

PREDICTORS OF DISHONESTY IN COLLEGE STUDENTS: EXPLORING PERCEPTIONS OF A SELF-SERVICE FOOD TRANSACTION SYSTEM

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ABSTRACT

This study examined students' perceptions towards a self-service food and drink transaction system that was being considered in an academic building on a university campus. The inquiry was guided by a research question concerning students' perceptions of this type of system built on customer honesty. Several research hypotheses predicted that constructs such as integrity, social phobia, and gender would play a role in whether students would be dishonest in their use of this type of honor system that allowed customers to make their own transactions. Results reveal four major findings: 1) students felt comfortable with the notion of a hypothetical self-service transaction system, 2) men reported they were more likely to be dishonest than women using a self-service transaction system, 3) existing antisocial behaviors among students served as significant predictors of potential cheating in this type of honor system, and 4) a third-person effect emerged, showing that students were inclined to perceive other students would be more likely to commit dishonest behaviors than they would themselves if such a transaction system was implemented for food transactions.

Keywords: food honor system, college students, dishonesty, deception, third-person effect

INTRODUCTION

Dishonesty and deception are a ubiquitous part of human communication – and as such this type of behavior is represented on college and university campuses. Institutions of higher education are *moral communities* that put a great deal of value in truth telling and honesty. However, academic misconduct (Conway, Hard, & Moran, 2006), theft (Allen, 1997), and student-instructor deception (Griffin, Bolkan, & Goodboy, 2015) are examples of potentially unethical behaviors occurring on college campuses. Information and communication technologies may facilitate engagement in deception and ease of employing immoral acts; for example, in the classroom context, cut and paste is a common plagiaristic behavior which is relatively easy for students to use (Bretag, 2015). Students also use their various techniques to try to scam attendance systems, either by using false excuses (lies) or through the use of technology (Kinoshita, Niibori, & Kamada, 2018).

Academic dishonesty and cheating are common to students. The International Center for Academic Integrity reported on their website that 68% of a sample of 71,000 undergraduate students surveyed between 2002 and 2015 admitted to cheating on a written assignment or test. However, acts of dishonesty on campus are not limited to the work students submit for course grades or their academic activity online. There are other contexts where students must enact their own morals and abide by ethical principles. One such example is food purchase systems that rely on customers to

document their own transactions via an honor system (self-service transactions). This type of food store was proposed by the Dean of the college where this study took place – thus, providing an ample opportunity to examine dishonesty in an academic context outside of standard cheating and plagiarism practices.

College campuses are unique social settings because they uphold truth-telling and integrity to such an extent that many institutions ask their students to pledge to honor codes and abide by codes of conduct. There are different benefits that may influence college students towards honest behaviors. One example would be students who abide by an honor code may reap the benefits of un-proctored exams (O'Neill & Pfeiffer, 2008). The preservation of moral communities, such as college campuses, can also increase the prevalence of positive moral emotions such as elevation, gratitude, and empathy. Elevation has been studied as a positive moral emotion; described as a warm or glowing feeling that is experienced by individuals when viewing someone making a virtuous choice. It has been found to prompt people to help others (Haidt, 2000).

Opportunities for learning about and practicing ethical behavior and facing difficult decisions are beneficial for college students. Some college campuses have enacted mandatory ethics courses for all students, and have found that the experience increases students' comfort in dealing with ethical issues (Polczynski, Rozmus, & Carlin, 2019). College provides students with many contexts that allow them to practice making difficult decisions and develop personal ethical codes. One such situation that seems to activate one's propensity to engage in honest (or dishonest) behaviors are self-service technology transactions systems (Meuter, Ostrom, Bitner, & Roundtree, 2003) that rely on one's own trust to enact monetary transactions. Such food stores that are located on college campuses not only provide direct and obvious benefits (savings due to not paying employees or easy access to food items not otherwise available), but also provide a space for students to engage in experiences that involve ethical and moral choices.

Honor Systems

Honor systems and honor codes function as moral guidelines. Honor codes dictate or prescribe certain behaviors that are not allowed in particular contexts/settings (Tatum & Schwartz, 2017). Honor systems in the context of transactional purchases are generally thought of as systems where an exchange is made, but where there is no surveillance or a person to enforce the honest exchange of money for some service (e.g., a newspaper stand with no attendant; Brudermann, Bartel, Fenzl, & Bauer, 2015). In academic settings, honor systems can be somewhat ineffective in that students tend not to report the dishonest behaviors of others (Mathews, 1999). However, McCabe, Trevino, and Butterfield (2001) found that students were more apt to report peer cheating when their school has an honor code and the code reinforces students' responsibility to peer report. Other research has found, however, that the social

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pressure of being ridiculed for reporting dishonesty or theft was shown to be stronger than the desire to uphold personal integrity (Trevino, 1993).

The lack of literature on self-service food transaction honor systems on college campuses and the proposed idea for an actual food honor system in our academic building led to the exploration of this study's guiding research question: *What are students' perceptions towards a hypothetical food honor system?* The study was conducted to investigate students' perceptions toward a self-service food transaction honor system which was proposed as a solution to the lack of food resources in a specific academic building on campus. The inquiry was guided by an interest in establishing whether students felt this type of honor system would work, but also to extend previous research on student deception and dishonesty. This study explored several main factors that may exert influences on students' opinion and behaviors regarding a food transaction system that relies on honor and trust in an academic environment.

Honesty and integrity may not simply be things that people *do*, but these concepts may also be influenced by personality traits and personal dispositions. For example, people who are higher in extraversion and neuroticism have been found to be more likely to cheat on tests, while people who are higher in conscientiousness and agreeableness were less likely to cheat or deceive (Aslam, 2011). External factors such as parental income during childhood and adolescence have also been shown to be a predictor of delinquency and dishonesty. The higher income a family has, the less likely the child behaves in a delinquent manner (Mercer, 2015). Antisocial behavior in adolescents could also be a predictor of delinquency and dishonesty later in life. Pajer (2014) found that antisocial behavior during adolescence increases the likelihood of future criminal behavior. Based on these types of findings and the notion that a person's predispositions and personality traits may influence their (ethical) behaviors surrounding a self-service food honor transaction system, we developed the following research hypothesis:

Hypothesis 1: Antisocial tendencies will be positively related with the likelihood of dishonesty in a self-service food honor transaction system.

Social Anxiety

Social anxiety impacts multiple aspects of people's lives. For example, people who struggle with social anxiety often find it challenging to form and develop relationships. Social phobias, like agoraphobia (the fear of places or situations that might cause embarrassment), usually manifest themselves in adolescence and go untreated, despite evidence of social impairment (Magee, 1996). Social phobias are characterized by high levels of fear of authority figures, talking to strangers, and (maybe most importantly to our study) doing things while strangers are watching (Connor, 2000). Because a self-service transactional food honor system is related to making decisions and exchanges in public, and because of the potential to be thought of as deceptive person (a negative characteristic), we proposed a second hypothesis:

Hypothesis 2: Higher levels of social anxiety will be negatively related to the use of a self-service transactional food honor system.

Sex Differences in Dishonesty

The sex of a person could also contribute to whether they would report dishonest behavior. Studies have found that men are more likely than women to engage in dishonest behaviors such as cheating (Storch, 2001). Also, the frequency in which men use the Internet to plagiarize is almost the same as the frequency in which they use more traditional methods of plagiarism (Dreber & Johannesson, 2008).

Furthermore, Dreber and Johannesson (2008) conducted an experiment pertaining to whether individuals would lie to keep more money. While some prior research suggests that women are more likely to lie than men, (De Paulo et al., 1996; Tyler et al., 2006), Dreber and Johannesson found when the potential for a monetary gain is at stake, "women are more altruistic, more risk averse and less competitive than men" (Dreber & Johannesson, 2008; p. 198). Therefore, guided by the research findings on sex differences in cheating behavior we proposed the following hypothesis:

Hypothesis 3: Compared to women, men will believe they are more likely to be dishonest in a self-service transactional food honor system and thus will self-report higher incidents of dishonest behaviors.

Integrity

Youth who avoid acts of delinquency such as vandalism and theft, have been found to score high in the categories of conformity and honesty (Mercer, 2015). Moral equity and relativism (the belief that no point of view is the absolute truth) are also strong indicators of high levels of personal integrity (Manly, 2013). Academic integrity, or the aversion to cheating or plagiarism (Cronan, Mullins, & Douglas, 2018), can also be a valid predictor of personal integrity outside of the context of the classroom. Research in this context inspired the fourth hypothesis of this study:

Hypothesis 4: Higher levels of integrity will be positively related to reported use of honesty in a hypothetical self-service transactional food honor system.

Perspectives and Biases on Views of Others

Research has found that onlookers may project personality traits onto a person that is seen stealing or deceiving. In the context of food purchase thefts, thieves are seen as sneakier and less trustworthy in general, but also are seen as having more self-confidence (Alley & Kooi, 2015). Stealing food is a behavior that is not socially acceptable and most people would not want to be labeled as a thief. People are quick to associate negative, and internal (i.e., personality) attributes with stealing behaviors of others while maintaining rational and external excuses for the same behaviors for themselves. This type of bias is known as the attribution bias (Heider, 1958) or the fundamental attribution error (Jones & Harris, 1967), or more recently dubbed the correspondence bias (Gawronski, 2004). Also, the third person effect (Davison, 1983) has been found to create a distortion of perception in that people believe that others are more heavily influenced by negative events or messages (than they are or would be themselves). These phenomena are likely at play in the beliefs about one's own behavior toward a hypothetical self-service food honor transactional system. These theoretical frames helped to form the basis of the final hypothesis.

Hypothesis 5: Students will report that others would be more likely to be dishonest when relying on a hypothetical self-service food honor transactional system.

Guided by the preceding research question and hypotheses we analyzed students' perspectives about a proposed hypothetical self-service food honor transactional system, and gauged whether or not they felt that they, as individuals, and the campus population at large would be honest with such a system in place.

METHODS

Participants

The institutional research board approved this research before any data collection occurred and all standard protocols for ethical research were followed. Through the use of an anonymous paper survey, a total of 181 undergraduate students were recruited from

introductory-level communication courses. Course extra credit was provided to student participants. One respondent did not provide adequate information. Of the 180 usable responses, 119 were female (66.11%) and 61 were male (33.89%). Also, 17 were freshmen (9.44%), 60 were sophomores (33.33%), 68 were juniors (37.78%) and 33 were seniors (18.33%).

Procedures

With the permission of instructors, we distributed paper questionnaires during the first 20 minutes of class time at a large university in the southern United States. After hearing a brief explanation of a proposed self-service food honor transaction system in the building where the recruitment took place, students signed a consent statement, participants then completed the questionnaire. The scales used in the study include an integrity scale, social phobia symptom scale, and an antisocial behavior scale. We deleted items that are not applicable to the current study.

Instrumentation

To assess integrity, we used the Schlenker (2008) integrity scale, which included 18 items and was measured on a five-point Likert scale ranging from 1 (strongly disagree), to 5 (strongly agree), with higher scores indicating strong endorsement of principled ethics. According to Schlenker (2008), the scale seeks to measure "the inherent value of principled conduct, the steadfast commitment to principles despite temptations or costs, and the unwillingness to rationalize unprincipled behavior" (p. 1084-1085).

Questions related to social phobia came from a scale with eight true/false items. The social phobia symptom scale belongs to a subsection of the psychiatric diagnostic screening questionnaire developed by Zimmerman (2002). The social phobia symptom scale contains 15 items with eight of the items focused on situation-specific forms of phobia symptoms.

The third section of the survey contained the Schlenker (2008) antisocial behavior scale (e.g., lies, theft, academic cheating, cheating others, broke promises), consisted of five subscales of lying (14 items), stealing (15 items), academic cheating (4 items), broken promises (4 items), aggression (8 items), and infidelity (1 item). In the scale, a five-point Likert answer choice was used for all the questions with responses ranging from 1 (never), to 5(always), with higher scores indicating higher tendencies for antisocial behaviors. The items of each scale and the Cronbach's alphas have been summarized in Table 1.

RESULTS

The guiding research question for this study set out to investigate students' perceptions of a hypothetical self-service food honor transaction system. Two measures were used to test students' perceptions of the honor system: the extent of whether they felt comfortable using a transactional system for food purchases where they were the only observer of their own honesty; and the degree to which student's would feel nervous relying on a self-monitored honor system for food purchases. The exact question on the questionnaire to measure comfort was: "I would be comfortable using an honor system to make food purchases." The mean of students' response to the extent of how comfortable using an honor system is 4.1 ($M = 4.1 \pm 0.64$). Using a five-point response choice, a 3.0 (midpoint) was used as the cut point to compare participants' comfort toward using the hypothetical food honor system. A single-sample *t*-test was used to compare the mean of students' comfortable feeling to the neutral mid-point. A significant difference was found ($t(180) = 15.1, p < 0.001$). The mean of students' comfortable feeling of 4.1 ($M = 4.1 \pm 0.64$) is

significantly greater than the midpoint. In other words, students reported that they would feel comfortable using a hypothetical food honor system (Table 2).

Additionally, the statement "participating in an honor system for food purchases would make me nervous" was included on the survey to investigate whether participants would be nervous using this type of transactional system for food purchases. We employed a reverse coding method to transform the data from this item. That is, the higher the score on this item, the less nervous participants reported they would feel. Again, relying on a 3.0 as a cut point (midpoint score) to compare participants' responses regarding nervousness a single-sample *t*-test was conducted to compare the mean of students' feelings to the neutral mid-point. A significant difference ($t(180) = -8.5, p < 0.001$) revealed that the mean of students' nervous feelings of 3.75 ($M = 3.75 \pm 1.18$) was significantly greater than that of the midpoint showing students were not overly nervous. In other words, students were not overly nervous with the idea of using a hypothetical food honor system.

Further, in order to explore the relationships between students' likelihood of engaging in dishonest activities in the food honor system and other reported antisocial behaviors, two linear regression analyses were conducted. Students' likelihood of engaging in dishonest activities in the food honor system was measured through the item "How likely are you to engage in dishonesty when using a food honor system?" *Hypothesis 1* and *Hypothesis 4* explored the relationship between students' dishonest behaviors and the two predictors: (a) antisocial behavior tendency and (b) integrity. In order to detect any multicollinearity between these two predictors, the variance inflation factor (VIF) was tested. Based on the results, all three factors' VIF value is 1.2, which was close to 1.0, meaning that these two factors are relatively independent and no multicollinearity was found among these two predictors (i.e., constructs).

The predictors were respondents' self-report on the extent of their antisocial behavior and social anxiety and the outcome was their perception towards their predicted behaviors in a hypothetical self-service food honor transaction system. The first hypothesis predicted that antisocial behaviors were positively associated with the likelihood of dishonesty in a self-monitored food purchases. Based on the linear regression analysis, antisocial behavioral tendency was a significant predictor for students' likelihood of engaging in dishonest activities in the food honor system ($\beta = 0.86, t(0.154) = 4.53, p < 0.001$). Therefore, students who were more likely to have existing antisocial behavioral tendencies, were more likely to report engaging in dishonest activities when using the food honor system. This finding supported the study's first hypothesis.

The second hypothesis predicted students with high levels of social anxiety would be less likely to use a food honor system. Based on the results, social phobia was not a significant predictor for students' likelihood of using a food honor system ($\beta = 0.041, t(0.22) = 1.93, p > 0.05$). Therefore, the second hypothesis was not supported (Table 3).

The third hypothesis focused on sex differences within dishonesty; the prediction was that men, as compared to women, would engage in more potentially dishonest behaviors in a hypothetical food honor system. An independent sample *t*-test explored this hypothesis, and based on the results; men ($M = 1.99 \pm 1.2$) were more likely to engage in dishonest activities than women ($M = 1.50 \pm 0.84, t(91.71) = 2.81, p < 0.05$). Therefore, the third hypothesis is supported, and the data revealed a sex difference in self-reported behaviors associated with dishonesty in the proposed hypothetical food honor system (Table 4).

The fourth hypothesis examined the relationship between integrity and students' likelihood of engaging in dishonest behavior in food honor purchases. A linear regression investigated this relationship. The predictor variable is students' self reported integrity, and the outcome variable was the likelihood of engaging in dishonest activities in the food honor system. The linear regression analysis revealed that integrity served as a significant predictor for students' likelihood of engaging in dishonest activities in the food honor system ($\beta = -0.29$, $t(0.15) = -1.83$, $p > 0.05$). This finding contradicted what was anticipated and therefore, the fourth research hypothesis was not supported (Table 3).

The last hypothesis examined the influence of inherent biases on the perceived dishonest behavior of others with regard to their use of a hypothetical food honor system. Results showed a significant difference between students' perspective toward themselves and toward others in terms of using food honor system ($t(360) = 18.64$, $p < 0.001$). The mean for students who reported that they would be more likely to engage in dishonesty when using a food honor system

is 1.67 ($M = 1.67 \pm 0.99$) while the mean for students who believe others would be more likely to engage in dishonesty when using a food honor system is 3.55 ($M = 3.55 \pm 0.92$). In other words, students tended to believe other people are likely to behave dishonestly when using the food honor system, demonstrating a bias in how they see their potential behaviors and those of others using the system. Thus, hypothesis 5 was supported.

DISCUSSION

Academic dishonesty is a construct (Popham, 2017; Whitley & Keith-Spiegel, 2001) that describes the many academic behaviors that are prohibited on college campuses. Recent research has found that academic dishonesty may also include deceptive communication that involves interpersonal dynamics (Griffin et al., 2015). The current study adds to the literature on dishonesty in the academic context in a novel way because it explored students' perceptions and expectations of their own behavior and the actions of their peers in a new context—a proposed self-monitored food honor transaction system located in an academic setting. Answers to the research

Table 1: Scales and Reliabilities

Integrity Scales	Items	Alpha	Mean
(1 is the lowest and 5 is the highest)	<p>It is foolish to tell the truth when big profits can be made by lying.</p> <p>No matter how much money one makes, life is unsatisfactory without a strong sense of duty and character.</p> <p>Regardless of concerns about principles, in today's world you have to be practical, adapt to opportunities, and do what is most advantageous for you.</p> <p>Being inflexible and refusing to compromise are good if it means standing up for what is right.</p> <p>The reason it is important to tell the truth is because of what others will do to you if you don't, not because of any issue of right and wrong.</p> <p>The true test of character is a willingness to stand by one's principles, no matter what price one has to pay. There are no principles worth dying for.</p> <p>It is important to me to feel that I have not compromised my principles.</p> <p>If one believes something is right, one must stand by it, even if it means losing friends or missing out on profitable opportunities.</p> <p>Compromising one's principles is always wrong, regardless of the circumstances or the amount that can be personally gained.</p> <p>Universal ethical principles exist and should be applied under all circumstances, with no exceptions.</p> <p>Lying is sometimes necessary to accomplish important, worthwhile goals.</p> <p>Integrity is more important than financial gain.</p> <p>It is important to fulfill one's obligations at all times, even when nobody will know if one doesn't.</p> <p>If done for the right reasons, even lying or cheating are ok.</p> <p>Some actions are wrong no matter what the consequences or justification.</p> <p>One's principles should not be compromised regardless of the possible gain.</p> <p>Some transgressions are wrong and cannot be legitimately justified or defended regardless of how much one tries.</p>	0.80	3.62
Social Phobia Symptom Scales (15 is the highest and 0 is the lowest)	<p>Did you worry a lot about embarrassing yourself in front of others?</p> <p>Did you worry a lot that you might do something to make people think that you were stupid or foolish?</p> <p>Did you feel very nervous in situations where people might pay attention to you?</p> <p>Were you extremely nervous in social situations?</p> <p>Did you regularly avoid any situations because you were afraid you'd do or say something to embarrass yourself?</p> <p>Did you worry a lot about doing or saying something to embarrass yourself in any of the following situations?</p> <p>Public speaking</p> <p>Eating in front of other people</p> <p>Using public restrooms</p> <p>Wring in front of others</p> <p>Saying something stupid when you were with a group of people</p> <p>Asking a question when in a group of people</p> <p>Business meetings</p> <p>Parties or other social gatherings</p> <p>Did you almost always get very anxious as soon as you were in any of the above situations?</p> <p>Did you avoid any of the above situations because they made you feel anxious or fearful?</p>	0.83	5.09

Table 1: Scales and reliabilities (continued)

Integrity Scales	Items	Alpha	Mean
Antisocial Behavioral Scales (1 is the lowest and 5 is the highest)	<p>How often have you lied in order to...?"</p> <p>___ 1. Protect a friend's feelings</p> <p>___ 2. Minimize conflict</p> <p>___ 3. Avoid embarrassing someone</p> <p>___ 4. Impress friends</p> <p>___ 5. Impress an employer</p> <p>___ 6. Avoid personal embarrassment</p> <p>___ 7. Protect one's reputation</p> <p>___ 8. Gain a financial reward</p> <p>___ 9. Gain a reward from an employer</p> <p>___ 10. Avoid a financial loss</p> <p>___ 11. Avoid an undesired relationship</p> <p>" How often have you stolen something from...?"</p> <p>___ 1. An acquaintance</p> <p>___ 2. A friend</p> <p>___ 3. A family member</p> <p>___ 4. A romantic partner</p> <p>___ 5. An employer</p> <p>___ 6. A stranger</p> <p>___ 7. A store</p> <p>" How often have you shoplifted or stolen something from a store...?"</p> <p>___ 1. Because they treated customers unfairly</p> <p>___ 2. To impress someone</p> <p>___ 3. For the thrill of it</p> <p>___ 4. To get something you wanted</p> <p>" How often have you stolen something from another person (e.g., stranger, acquaintance, employer, friend, family member, romantic partner)...?"</p> <p>___ 1. Because that person treated you unfairly</p> <p>___ 2. To impress someone</p> <p>___ 3. For the thrill of it</p> <p>___ 4. To get something you wanted</p> <p>Considering YOUR LAST SIX MONTHS WHILE IN COLLEGE, please answer each item by writing in your response on the line next to each question, where</p> <p>___ 1. Threw something at someone</p> <p>___ 2. Teased someone in a hurtful way</p> <p>___ 3. Insulted someone in a hurtful way</p> <p>___ 4. Got in physical fights</p> <p>___ 5. Physically attacked people (initiated the attack)</p> <p>___ 6. Damaged or destroyed things belonging to others</p> <p>___ 7. Threatened to hurt other people (initiated the threats)</p> <p>___ 8. Tried to frighten others</p> <p>___ 9. Cheated on an exam in high school</p> <p>___ 10. Cheated on a paper in high school</p> <p>___ 11. Cheated on a paper in college</p> <p>___ 12. Cheated a stranger</p> <p>___ 13. Cheated a friend</p> <p>___ 14. Was unfaithful to a romantic partner (i.e., infidelity)</p> <p>___ 15. Broke a promise to a romantic partner</p> <p>___ 16. Broke a promise to a family member</p> <p>___ 17. Broke a promise to a friend</p> <p>___ 18. Broke a promise to an employer</p>	0.93	1.56

question and examining the predictions set out by the hypotheses in this study began a valuable and interesting discussion about the role personality, experience, sex, and perception/biases play in a potential food honor system.

Our first research question allowed us to ask whether students would be comfortable using an self-service food honor transaction system for purchases – our findings show that they would. One concern about a potential honor system for food purchases could be that it would make people uneasy and uncomfortable when making

Table 2: Perception and Feelings Toward using Hypothetical Food Honor System

	Cut point	M	N	Single-sample t test	P value
Perception	3.0	4.1	180	15.1	0.001
Feeling (nervous)	3.0	3.75	180	-8.5	0.001

purchases because people naturally feel nervous under a surveillance camera (Goold, 2003). Perhaps some individuals would feel scrutinized or this type of transaction system might induce feelings of guilt because of the potential for others to suspect theft (Gill, 2005). This did not seem to be the case in our sample—students reported feeling comfortable with the idea of engaging in purchases that asks them to rely on an honor system.

As predicted, the more antisocial behavioral tendencies students possessed in their lives the more likely they would be to report they would potentially engage in dishonest activities when using a food honor transaction system. This study's first hypothesis predicted that students with behaviors that previous research has categorized as antisocial would correlate with dishonesty in a food based honor system. Based on the current data from student responses and statistical analyses this hypothesis was supported. People who steal, and engage in other antisocial behaviors, break social conventions and because a food honor system operates on rules these same people are more likely to report they would be less than honest in this context (Giacalone, 1997; Qualls, 2014). People with antisocial tendencies might be more likely to extend their behaviors to new contexts that mirror the expectations their prior experiences dictated from them.

The data from the students' responses did not support the predictions of the second research hypothesis. Based on the results, social phobia was not a significant predictor for students' likelihood of using a food honor system. Based on prior research about social phobias we predicted that students with these traits would be more likely to avoid a food honor system that relied on them making their own transactions in a public space. We expected that the feeling of projected guilt of the potential to be accused of theft would discourage students high in social anxiety to avoid an honor system. Instead, maybe those with high social phobia might be more likely to use this type of system, because after all – using a self-service honor system of this type means that students can avoid interacting with a food service worker or cashier who might otherwise raise their anxiety or enact their phobias of communicating with other people.

What is difficult to understand from this study's findings is that integrity scores were not a significant predictor for students' likelihood of engaging in dishonest activities in a food honor system. The results from data analyses did not support the predictions of the fourth research hypothesis. Perhaps the contexts that were laid out in other social contexts in the integrity scales did not resemble the behaviors that students feel they would engage in during a self-service monetary transaction for food purchases. Using a food honor system was a novel experience for most people and imagining one's behavior during a food purchase in an academic building may even be more challenging. Future research should measure previous experiences with stealing behaviors as a predictor of dishonesty in a self-service food honor system.

Third person effects are well-documented phenomena (Rosenthal, Detenber, & Rojas, 2018; Scanlon, & Neumann, 2002; Megehee, & Spake, 2008). We predicted that students would see others as being more dishonest and likely to cheat in an honor system. To examine this, we asked students to rate the likelihood of their own behavior as being dishonest and then asked them to think of their peers' behavior in this context. A comparison of group means allowed for a test of the prediction that a bias would be active in this scenario, and as predicted our fifth hypothesis was supported. Many studies have demonstrated that others are often seen as more irrational and driven by internal attributes with the context is negative (as is the case with stealing from a self-service food honor transactional system).

Ethical perspectives

Moral absolutism was advocated by the philosopher Immanuel Kant; he believed that one should not lie no matter the situation (Knapp, McGlone, Griffin, & Earnest, 2016). Incorporating this perspective into the current findings, most students confirmed that they were unlikely to cheat if using a self-service food honor transactional system regardless of the circumstances, upholding their general ethical and moral beliefs. However, the viewpoint of utilitarianism, favors that lying can be justified if it leads to more good than harm. The perspective of utilitarianism is consistent with the "doctrine of specificity" which prescribes that "honesty and dishonesty are not unified traits but specific functions of life situations, and the consistency across situations is due to what those situations have in common" (Knapp et al., 2016, p. 49). Applying this perspective to the scenario of the current study, if a student were to steal food because of hunger or lack of available money, then this student might justify their behaviors and remove feelings of guilt or shame. There are many nuances and situations that might influence perceptions of honesty and theft in a self-service food honor system; future research should consider the other constructs that might drive anticipated dishonest behaviors in this context.

Limitations and Future Research

We asked students in several classes in one college within a larger university to self-disclose their perceptions and beliefs regarding a hypothetical self-service food honor transaction system. Using a variety of students across the campus or across several universities would give us a better picture of the sentiments and behaviors of college students in general as it relates to the context of dishonesty. Additionally, constructs such as religiosity (Huelsman & Wasieleski, 2006) might play a significant role in dishonesty in an honor system and a location of a school or type of school (public vs. private) may also drive the likelihood of students' affiliations with certain religious beliefs—and as a consequence behavior in a food honor transaction system (Hudson & Pearson, 2018).

We also used scales to ask about students' previous behaviors. We then used scales to allow participants to predict future/hypothetical

Table 3: Linear Regression Results

Predictors	Outcome	<i>B</i>	S.E.	<i>Sig</i>
Antisocial Behaviors	Likelihood of dishonesty	0.86	0.40	0.000
Social Phobia	Likelihood of using a food honor system	0.041	0.021	0.055
Integrity	Likelihood of engaging in dishonest activities	-0.29	0.15	0.064

Table 4: Independent Samples t-test Results

		N	M	T	Sig
Men	Dishonest activities	61	1.99	2.81	0.006
Women		119	1.50		
Self-perception	Dishonest activities	61	1.67	18.64	0.038
Others-perception		119	3.55		

behaviors. Reporting on actual past experiences may have been easier for students than reporting on future/hypothetical behaviors. This might be especially true for behaviors taking place in a novel context that they may have never experienced. Also, we must remember that there are social desirability effects when people report on their behavior (Jensen & Hurley, 2005). Participants may have been less likely to be honest about their unethical and negatively viewed behaviors. Guilt, shame, or fear of repercussions for reporting these behaviors could have played a role in the results of this study.

Overall, the results revealed that students were interested in this type of food purchase system and that while they perceived that others would be more likely to cheat on this type of honor context – they reported that their own behavior would be more honest. Moral communities such as a college campuses, are places where people can practice ethics; a self-service food honor transaction system, should one be implemented, would allow college students to practice and think about important parts of everyday life in a safe environment with opportunities for learning and reflection. This exploration extends what we know about honesty, integrity, and deception among students on college campuses. It allows us to extend the idea that dishonesty on college campuses may include behaviors beyond traditional constructs such as cheating, plagiarism, and interpersonal deception (Griffin et al., 2015; Stearns, 2019).

REFERENCES

Allen, S. M. (1997). Preventing theft in academic libraries and special collections. *Library & Archival Security, 14*, 29-43. doi:10.1300/J114v14n01_04

Aslam, M. S., & Nazir, M. S. (2011). The impact of personality traits on academic Dishonesty among Pakistan students. *The Journal of Commerce, 3*, 50-61.

Bretag, T. (2015). Contextual Factors Which Impact on Academic Integrity: Introduction. In T. Bretag (Ed.), *Handbook of Academic Integrity* (pp. 1-2). Springer, Singapore. doi: 10.1007/978-981-287-079-7_77-1

Brudermann, T., Bartel, G., Fenzl, T., & Seebauer, S. (2015). Eyes on social norms: A field study on an honor system for newspaper sale. *Theory and Decision, 79*, 285-306. <https://doi.org/10.1007/s11238-014-9460-1>

Connor, K. M., Davidson, J. R., Churchill, L. E., Sherwood, A., Weisler, R. H., & Foa, E. (2000). Psychometric properties of the Social Phobia Inventory (SPIN) New self-rating scale. *The British Journal of Psychiatry, 176*(4), 379-386. doi: 10.1192/bjp.176.4.379

Conway, J. M., Hard, S. F., & Moran, A. C. (2006). Faculty and college student beliefs about the frequency of student academic misconduct. *The Journal of Higher Education, 77*(6), 1058-1080. doi:10.1080/00221546.2006.11778956

Cronan, T. P., Mullins, J. K., & Douglas, D. E. (2018). Further understanding factors that explain freshman business students' academic integrity intention and behavior: Plagiarism and sharing homework. *Journal of Business Ethics, 147*, 197-220. <https://doi.org/10.1007/s10551-015-2988-3>

Davison, W. P. (1983). The third-person effect in communication. *Public Opinion Quarterly, 47*, 1-15. doi:10.1086/268763

De Paulo, B. M., Kashy, D. A., Kirkendol, S. E., Wyer, M. M., Epstein, J. A., 1996. Lying in everyday life. *Journal of Personality and Social Psychology, 70*, 979-995. doi: 10.1037/0022-3514.70.5.979

Dreber, A., & Johannesson, M. (2008). Gender differences in deception. *Economics Letters, 99*, 197-199. doi: 10.1016/j.econlet.2007.06.027

Gawronski, B. (2004). Theory-based bias correction in dispositional inference: The fundamental attribution error is dead, long live the correspondence bias. *European Review of Social Psychology, 15*, 183-217. doi: 10.1080/10463280440000026

Gill, M., & Spriggs, A. (2005). *Assessing the impact of CCTV* (Vol. 292). London: Home Office Research, Development and Statistics Directorate.

Giachalone, R. A., & Greenberg, J. (Eds.). (1997). *Antisocial behavior in organizations*. Sage.

Goold, B. J. (2003). Public area surveillance and police work: The impact of CCTV on police behaviour and autonomy. *Journal of Surveillance and Society, 1*(2), 191-203.

Griffin, D. J., Bolkan, S., & Goodboy, A. K. (2015). Academic dishonesty beyond cheating and plagiarism: Students' interpersonal deception in the college classroom. *Qualitative Research Reports in Communication, 16*, 9-19. doi: 10.1080/17459435.2015.1086416

Haidt, J. (2003). Elevation and the positive psychology of morality. In C.L. Keyes, J. Haidt (Eds), *Flourishing: Positive psychology and the life well-lived*, (pp. 275-289). Washington, DC: Am. Psychol. Assoc.

Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley. doi:10.1037/10628-000

Hudson, T. D., & Diaz Pearson, A. (2018). Developing the Moral Self: College Students' Understandings of Living a Moral or Ethical Life. *Journal of College and Character, 19*(3), 185-200.

Huelsman, M. A., Piroch, J., & Wasielecki, D. (2006). Relation of religiosity with academic dishonesty in a sample of college students 1. *Psychological Reports, 99*(3), 739-742. doi:10.2466/PRO.99.3.739-742

Jensen, J. D., & Hurley, R. J. (2005). Third-person effects and the environment: Social distance, social desirability, and presumed behavior. *Journal of Communication, 55*(2), 242-256. doi:10.1111/j.1460-2466.2005.tb02670.x

Jones, E. E., & Harris, V. A. (1967). The attribution of attitudes. *Journal of Experimental Social Psychology, 3*, 1-24. doi: 10.1016/0022-1031(67)90034-0

Kinoshita, S., Niibori, M., & Kamada, M. (2018). An attendance management system capable of mapping participants onto the seat map. In L. Barolli, N. Kryvinska, T. Enokido, M. Takizawa (Eds), *International Conference on Network-Based Information Systems*. (pp. 897-902). Cham, Switzerland: Springer.

Knapp, M. McGlone, M., Griffin, D., & Earnest, W. (2016). *Lying and Deception in Human Interaction*. Dubuque, IA: Kendall Hunt Publishing.

Magee, W. J., Eaton, W. W., Wittchen, H. U., McGonagle, K. A., & Kessler, R. C. (1996). Agoraphobia, simple phobia, and social phobia in the National Comorbidity Survey. *Archives of General Psychiatry, 53*, 159-168. doi:10.1001/archpsyc.1996.01830020077009

Manly, T. S., Leonard, L. N., & Riemenschneider, C. K. (2015). Academic Integrity in the Information Age: Virtues of Respect. *Journal of Business Ethics, 127*, 579-590. doi: 10.1007/s10551-014-2060-8

Mathews, C. O. (1999). The honor system. *Journal of Higher Education, 50*(4-509). doi:10.1080/00221546.1999.11780781

McCabe, D. L., & Trevino, L. K. (1993). Academic dishonesty: Honor codes and other contextual influences. *Journal of Higher Education, 64*, 522-538. doi:10.1080/00221546.1993.11778446

McCabe, D. L., Trevino, L. K., & Butterfield, K. D. (2001). Dishonesty in academic environments: The influence of peer reporting requirements. *The Journal of Higher Education, 72*, 29-45. <https://doi.org/10.1080/00221546.2001.11778863>

Megehee, C. M., & Spake, D. F. (2008). The impact of perceived peer behavior, probable detection and punishment severity on student cheating behavior. *Marketing Education Review, 18*(2), 5-19. doi:10.1080/10528008.2008.11489033

O'Neill, H. M., & Pfeiffer, C. A. (2008). The impact of honor codes on academic cheating within liberal arts colleges. *Business and Economics Faculty Publications, 2*. https://digitalcommons.ursinus.edu/cgi/viewcontent.cgi?article=1001&context=bus_econ_fac

- Mercer, N., Farrington, D. P., Ttofi, M. M., Keijsers, L., Branje, S., & Meeus, W. (2015). Childhood predictors and adult life success of adolescent delinquency abstainers. *Journal of Abnormal Child Psychology*, 1-12. doi:10.1007/s10802-015-0061-4
- Meuter, M. L., Ostrom, A. L., Bitner, M. J., & Roundtree, R. (2003). The influence of technology anxiety on consumer use and experiences with self-service technologies. *Journal of Business Research*, 56, 899-906.
- Pajer, K. A. (2014). What happens to “bad” girls? A review of the adult outcomes of antisocial adolescent girls. *American Journal of Psychiatry*, 155, 862-870 doi:10.1176/ajp.155.7.862
- Pincus, H. S., & Schmelkin, L. P. (2003). Faculty perceptions of academic dishonesty: A multidimensional scaling analysis. *The Journal of Higher Education*, 74(2), 196-209. doi:10.1080/00221546.2003.11777196
- Polczynski, A. M., Rozmus, C. L., & Carlin, N. (2019). Beyond silos: An interprofessional, campus-wide ethics education program. *Nursing Ethics*. 26(7-8), 2314-2324.
- Popham, W. J. (2017). *Classroom assessment: What teachers need to know (8th ed.)*. New York, NY: Pearson.
- Qualls, R. (2014). The relationship between disciplinary practices in childhood and academic dishonesty in college students. *College Student Journal*, 48 (3), 362-374.
- Rosenthal, S., Detenber, B. H., & Rojas, H. (2018). Efficacy beliefs in third-person effects. *Communication Research*, 45(4), 554-576. doi:10.1177/0093650215570657
- Scanlon, P. M., & Neumann, D. R. (2002). Internet plagiarism among college students. *Journal of College Student Development*, 43, 374-385.
- Schlenker, B. R. (2008). Integrity and character: Implications of principled and expedient ethical ideologies. *Journal of Social and Clinical Psychology*, 27, 1078-1125. doi:10.1521/jscp.2008.27.10.1078
- Stearns, S. A. (2019). Student cheating: A dramaturgical analysis of identity, deception, and self-deception. In T. Docan-Morgan (Ed.), *The Palgrave handbook of deceptive communication* (pp. 67-89). Chom, Switzerland: Palgrave Macmillan.
- Storch, E. A., & Storch, J. B. (2001). Organizational, nonorganizational, and intrinsic religiosity and academic dishonesty. *Psychological Reports*, 88, 548-552. doi:10.2466/pr0.2001.88.2.548
- Sun, Y., Shen, L., & Pan, Z. (2008). On the behavioral component of the third-person effect. *Communication Research*, 35, 257-278. doi:10.1177/0093650207313167
- Tangney, J. P., Stuewig, J., & Mashek, D. J. (2007). Moral emotions and moral behavior. *Annual review of psychology*, 58, 345-372. doi:10.1146/annurev.psych.56.091103.070145
- Tatum, H. E., Schwartz, B. M., Hageman, M. C., & Koretke, S. L. (2018). College students' perceptions of and responses to academic dishonesty: an investigation of type of honor code, institution size, and student-faculty ratio. *Ethics & Behavior*, 28, 302-315. https://doi.org/10.1080/10508422.2017.1331132
- Trevino, L. K., & Victor, B. (1992). Peer reporting of unethical behavior: A social context perspective. *Academy of Management Journal*, 35, 38-64. doi:10.2307/256472
- Tyler, J.M., Feldman, R.S., Reichert, A., (2006). The price of deceptive behavior: disliking and lying to people who lie to us. *Journal of Experimental and Social Psychology*, 42, 69-77. doi:10.1016/j.jesp.2005.02.003
- Weast-Knapp, J. A., Malone, M., & Abney, D. H. (2015, July). Social Perception of Culprits and Victims by Witnesses of Minor Food Theft. In J. Weast-Knapp, M. Malone & D. Abney (Eds.), *Studies in Perception and Action XIII: Eighteenth International Conference on Perception and Action* (pp. 97-100). New York: Psychology Press.
- Whitley Jr, B. E., & Keith-Spiegel, P. (2001). *Academic dishonesty: An educator's guide*. New York: Psychology Press.
- Zimmerman, M. (2002). *The Psychiatric Diagnostic Screening Questionnaire: Manual*. Los Angeles: Western Psychological Services.