the opposite scores between men and women for loyalty vs

authority in the vignettes. Since women and men scored so differently, can it be inferred

that women are more likely to obey authority rather than help a group, while men would

be more likely to do the opposite? Again, the low number of men makes this finding less

than reliable and even more suspect since their averages on the MFQ-2 in these

categories were much more comparable. There may be something about the academic

context, such as the gender of the professor or other authority figure, that makes females

more likely to defer to authority.

Findings related to extremely religious students were also interesting and bear

further study. Since there were only two of them, their findings cannot be generalized,

but it was interesting that their responses were nearly identical. First, they were

unwilling to engage in almost every target behavior. The only exception to this was that

one of them was willing to hold an eBook since she felt that doing so was not dishonest.

Also, authority was the highest MFQ-2 score and the highest forced choice vignette score

for the extremely religious. This suggests that extremely religious students are likely to

be rule followers and respecters of authority. If this is the case, then religious

institutions should show lower rates of cheating than other institutions. Research has

shown, however, that rates of cheating between religious colleges and state institutions

are comparable (Bourassa, 2011; Williams, 2018). Complicating this finding is the fact

that simply attending a religious institution does not mean that all students themselves are

religious, and in most studies, including the current one, students self-identify their

religiosity, meaning that there can be widely varied understandings of the terms.

Another surprising finding, given that much research has been conducted related

to political views and moral foundations, is that there were no statistically significant

differences found among the political groups in terms of judging acts, willingness to

engage in acts, or foundations relied upon.

Research Question 6

In what ways do open responses to academic vignettes contribute to a richer understanding of the relationship between preferred moral foundations as measured by the Moral Foundation Questionnaire-2 and reasoning about academic behaviors?

This was arguably the most interesting and enlightening portion of the current

study. It is one thing to survey students and count behaviors and opinions. It is quite

another thing to explore why participants hold the beliefs that they hold or why they

engage in the acts that they choose.

Much space in this paper has been dedicated to the prevalence of academic

dishonesty, its various forms, and varied understandings of the concept and related acts.

All of these topics have been studied frequently. More meaningful is the candid thoughts

of students related to their predicted actions, their judgments of said acts, and their

reasoning for choosing behaviors. All 25 participants seemed honest in admitting what

they would and would not do and why. The information that they shared gives insight

into what students are thinking as they make moral academic decisions.

Several findings were encouraging. It is encouraging to know that many students

who ultimately choose to cheat exhaust other options first before resorting to dishonest

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behaviors. With access to the appropriate support and intervention, many dishonest

behaviors may be prevented. It is also encouraging that students judged most of the

questionable behaviors as dishonest. This alleviates concern that students have

normalized these behaviors to the point that they no longer recognize them as dishonest.

Of course, not all of the target behaviors were blatantly dishonest, and the varied

responses demonstrated this. However, even the fact that two of the target acts were

unanimously regarded as dishonest shows that students retain some measure of moral

thinking.

Other findings were less than encouraging. As demonstrated by previous

research, moral foundations do not seem to play a major role in moral decisions regarding

behavior. In academics as in other areas, when there is a need and risk is low, humans

are often willing to act in questionable ways (Gino, 2015). Realizing this, faculty might

want to reconsider the number and types of assignments and assessments they use in their

classes. When there are few assessments and each carries substantial weight, students

may feel more pressure to cheat than when they have more assignments with less riding

on each one. In addition, making dishonest behaviors riskier and with significant

consequences may lead to less dishonesty. When students know that there is a good

chance of getting caught, and when getting caught comes with substantial penalties, they

are more likely to behave in honest ways.

Limitations

Problems with vignettes

The most glaring problem with the vignettes is that they were unevenly

distributed among foundations with authority being represented in six of the vignettes,

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care in five, equality/proportionality and group loyalty in four, and purity in only one vignette. This likely inflated authority and care outcomes in the forced choice items and minimized equality and purity scores. An attempt was made when constructing the vignettes to set each foundation against each other foundation, but some foundations (i.e., purity) are more difficult to embed in academic vignettes than are others. In addition, there were originally four fairness vignettes, which were later separated into one equality vignette and three proportionality vignettes. In retrospect, it would probably have been more effective to have administered the MFQ-1 for consistency in categories. Constructing more vignettes to tap the less represented foundations would give scores more meaning.

As stated in the previous paragraph, it was difficult to construct a vignette with purity as a foundation. A very broad understanding of purity/sanctity was used that considered strict adherence to moral pillars, such as honesty, to count as purity. One researcher stated that "not all the moral foundations are relevant to every situation" (Chan, 2021). With this in mind, perhaps no attempt should have been made to assess the purity foundation as related to academic dishonesty. Excluding purity would have led to more emphasis on foundations relevant to academic dishonesty.

The vignettes may not have sampled a broad enough range of academic behaviors. An attempt was made to measure responses to a wide range of situations, but based on the experiences of the participants, the vignettes may or may not have been relevant to them. In fact, Vignette 6 (using a relationship with a TA to access tests) often led to laughter from participants and they sometimes were amused by how far-fetched the

scenario seemed. One student said, "This sounds like something out of mission impossible – a little much."

The vignettes may not have tapped moral foundations in the way they were designed. Since the vignettes were open response items and the forced choice moral foundations were followed up with probing questions, this should have allowed for other relevant moral foundations to be revealed. Hopefully, this mitigated any failed vignettes. For example, in Vignette 10 (purchasing a paper in order to ease family finances) most students expressed care for the family, rather than group loyalty, which the vignette was designed to tap.

<div align="center">*Problems with MFQ-2 and moral foundations*</div>

The fact that the MFQ-2 was released at the beginning of data collection caused a conundrum. After reading about the improved psychometric properties of the MFQ-2, it was used to take advantage of these improvements. However, the vignettes had already been written based on the original five foundations. Switching questionnaires led to the vignettes being even more unevenly distributed than they already were. Dividing fairness into the new equality and proportionality categories also made data presentation difficult. Should equality and proportionality be presented separately as equally important foundations, or presented together as two dimensions of fairness? In retrospect, it probably would have led to better data to have retained the MFQ-1, even though it is psychometrically inferior.

Difficulties in interpreting open responses

The MFQ Dictionary 2.0 contains 2102 words. For this research, every word was entered into an Excel spreadsheet, labeled by foundation, then sorted alphabetically. It was sometimes difficult to use the dictionary in a meaningful way for coding. For example, one student, in response to Vignette 1 (looking up test items on Chegg) said, "I am a Christian, so honesty is important to me, so I don't think I'd look." According to the MFQ Dictionary 2.0, the term "Christian" is related to the purity foundation and the term "honesty" is related to the original fairness foundation. In addition, "family" is assigned to the group loyalty foundation, "father" is assigned to authority, and "mother" is assigned to care. The term "parent" or "parents" is not included in the dictionary, and "parental" is associated with the care foundation. The vignette was designed to set respect for authority (parental approval) against proportionality (inability to do well on an unfair test). While the student named her faith and her commitment to honesty as related to her faith as important factors in her behavior, in the forced choice, she said that her parents' opinion was more important to her than the fact that the test was unfair. It was difficult to decide which foundation was most significant based on this content. Simply using words contained in the dictionary did not necessarily mean that those foundations were most salient, but reading holistically did not always lead to more clarity. The process was subjective and prone to bias. As Rest et al. claim, there can be problems with interviewing related to a participant's inability to articulate their own moral thinking and the tendency for researchers to view participant comments through their own personal moral filter (Rest et al., 1999). This would have been mitigated to some degree by having multiple coders.

Related to the subjectivity of the interviews mentioned above, since identifying information was not saved and member checking could not occur, the responses could be verified. It cannot be guaranteed that responses were interpreted and coded accurately. Recorded interviews were saved in Zoom and consulted as needed to clarify unclear responses, but mistakes may have been made in interpretation. In addition, there was no attempt at inter-rater reliability in coding since the researcher did the coding independently. It is possible that additional coders would have resulted in different coding outcomes.

Since the topic involves morality and is sensitive, there is the chance that participants were not truthful.   The choice of semi-structured interviews was intentional to prevent survey fatigue and to yield more substantial responses. There is a risk of interview participants being untruthful, but there is also risk that written questionnaires would have led to thin responses.   Either data collection method would have come with its own set of issues.

Sample Problems

The sample of students was small (n = 25). For this reason, it is difficult to generalize these findings to the overall population of students. The participants were 80% female, 68% B students, 76% religious to some degree, and mostly 19 or 20 years old. They were fairly equally distributed politically. They were all from WEIRD cultures (western, educated, industrial, rich, democratic) since 24 were US citizens and one was from Costa Rica.

A voluntary response sample may not be representative of all students. Sampling bias may be especially true if more students responded from specialized locations on campus. For example, if most subjects saw the research poster in the science building, students taking science classes may differ in some way from students who may have seen the poster in the fine arts building. Since these locations are unknown, it is impossible to know if this created a bias. In addition, three of the participants are known to be Resident Advisors at the university. It is possible that students who are selected as Resident Advisors are different from the general student population when it comes to making moral decisions. Two of the three RAs who participated are personally acquainted with the researcher. This may also have biased their data, even though a conversation was held during their interviews addressing the need for honest responses. Another relevant factor is that 80% of the participants were female. MFT research shows that women typically score higher than men on care, fairness, and purity, particularly in WEIRD societies (Atari et al., 2020). Since the sample of students was biased toward women, responses may lean more toward care, fairness, and purity than they would have if the sample had contained more men.

Further Study

Since Haidt (2012) and others have found cultural differences in moral foundations, it can be assumed that these differences would be seen in students from different countries. Particularly interesting would be non-WEIRD students' responses to these vignettes in order to see if they have similar judgments of the honesty/dishonesty of acts and if their willingness to engage in the acts is similar. In fact, it would be useful to see if these vignettes are meaningful and relevant to students from other cultures.

In replicating this research, improvements can be made in research design. Clearly, the vignettes need to be revised to reflect the newly separated fairness foundation and to tap all foundations more equally. The vignettes also could be revised based on differences found in this research. For example, is there a real difference between male/female reliance on in-group loyalty, or can a vignette be devised in which females would be equally loyal to a group? Perhaps focus groups could be held where students from all demographic groups could give input into situations where they might exercise each moral foundation. This might lead to the addition of new and more varied vignettes.

Another improvement is to remove vignettes that tap the purity foundation. Since it is nearly impossible to create a meaningful academic-focused vignette that elicits the disgust response, removing all purity related content might lead to more meaningful findings related to other foundations.

Perhaps a better research design would have been an explanatory sequential design, collecting both MFQ scores and FC closed ended responses using a survey and following that data up with a small number of interviews. In doing so, a larger sample could have been provided with the closed ended items leading to more data to analyze. Having only 25 participants in the sample did not allow for generalization of findings or for meaningful correlations.   Having a larger sample of MFQ-2 scores and forced choice items would have allowed for not only correlation, but possibly prediction.

Appendix 1: Moral Foundations Questionnaire - 2 (Atari et al., 2022)

For each of the statements below, please indicate how well each statement describes you or your opinions.

Response options:

Does not describe me at all (1)

Slightly describes me (2)

Moderately describes me (3)

Describes me fairly well (4)

Describes me extremely well (5)

1. Caring for people who have suffered is an important virtue.

2. The world would be a better place if everyone made the same amount of money.

3. I think people who are more hard working should end up with more money.

4. I think children should be taught to be loyal to their country.

5. I think it is important for societies to cherish their traditional values.

6. I think the human body should be treated like a temple, housing something sacred within.

7. I believe that compassion for those who are suffering is one of the most crucial virtues.

8. Our society would have fewer problems if people had the same income.

9. I think people should be rewarded in proportion to what they contribute.

10. It upsets me when people have no loyalty to their country.

11. I feel that most traditions serve a valuable function in keeping society orderly.

12. I believe chastity is an important virtue.

13. We should all care for people who are in emotional pain.

14. I believe that everyone should be given the same quantity of resources in life.

15. The effort a worker puts into a job ought to be reflected in the size of a raise they receive.

16. Everyone should love their own community.

17. I think obedience to parents is an important virtue.

18. It upsets me when people use foul language like it is nothing.

19. I am empathetic toward those people who have suffered in their lives.

20. I believe it would be ideal if everyone in society wound up with roughly the same amount of

money.

21. It makes me happy when people are recognized on their merits.

22. Everyone should defend their country, if called upon.

23. We all need to learn from our elders.

24. If I found out that an acquaintance had an unusual but harmless sexual fetish, I would feel uneasy about them.

25. Everyone should try to comfort people who are going through something hard.

26. When people work together toward a common goal, they should share the rewards equally, even if some worked harder on it.

27. In a fair society, those who work hard should live with higher standards of living.

28. Everyone should feel proud when a person in their community wins in an international

competition.

29. I believe that one of the most important values to teach children is to have respect for authority.

30. People should try to use natural medicines rather than chemically identical human

made ones.

31. It pains me when I see someone ignoring the needs of another human being.

32. I get upset when some people have a lot more money than others in my country.

33. I feel good when I see cheaters get caught and punished.

34. I believe the strength of a sports team comes from the loyalty of its members to each other.

35. I think having a strong leader is good for society.

36. I admire people who keep their virginity until marriage.

Scoring: Average each of the following items to get six scores corresponding with the six foundations.

Care = 1, 7, 13, 19, 25, 31

Equality = 2, 8, 14, 20, 26, 32

Proportionality = 3, 9, 15, 21, 27, 33

Loyalty = 4, 10, 16, 22, 28, 34

Authority = 5, 11, 17, 23, 29, 35

Purity = 6, 12, 18, 24, 30, 36

Appendix 2: Academic Dishonesty Vignettes

Scenario 1: You know that your parents will be very disappointed if you cheat on a test. Honesty is very important to your parents. However, your math professor's exams are unusually difficult and include material not covered in class. Very few students are able to do well on the exams. You learn that the test answers have been posted on Chegg and you can look them up. What do you think you would do and why?

Your parents' opinion or the fact that students cannot perform well on the test

 (authority vs proportionality)

Scenario 2: Only the top ten percent of students in a course can go on to take a higher-level course. You are in the top ten percent and your friend is almost there, except for one other student. You can give your friend test answers to help your friend move ahead of the other student and into the top 10%. This will prevent the other student from moving to the next course. What do you think you would do and why?

Helping your friend or being fair to the other student (care vs. proportionality)

Scenario 3: Your professor, whom you greatly admire, has asked you to be part of a research experiment for significant class credit that will boost your GPA. All you need to do is answer survey questions in the way that the professor has asked you to, even though your actual opinions are different from the professor's request. Your responses will be anonymous, but your professor really needs more responses to support the professor's hoped-for outcome. What do you think you would do and why?

Admiration for your professor or being truthful (authority vs. purity)

Scenario 4: Your student organization needs a high grade from you in order for the organization to maintain good standing on campus. If the organization's grades fall, the organization will go on probation. You cannot earn a high grade without using your phone to look up answers on an online exam. If you are caught looking up answers, your professor will give a 0 for the exam, since looking up answers is not allowed. What do you think you would do and why?

Helping your organization or following the rules (group loyalty vs. authority)

Scenario 5: A close friend explains that she could not study for a test because her mother is in the hospital after a serious car accident. The friend asks if the two of you can take the online test together so you can help her with answers. The online test is not proctored, but the professor has forbidden collaboration.   What do you think you would do and why?

Helping your friend or obeying the professor's instructions (care vs authority)

Scenario 6: A TA for one of your courses is attracted to you and has approached you to initiate a relationship. Entering into an intimate relationship with the TA can gain you access to the departmental office where you can access copies of tests.   Your student organization needs a copy of a final exam so that members can pass the test. Your organization is on probation due to low grades and a strong performance on the test can save the organization. What do you think you would do and why?

Helping your organization or using a relationship for an advantage (group loyalty vs care)

Scenario 7: An instructor has forbidden collaboration on a class project, but if your friend does not pass the project, your friend cannot pass the course and will have to transfer to a less expensive school. You can quickly produce some graphs and charts that will help your friend do well on the project. What do you think you would do and why?

Obeying the instructor's rules or helping your friend (authority vs care)

Scenario 8: Your dorm floor is competing with another floor to win a major prize at the end of the school year. The other floor has worked harder than yours and has been ahead of your floor in points for the entire academic year. As a student worker in a campus office, you can adjust the numbers to allow your floor to win the prize, which will also help your floor to win a prestigious end-of-year award. What do you think you would do and why?

Helping your fellow residents or being unfair to the other floor (group loyalty vs. proportionality)

Scenario 9: Your professor gives extra points to students who post early on a discussion board about a hard-to-obtain book. You need the extra points to improve your grade. The library only allows one student at a time to check out the digital copy of the book. You are lucky and are able to check out the eBook. In order to prevent others from posting ahead of you, you can continue to renew the book so that others cannot use it. Others have been posting on the course chat that they are unable to check out the book, but nobody knows that you are the person who has it. What do you think you would do and why?

Helping yourself or being fair to classmates (care vs. equality)

Scenario 10: Your professor is a highly regarded professional who can help you attain a job after graduation. However, your professor has strict standards for integrity. Your family is struggling to pay for your education, and your grades have fallen lately, risking your scholarship. You have an opportunity to purchase a term paper that will likely earn an A for the course and save your scholarship, also saving your family money that they need to pay other expenses for the family. You don't think your professor will suspect, but if you are caught, the professor will be disappointed in you. What do you think you would do and why?

Your professor's opinion of you or helping your family (authority vs. group loyalty)

Appendix 3: Interview Script

Thank you for participating in this research project.

In this project, I am exploring student opinions related to academic dishonesty and their views on morality in general. This interview contains 10 scenarios that ask you to imagine what you might do in a situation and why. Even if the statements in the scenario are not true in your real life, try to imagine that they are true. Try to consider all of the complexities of each situation and decide what you think you would do.

At the end of each scenario, I'll ask you some questions about specific factors that might influence your decision making.

You are welcome to discontinue at any time and you may decline to answer any of the questions.

I will be recording the Zoom meeting.

I will share my screen so that you can see the scenarios as we discuss them.

For each vignette:

What do you think you would do? Why?

In looking at the scenario, do you consider _____ to be dishonest in this context or is it OK? Why?

I'm going to ask you about two specific factors that might influence your decision in this scenario. Of these two factors, tell me which would be more important to you in considering a decision.

(Show the two factors on the screen)

Are there other factors that might be more important to you than either of these two in considering a decision?

References

Aaron, L., Simmons, P., & Graham-Webb, D. (2011). Academic dishonesty and unprofessional behavior. *Radiologic Technology*, *83*, 133–140.

Allemand, K. R. (2012). *Student and Faculty Perceptions of Academic Dishonesty: A Qualitative Single-Case Study* [Ed.D., Northcentral University]. http://www.proquest.com/docview/1095810745/abstract/1F9D4C9956F246E2PQ/1

Alghamdi, A. K. H., Hussain, I. Y., & Al-Hattami, A. A. (2018). Plagiarism in Saudi Arabian public higher education: Reasons and solutions. *Asian Journal of Arts, Humanities and Social Studies*, *1*(1), 40-48.

Aluede, O., Omoregie, E. O., & Osa- Edoh, G. I. (2006). Academic dishonesty as a contemporary problem in higher education: How academic advisers can help. *Reading Improvement*, *43*(2), 97–106.

Amin, A. B., Bednarczyk, R. A., Ray, C. E., Melchiori, K. J., Graham, J., Huntsinger, J. R., & Omer, S. B. (2017). Association of moral values with vaccine hesitancy. *Nature Human Behaviour*, *1*(12), 873–880. https://doi.org/10.1038/s41562-017-0256-5

Anderman, E. M., & Murdock, T. B. (2011). *Psychology of Academic Cheating*. Elsevier.

Anderman, E. M., & Won, S. (2019). Academic cheating in disliked classes. *Ethics & Behavior*, *29*(1), 1–22. https://doi.org/10.1080/10508422.2017.1373648

Arhin, A. O., & Jones, K. A. (2009). A multidiscipline exploration of college students' perceptions of academic dishonesty: Are nursing students different from other college students? *Nurse Education Today*, *29*(7), 710–714. https://doi.org/10.1016/j.nedt.2009.03.001

Atari, M., Haidt, J., Graham, J., Koleva, S., Stevens, S. T., & Dehghani, M. (2022). *Morality Beyond the WEIRD: How the Nomological Network of Morality Varies Across Cultures*. PsyArXiv. https://doi.org/10.31234/osf.io/q6c9r

Baldwin, D. C., Daugherty, S. R., Rowley, B. D., & Schwarz, M. D. (1996). Cheating in medical school: A survey of second-year students at 31 schools. *Academic Medicine*, *71*(3), 267–273. https://doi.org/10.1097/00001888-199603000-00020

Barrett, R., & Cox, A. L. (2005). "At least they're learning something": The hazy line between collaboration and collusion. *Assessment & Evaluation in Higher Education*, *30*(2), 107–122. https://doi.org/10.1080/0260293042000264226

Barsalou, L. W. (1983). Ad hoc categories. *Memory & Cognition*, *11*(3), 211–227. https://doi.org/10.3758/BF03196968

Bates, I. P., Davies, J. G., Murphy, C., & Bone, A. (2005). A multi-faculty exploration of academic dishonesty. *Pharmacy Education*, *5*(1), 69–76. https://doi.org/10.1080/15602210500086264

Belohlavek, R., & Klir, G. J. (2011). *Concepts and Fuzzy Logic*. MIT Press.

Bens, S. L. (2010). *Senior Education Students' Understandings of Academic Honesty and Dishonesty* [Ph.D., The University of Saskatchewan (Canada)]. http://www.proquest.com/docview/1288916147/abstract/8D91FC8A97DD4589PQ/5

Bertram Gallant, T., Binkin, N., & Donohue, M. (2015). Students at risk for being reported for cheating. *Journal of Academic Ethics*, *13*(3), 217–228. http://dx.doi.org.ezproxy.uky.edu/10.1007/s10805-015-9235-5

Birchard. (2011, September 7). *Growing Concerns in Canada Over Foreign Students' Cheating*. The Chronicle of Higher Education. https://www.chronicle.com/blogs/global/growing-concerns-in-canada-over-foreign-students-cheating

Bourassa, M. J. (2011). *Academic Dishonesty: Behaviors and Attitudes of Students at Church-related Colleges and Universities* [University of Toledo]. https://etd.ohiolink.edu/apexprod/rws_olink/r/1501/10?clear=10&p10_accession_num=toledo1302301033

Bowers, W. J. (1964). *Student Dishonesty and Its Control in College* [Ph.D., Columbia University]. https://www.proquest.com/docview/302212913/citation/A5A35B604BE7481APQ/1

Bretag, T., Mahmud, S., Wallace, M., Walker, R., McGowan, U., East, J., Green, M., Partridge, L., & James, C. (2014). 'Teach us how to do it properly!' An Australian academic integrity student survey. *Studies in Higher Education*, *39*(7), 1150–1169. https://doi.org/10.1080/03075079.2013.777406

Brickman, W. W. (1961). *Ethics, examinations, and education—UK Libraries- University of Kentucky (UKY)*. https://saalck-uky.primo.exlibrisgroup.com

Brimble, M., & Stevenson-Clarke, P. (2005). Perceptions of the prevalence and seriousness of academic dishonesty in Australian universities. *The Australian Educational Researcher*, *32*(3), 19–44. https://doi.org/10.1007/BF03216825

Brunell, A. B., Staats, S., Barden, J., & Hupp, J. M. (2011). Narcissism and academic dishonesty: The exhibitionism dimension and the lack of guilt. *Personality and Individual Differences*, *50*(3), 323–328. https://doi.org/10.1016/j.paid.2010.10.006

Bruner, J. S., Goodnow, J. J., & Austin, G. A. (1956). *A Study of Thinking*. NY: John Wiley & Sons.

Burgason, K. A., Sefiha, O., & Briggs, L. (2019). Cheating is in the eye of the beholder: An evolving understanding of academic misconduct. *Innovative Higher Education*, *44*(3), 203–218. http://dx.doi.org.ezproxy.uky.edu/10.1007/s10755-019-9457-3

Bushway, A., & Nash, W. (1977). School cheating behavior. https://journals-sagepub-com.ezproxy.uky.edu/doi/abs/10.3102/00346543047004623

Cannon, P. R., Schnall, S., & White, M. (2011). Transgressions and expressions: Affective facial muscle activity predicts moral judgments. *Social Psychological and Personality Science*, *2*(3), 325–331. https://doi.org/10.1177/1948550610390525

Carrell, S. E., Malmstrom, F. V., & West, J. E. (2008). Peer effects in academic cheating. *Journal of Human Resources*, *43*(1), 173–207. https://doi.org/10.3368/jhr.43.1.173

Castilla-Estévez, D., & Blázquez-Rincón, D. (2021). Age and moral foundations: A meta-analytic approach. *The Spanish Journal of Psychology*, *24*, e41. https://doi.org/10.1017/SJP.2021.35

Chan, E. Y. (2021). Moral foundations underlying behavioral compliance during the COVID-19 pandemic. *Personality and Individual Differences*, *171*, 110463. https://doi.org/10.1016/j.paid.2020.110463

Charmaz, K. (1990). 'Discovering' chronic illness: Using grounded theory. *Social Science & Medicine*, *30*(11), 1161–1172. https://doi.org/10.1016/0277-9536(90)90256-R

Chien, S.-C. (2014). Cultural constructions of plagiarism in student writing: Teachers' perceptions and responses. *Research in the Teaching of English*, 120-140.

Chun-Hua, L. & Ling-Yu W. (2007). Academic dishonesty in higher education—A nationwide study in Taiwan. *Higher Education (00181560)*, *54*(1), 85–97. https://doi.org/10.1007/s10734-006-9047-z

Cizek, G. J. (2003). *Detecting and Preventing Classroom Cheating: Promoting Integrity in Assessment*. Corwin Press.

Clifford, S., Iyengar, V., Cabeza, R., & Sinnott-Armstrong, W. (2015). Moral foundations vignettes: A standardized stimulus database of scenarios based on moral foundations theory. *Behavior Research Methods*, *47*(4), 1178–1198. https://doi.org/10.3758/s13428-014-0551-2

Comas-Forgas, R., & Sureda-Negre, J. (2010). Academic Plagiarism: Explanatory factors from students' perspective. *Journal of Academic Ethics*, *8*(3), 217–232. https://doi.org/10.1007/s10805-010-9121-0

Creswell, J. W. (2007). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. SAGE.

Danielsen, R. D., Simon, A. F., & Pavlick, R. (2006). *The Culture of Cheating: From the Classroom to the Exam Room*. https://oce-ovid-com.ezproxy.uky.edu/article/01367895-200617010-00004/HTML

Dille, E. T. (2011). A multi-institutional investigation into cheating on tests in college online courses [Ph.D., University of South Carolina]. In *ProQuest Dissertations and Theses*. https://www.proquest.com/docview/915016152/abstract/AF7FB5D933EE47B8PQ/1

Ehrich, J., Howard, S. J., Mu, C., & Bokosmaty, S. (2016). A comparison of Chinese and Australian university students' attitudes towards plagiarism. *Studies in Higher Education*, *41*(2), 231–246. https://doi.org/10.1080/03075079.2014.927850

Ellemers, N., van der Toorn, J., Paunov, Y., & van Leeuwen, T. (2019). The psychology of morality: A review and analysis of empirical studies published from 1940 through 2017. *Personality and Social Psychology Review*, *23*(4), 332–366. https://doi.org/10.1177/1088868318811759

Enke, B. (2020). Moral values and voting. *Journal of Political Economy*, *128*(10), 3679–3729. https://doi.org/10.1086/708857

Fass-Holmes, B. (2018). International students reported for academic integrity violations: demographics, retention, and graduation. *Journal of International Students*, *7*(3), 644–669. https://doi.org/10.32674/jis.v7i3.292

Faucher, D., & Caves, S. (2009). Academic dishonesty: Innovative cheating techniques and the detection and prevention of them. *Teaching and Learning in Nursing*, *4*(2), 37–41. https://doi.org/10.1016/j.teln.2008.09.003

Ferrell, C. M., & Daniel, L. G. (1995). A frame of reference for understanding behaviors related to the academic misconduct of undergraduate teacher education students. *Research in Higher Education*, *36*(3), 345–375.

Frimer, J. A., Boghrati, R., Haidt, J., Graham, J., & Dehgani, M. (2019). Moral foundations dictionary for linguistic analyses 2.0. *Unpublished Manuscript*.

Gallant, T. B., & Drinan, P. (2006). Organizational theory and student cheating: Explanation, responses, and strategies. *The Journal of Higher Education*, *77*(5), 839–860. https://doi.org/10.1080/00221546.2006.11778946

Gino, F. (2015). Understanding ordinary unethical behavior: Why people who value morality act immorally. *Current Opinion in Behavioral Sciences*, *3*, 107–111. https://doi.org/10.1016/j.cobeha.2015.03.001

Gitanjali, B. (2004). Academic dishonesty in Indian medical colleges. *Journal of Postgraduate Medicine*, *50*(4), 281–284.

Gottschall, H., & García-Bayonas, M. (2008). Student attitudes towards group work among undergraduates in business administration, education and mathematics. *Educational Research Quarterly*, *32*(1), 3–28.

Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of Personality and Social Psychology*, *96*(5), 1029–1046. https://doi.org/10.1037/a0015141

Graham, J., Nosek, B., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. (2011). Mapping the moral domain. *Journal of Morality and Social Psychology,* 101(2), 366.

Gray, K., DiMaggio, N., Schein, C., & Kachanoff, F. (2022). The problem of purity in moral psychology. *Personality and Social Psychology Review*, 10888683221124740. https://doi.org/10.1177/10888683221124741

Haidt, J. (2001). The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychological Review*, *108*(4), 814.

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion* (1st ed.). Pantheon Books.

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 2007.

Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus*, *133*(4), 55–66.

Haidt, J., & Kesebir, S. (2010). Morality. In *Handbook of social psychology, Vol. 2, 5th ed* (pp. 797–832). John Wiley & Sons, Inc. https://doi.org/10.1002/9780470561119.socpsy002022

Haidt, J., Koller, S. H., & Dias, M. G. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology*, *65*(4), 613–628. https://doi.org/10.1037/0022-3514.65.4.613

Hildreth, J. A. D., Gino, F., & Bazerman, M. (2016). Blind loyalty? When group loyalty makes us see evil or engage in it. *Organizational Behavior and Human Decision Processes*, *132*, 16–36. https://doi.org/10.1016/j.obhdp.2015.10.001

Hu, G., & Lei, J. (2015). Chinese university students' perceptions of plagiarism. *Ethics & Behavior*, *25*(3), 233–255. https://doi.org/10.1080/10508422.2014.923313

Hughes, J. M. C., & McCabe, D. L. (2006). Understanding academic misconduct. *Canadian Journal of Higher Education*, *36*(1), Article 1. https://doi.org/10.47678/cjhe.v36i1.183525

Jensen, L. A., Arnett, J. J., Feldman, S. S., & Cauffman, E. (2002). It's wrong, but everybody does it: Academic dishonesty among high school and college students. *Contemporary Educational Psychology*, *27*(2), 209–228. https://doi.org/10.1006/ceps.2001.1088

Jones, D. L. R. (2011). Academic dishonesty: Are more students cheating? *Business Communication Quarterly*, *74*(2), 141–150.

Jones, I. S., Blankenship, D., & Hollier, G. (2013). Am I cheating? An analysis of online student perceptions of their behaviors and attitudes. *Psychology Research*, *3*(5), 261-269.

Josien, L., & Broderick, B. (2013). Cheating in higher education: The case of multi-methods cheaters. *Academy of Educational Leadership Journal*, *17*(3), 93–105.

Josien, L., Seeley, E., Csipak, J., & Rampal, R. (2015). Cheating: Students and faculty's perception on potential cheating activity. *Journal of Legal, Ethical and Regulatory Issues*, *18*(2), 21.

Kennedy, B., Atari, M., Mostafazadeh Davani, A., Hoover, J., Omrani, A., Graham, J., & Dehghani, M. (2021). Moral concerns are differentially observable in language. *Cognition*, *212*, 104696. https://doi.org/10.1016/j.cognition.2021.104696

Kidwell, L. A., & Kidwell, R. E. (2008). Do the numbers add up to different views? Perceptions of ethical faculty behavior among faculty in quantitative versus qualitative disciplines. *Journal of Business Ethics*, *78*(1/2), 141–151.

Kivikangas, J. M., Fernández-Castilla, B., Järvelä, S., Ravaja, N., & Lönnqvist, J.-E. (2021). Moral foundations and political orientation: Systematic review and meta-analysis. *Psychological Bulletin*, *147*(1), 55–94. https://doi.org/10.1037/bul0000308

LaDonna, K. A., Taylor, T., & Lingard, L. (2018). Why open-ended survey questions are unlikely to support rigorous qualitative insights. *Academic Medicine*, *93*(3), 347–349. https://doi.org/10.1097/ACM.0000000000002088

Ladyshewsky, R. K. (2015). Post-graduate student performance in 'supervised in-class' vs. 'unsupervised online' multiple choice tests: Implications for cheating and test security. *Assessment & Evaluation in Higher Education*, *40*(7), 883–897. https://doi.org/10.1080/02602938.2014.956683

Mah, C. L., Taylor, E., Hoang, S., & Cook, B. (2014). Using vignettes to tap into moral reasoning in public health policy: Practical advice and design principles from a study on food advertising to children. *American Journal of Public Health*, *104*(10), 1826–1832. https://doi.org/10.2105/AJPH.2014.302005

Mahmud, S., Bretag, T., & Foltýnek, T. (2019). Students' perceptions of plagiarism policy in higher education: A comparison of the United Kingdom, Czechia, Poland and Romania. *Journal of Academic Ethics*, *17*(3), 271–289. http://dx.doi.org.ezproxy.uky.edu/10.1007/s10805-018-9319-0

Malesky, A., Grist, C., Poovey, K., & Dennis, N. (2022). The effects of peer influence, honor codes, and personality traits on cheating behavior in a university setting. *Ethics & Behavior*, *32*(1), 12–21. https://doi.org/10.1080/10508422.2020.1869006

McCabe. (2005). Cheating among college and university students: A North American perspective. *International Journal for Educational Integrity*, *1*(1), Article 1. https://doi.org/10.21913/IJEI.v1i1.14

McCabe, D. L., Butterfield, K. D., & Treviño, L. K. (2006). Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action. *Academy of Management Learning & Education*, *5*(3), 294–305.

McCabe, D. L., Butterfield, K. D., & Treviño, L. K. (2012). *Cheating in College: Why Students Do It and What Educators Can Do about It*. JHU Press.

McCabe, D. L., Feghali, T., & Abdallah, H. (2008). Academic Dishonesty in the Middle East: Individual and contextual factors. *Research in Higher Education*, *49*(5), 451–467. https://doi.org/10.1007/s11162-008-9092-9

McCabe, D. L., Trevino, L. K., & Butterfield, K. D. (2002). Honor codes and other contextual influences on academic integrity: A replication and extension to modified honor code settings. *Research in higher Education*, *43*, 357-378.

McCabe, D. L., & Trevino, L. K. (1996). What we know about cheating in college longitudinal trends and recent developments. *Change: The Magazine of Higher Learning*, *28*(1), 28-33.

McKibban, A. R., & Burdsal, C. A. (2013). Academic dishonesty: An in-depth investigation of assessing measurable constructs and a call for consistency in scholarship. *Journal of Academic Ethics*, *11*(3), 185–197. http://dx.doi.org/10.1007/s10805-013-9187-6

McNair, M., & Haynie, L. (2017). Academic dishonesty: A multi-discipline view of faculty and students' perceptions. *International Journal of Caring Sciences*, *10*(1), 294–302.

Medin, D. L., & Schaffer, M. M. (1978). Context theory of classification learning. *Psychological Review*, *85*(3), 207–238. https://doi.org/10.1037/0033-295X.85.3.207

Medin, D. L., & Smith, E. E. (1984). Concepts and concept formation. *Annual Review of Psychology*, *35*(1), 113–138. https://doi.org/10.1146/annurev.ps.35.020184.000553

Menon, M. K., & Sharland, A. (2011). Narcissism, exploitative attitudes, and academic dshonesty: An exploratory investigation of reality versus myth. *Journal of Education for Business: Vol 86, No 1*. https://www.tandfonline.com/doi/abs/10.1080/08832321003774772

Mitchell, T. (2019, January 17). Generation Z looks a lot like millennials on key social and political issues. *Pew Research Center's Social & Demographic Trends Project*. https://www.pewresearch.org/social-trends/2019/01/17/generation-z-looks-a-lot-like-millennials-on-key-social-and-political-issues/

Moten, J., Jr., Fitterer, A., Brazier, E., Leonard, J., & Brown, A. (2013). Examining online college cyber cheating methods and prevention measures. *Electronic Journal of E-Learning*, *11*(2), 139–146.

Nilsson, A. (2023). Measurement invariance of moral foundations across population strata. *Journal of Personality Assessment*, *105*(2), 163–173. https://doi.org/10.1080/00223891.2022.2074853

Nora, W. L. Y., & Zhang, K. C. (2010). Motives of cheating among secondary students: The role of self-efficacy and peer influence. *Asia Pacific Education Review*, *11*(4), 573–584. https://doi.org/10.1007/s12564-010-9104-2

O'Grady, T., & Vandegrift, D. (2019). Moral foundations and decisions to donate bonus to charity: Data from paid online participants in the United States. *Data in Brief*, *25*, 104331. https://doi.org/10.1016/j.dib.2019.104331

Pagliaro, S., Ellemers, N., Barreto, M., & Di Cesare, C. (2016). Once dishonest, always dishonest? The impact of perceived pervasiveness of moral evaluations of the self on motivation to restore a moral reputation. *Frontiers in Psychology*, *7*, 586. https://doi.org/10.3389/fpsyg.2016.00586

Park, C. (2003). In Other (People's) Words: Plagiarism by university students–literature and lessons. *Assessment & Evaluation in Higher Education*, *28*(5), 471–488. https://doi.org/10.1080/02602930301677

Pfaff, E., & Huddleston, P. (2003). Does it matter if I hate teamwork? What impacts student attitudes toward teamwork. *Journal of Marketing Education*, *25*(1), 37–45. https://doi.org/10.1177/0273475302250571

Pulfrey, C., Durussel, K., & Butera, F. (2018). The good cheat: Benevolence and the justification of collective cheating. *Journal of Educational Psychology*, *110*(6), 764–784. https://doi.org/10.1037/edu0000247

Pupovac, V., Bilic-Zulle, L., & Petrovecki, M. (2008). On academic plagiarism in Europe. An analytical approach based on four studies. *Digithum*, *0*(10). https://doi.org/10.7238/d.v0i10.507

Raines, D. A., Ricci, P., Brown, S. L., Eggenberger, T., Hindle, T., & Schiff, M. (2011). Cheating in online courses: The student definition. *Journal of Effective Teaching*, *11*(1), 80–89.

Razek, N. (2014). Academic integrity: A Saudi student perspective. *Academy of Educational Leadership Journal*, *18*(1).

Rest, J. R., Narvaez, D., Thoma, S. J., & Bebeau, M. J. (1999). DIT2: Devising and testing a revised instrument of moral judgment. *Journal of Educational Psychology*, *91*(4), 644–659. https://doi.org/10.1037/0022-0663.91.4.64

Robie, C., & Keeping, L. M. (2004). Perceptions of ethical behaviour among business faculty in Canada. *Journal of Academic Ethics*, *2*(3), 221–247. http://dx.doi.org.ezproxy.uky.edu/10.1007/s10805-004-4306-z

Rosch, E. H. (1973). Natural categories. *Cognitive Psychology*, *4*(3), 328–350. https://doi.org/10.1016/0010-0285(73)90017-0

Schmelkin, L. P., Gilbert, K., Spencer, K. J., Pincus, H. S., & Silva, R. (2008). A Multidimensional scaling of college students' perceptions of academic dishonesty. *Journal of Higher Education*, *79*(5), 587–607. https://doi.org/10.1080/00221546.2008.11772118

Septiana, E. (2017, September). The Relationship between Moral Emotions of Shame, Guilt, and Moral Identity Among Undergraduate Students in Indonesia. In *1st International Conference on Intervention and Applied Psychology (ICIAP 2017)* (pp. 255-262). Atlantis Press.

Shweder, R. A., Mahapatra, M., & Miller, J. G. (1990). *Culture and moral development*. Cambridge University Press. https://doi.org/10.1017/CBO9781139173728.005

Shweder, R. A., Much, N. C., Mahapatra, M., Park, L., Brandt, A., & Rozin, P. (1997). Morality and health. *A. Brandt & P. Rozin (Eds.)*, 119–169.

Sierles, F., Hendrickx, I., & Circle, S. (1980). Cheating in medical school. *Academic Medicine*, *55*(2), 124–125.

Simpser, A. (2017). When do sensitive survey questions elicit truthful answers? Theory and evidence with application to the RRT and the list experiment. *Theory and Evidence with Application to the RRT and the List Experiment (August 25, 2017)*.

Simpson, D. (2016). Academic dishonesty: An international student perspective. *Higher Education Politics & Economics*, *2*(1), 111–123. http://dx.doi.org.ezproxy.uky.edu/10.32674/hepe.v2i1.22

Skurka, C., Winett, L. B., Jarman-Miller, H., & Niederdeppe, J. (2020). All things being equal: Distinguishing proportionality and equity in moral reasoning. *Social Psychological and Personality Science*, *11*(3), 374-387.

Slootman, M. (2018). A Mixed-Methods Approach. In M. Slootman (Ed.), *Ethnic Identity, Social Mobility and the Role of Soulmates* (pp. 41–57). Springer International Publishing. https://doi.org/10.1007/978-3-319-99596-0_3

Smith, J. D., & Minda, J. P. (1998). Prototypes in the mist: The early epochs of category learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *24*(6), 1411–1436. https://doi.org/10.1037/0278-7393.24.6.1411

Song-Turner, H. (2008). Plagiarism: Academic dishonesty or 'blind spot' of multicultural education?. *Australian Universities' Review, The*, *50*(2), 39-50.

Stern, E. B., & Havlicek, L. (1986). Academic misconduct: Results of faculty and undergraduate student surveys. *Journal of Allied Health*, *15*(2), 129–142.

Suen, H. K., & Yu, L. (2006). Chronic consequences of high-stakes testing? Lessons from the Chinese civil service exam. *Comparative Education Review*, *50*(1), 46-65.

Sutarimah, A., Naila, K., Meyrantika, M., Shabrina, K., & Suryo, B. S. B. (2020). Academic dishonesty in Indonesian college students: An investigation from a moral psychology perspective. *Journal of Academic Ethics*, *18*(4), 395–417. http://dx.doi.org/10.1007/s10805-019-09352-2

Tabachnick, B. G., Keith-Spiegel, P., & Pope, K. S. (1991). Ethics of teaching: Beliefs and behaviors of psychologists as educators. *American psychologist*, *46*(5), 506.

Tabsh, S. W., El Kadi, H. A., & Abdelfatah, A. S. (2012). Faculty response to ethical issues at an American university in the Middle-East. *Quality Assurance in Education*, *20*(4), 319–340. http://dx.doi.org.ezproxy.uky.edu/10.1108/09684881211263957

Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual Review of Psychology*, *58*(1), 345–372. https://doi.org/10.1146/annurev.psych.56.091103.070145

Teixeira, A. A. C., & de Fátima Oliveira Rocha, M. (2010). Academic misconduct in Portugal: Results from a large scale survey to university economics/business students. *Journal of Academic Ethics*, *8*(1), 21–41. https://doi.org/10.1007/s10805-010-9102-3

Thomas, D. (2017, December). Academic dishonesty and achievement emotions among international students in Thailand. In *International Forum Journal* (Vol. 20, No. 2, pp. 5-21).

Tolman, S. (2017). Academic dishonesty in online courses: Considerations for graduate preparatory programs in higher education. *College Student Journal*, *51*(4), 579.

Tracy, S. J. (2019). *Qualitative Research Methods: Collecting Evidence, Crafting Analysis, Communicating Impact*. John Wiley & Sons.

Wankel, L. A., & Wankel, C. (2012). *Misbehavior Online in Higher Education*. Emerald Group Publishing.

Wendorf, C. A. (2001). History of American morality research, 1894–1932. *History of Psychology*, *4*(3), 272–288. https://doi.org/10.1037/1093-4510.4.3.27

What is Cheating? (2023, May). Retrieved May 12, 2023 from https://ombud.uky.edu/students/what-cheating

Williams, L. S. (2018). *Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat* [Ed.D., Liberty University]. https://www.proquest.com/docview/2046301206/abstract/B8D85ED6E4F441A4PQ/1

Winters, M., & Weitz-Shapiro, R. (2013). *Third-Person versus Second-Person Vignettes in Survey Experimental Research on Sensitive Topic*. Working paper, University of Illinois and Brown University.

Witherspoon, M., Maldonado, N., & Lacey, C. H. (2010). Academic Dishonesty of Undergraduates: Methods of Cheating. In *Online Submission*. https://eric.ed.gov/?id=ED518485

Yang, R. (2016). Toxic academic culture in East Asia. *International Higher Education*, *84*, Article 84. https://doi.org/10.6017/ihe.2016.84.9112

Yi, D., & Tsang, J.-A. (2020). The relationship between individual differences in religion, religious primes, and the moral foundations. *Archive for the Psychology of Religion*, *42*(2), 161–193. https://doi.org/10.1177/0084672420909459

Zakharin, M., & Bates, T. C. (2021). Remapping the foundations of morality: Well-fitting structural model of the Moral Foundations Questionnaire. *PLoS ONE*, *16*(10), e0258910. https://doi.org/10.1371/journal.pone.0258910

Zheng, S., & Cheng, J. (2015). *Academic Ghostwriting and International Students*.

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