The Influence of Social Media and Contract Cheating Website Use on the Perception of
Academic Integrity Standards
by
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PERCEPTION OF ACADEMIC INTEGRITY

1

Author's Declaration

I hereby declare that I am the sole author of this thesis. The work contained herein is my own except where explicitly stated otherwise in the text, and that this work has not been submitted for any other degree or professional qualification. This is a true copy of the thesis, including any required final versions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Suzanne Connell

June 22, 2023

Abstract

This work sought to address gaps in the literature regarding perceived student acceptance of certain types of cheating in higher education and the potential relationships to social media use and the digital academic services, called contract cheating websites (Rowland et al., 2018) or study helper websites (Harrison et al., 2021). In detail, the core of the study was the analysis of social media and contract cheating website use and how it related to judgments of cheating strategies by current and past postsecondary students. Through an online survey, participants (n = 47) were asked to indicate demographic features; report the time spent on specific social media sites and contract cheating websites (Chegg, Course Hero, and Quizlet); and indicate their judgments of seven academic dilemma scenarios depicting cheating. Spearman correlations revealed a moderate relationship between the time spent on social media and contract cheating websites ($r_s = .438$, p = .003). Although no links emerged between dilemma judgments and social media in the overall sample, when separated into groups, contract cheating website users (n = 17) indicated greater time spent on social media than non-users, t(42) = 2.847, p = .003, along with correlations to certain cheating scenario and strategy judgments. These findings highlight the need to investigate the underlying connections students may have to social media, contract cheating services, and their perceptions of academic integrity to inform remedial strategies for cheating in higher education.

Keywords: academic integrity, academic misconduct, contract cheating, contract cheating websites, study helper websites, social media, Canada

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Table of Contents

Author's Declaration	1
Abstract	2
Acknowledgments	3
List of Figures	6
List of Tables	7
Chapter 1: Introduction	8
Students as Pivotal Focus	10
The Problem	11
Contract Cheating Discourse	12
Study Lens	
Thesis Overview	
Chapter 2: Literature Review	17
Academic Policies	17
Faculty Interpretations	18
Contract Cheating	
Contract Cheating Websites	
Student Factors that Influence Decisions to Cheat	23
Enculturation and Age	24
Normalization of Cheating	25
Digital Influences	26
Definitions	34
Academic Integrity	
Academic Misconduct	
Cheating	
Current Study	
Chapter 3: Methods	38
Quantitative Approach to Research	38
Ethical Approval	
Sampling and Recruitment	
Administration	

Survey Instrument	42
Coding	44
Social Media and Contract Cheating Websites	44
Social Media and Contract Cheating Website Engagement Scores	45
Situational Integrity Judgments	45
Chapter 4: Results	48
Data Quality	48
Instrument Reliability	48
Scenarios	48
Contract Cheating Site Users and Non-Users Sample Demographics and Education	50
Situational Integrity Judgments	51
Scenarios	51
Strategies	51
Research Question 1	54
Research Question 1a	56
Research Question 2	58
Demographic Factor: Age and Digital Media	58
Demographic Factor: Education and Contract Cheating Website Engagement	60
Summary	61
Chapter 5: Discussion	62
Significance	69
Recommendations	70
Chapter 6: Conclusions	72
Limitations	72
Future Directions	73
References	75
Appendix A: Student Digital Engagement Survey	96
Appendix B: Survey Introduction and Informed Consent	107
Appendix C: Consent Affirmation	110

List of Figures

Figure 1. Co	ontract cheating Site	e Engagement C	Comparison of	College and	University Students
and Gradua	ates				60

List of Tables

Table 1.1	Overall Sample Demographic Characteristics	41
Table 1.2	Overall Sample Educational Characteristics	41
Table 2	Featured Platforms and Sites	45
Table 3	Demographic and Education Characteristics of Contract cheating Users and Non-Users	50
Table 4	Comparison of Scenario Mean (and standard deviation) Incongruence	51
Table 5	Comparison of Strategy Mean (and standard deviation) Incongruence	52
Table 6	Percentage of Sample with Incongruent Strategy Ratings	53
Table 7	Social Media Engagement Means (and standard deviations) Comparisons	54
Table 8	Correlations of Platform Engagement and Scenario Judgments	54
Table 9	Correlations of Contract cheating Non-Users' Social Media Use and Scenario Judgments	55
Table 10	Correlations of Contract cheating Users' Social Media Use and Scenario Judgments	55
Table 11.1	Correlations of Contract cheating Users' Platform Engagement and Strategy Incongruence (1 - 4)	56
Table 11.2	Correlations of Contract cheating Users' Platform Engagement and Strategy Incongruence (5 - 7)	56
Table 12	Scenario 3 Incongruence Means (and standard deviations) by Social Media Usage	57
Table 13	Scenario 7 Mean Incongruence Scores (and standard deviations) by Social Media Usage	57
Table 14	Strategy 7B Mean Incongruence Scores (and SD) by Social Media Usage	57
Table 15	Correlations for Age and Digital Engagement	58
Table 16	Contract cheating Site Engagement Means (and standard deviations) by	59
Table 17	Social Media Engagement Means (and standard deviations) by Age	59
Table 18	Age Comparison of Mean (and standard deviations) Social Media Platforms Used per Day	59
Table 19	Mean Comparison (and standard deviation) of Attendance Status on Contract cheating Site Engagement.	60

Chapter 1: Introduction

One of the central values of a degree, diploma, or certificate resides with the reputation of the institutions that award them. Colleges and universities that confer credentials also vouch for the integrity of those graduates and researchers. Therefore, academic integrity policies and enforcement are pivotal to the welfare of the school and its students (Amigud & Pell, 2020; Ashford, 2021). Academic professionals, including researchers and faculty, have suggested that students now perceive some forms of cheating as normalized behaviour (Blum, 2009; Lines, 2016; Roberts & Todd, 2019). Investigating this phenomenon and the potential influences for it is essential to developing strategies to educate students on their academic responsibilities.

Literature on academic integrity is broad and diverse, however recent data on the overall prevalence of cheating is sparse but there are indicators that it remains a significant problem in higher education. A bibliometric study conducted by Marques et al (2019) noted that the number of published papers on the topic academic cheating varied but showed a sharp increase between 1999 to 2017, engaging over a thousand authors. They also investigated papers published on the topic of plagiarism in which they observed a larger proportion of studies relative to their findings of *cheating* studies, but a similar growth pattern in publications over the same period. Although dated, central works within this field by McCabe et al. (2006) found that 86% of their sample of American business students admitted to cheating at some point during their higher education (HE) experience. Similarly, in Canada, Christensen Hughes and McCabe (2006) noted that 53% of undergraduates admitted to cheating on written assignments in the previous year. Infractions included copying work from other sources without citing, submitting a purchased essay, or fabricating references. Conversely, Jones (2011) found that 92% of students surveyed admitted to cheating or being aware of peer cheating. Almost three-quarters of the 1043 students

acknowledged that they had committed at least one form of cheating in the previous year when the researchers provided them with a list of policy integrity violations (DuPree & Sattler, 2010).

These statistics may still be an underestimate of the true amount of cheating (Curtis et al., 2022). Observers have suggested that there may be participant misrepresentations of self-report behaviours due to the influence of the social desirability bias (Bernardi & LaCross, 2004), which has been theorized to motivate participants to downplay socially stigmatizing actions such as cheating. Anderman and Won (2018) asserted that obtaining accurate rates of cheating in higher education is problematic as it is a covert behaviour that may cause respondents discomfort by revealing it in study surveys. Moreover, there is a lack of a standardized operational definition for academic misconduct that leads to incongruence in the judgment of cheating behaviours in research (Amigud & Lancaster, 2019), and between students and faculty (Blum, 2009; Evans-Tokaryk, 2014; Josien et al., 2015). McCabe (2016) added that online surveys may cause participants unease, believing that their identities could be tracked. He concluded that in these cases, cheating behaviours may be under-reported. Taken together, there is support for the belief that statistics published in studies that ask students to admit to their own cheating in higher education may lack precision.

Although students may be reluctant to report cheating, faculty perceptions of this type of misconduct can be informative in assessing the severity of the problem in higher education. In one study in Canada, 53.1% of faculty perceived academic integrity deteriorating, and 61% of this sample stated that they had up to four instances of suspected violations in their classes over the prior year (MacLeod & Eaton, 2020). Likewise, over 57% of Canadian faculty from both science and humanities, felt that plagiarism was a concern in their classrooms (Evans-Tokaryk, 2014). Some teachers have indicated that they feel that students do not have a strong grasp of institutional integrity policies and almost 40% felt that cheating was a significant issue in their

institution (Andrews, et al., 2007). Findings such as these cause concern for policy makers and faculty, especially because these misconducts are occurring even as academic institutions are vigorously engaged in deterring and detecting academic dishonesty.

The differences in meaning and perspectives between teachers and student is well established in the literature (Andrews et al., 2007; Blum, 2009; Evans-Tokaryk, 2014; Harrison et al., 2020; Higbee & Thomas 2002; Josien et al., 2015), and is one reason faculties and administrations have worked diligently to refine integrity mandates and strategies. However, there are differences in how individual institutions codify academic integrity definitions within Canada, including on key cheating strategies such as plagiarism (Eaton, 2017) and contract cheating (Stoesz et al., 2019). At the same time, innovations in digital processes and commercial services provide students a myriad of alternative, often unethical ways to complete their work, which leaves administrations and faculties scrambling to stay current in the many ways students may interpret their academic obligations in these new contexts (Andrews et al., 2007; Eaton et al., 2019).

Students as Pivotal Focus

It is the learners who are the actors in the phenomenon of cheating, and their beliefs impact their behaviour. Studies have demonstrated that even in cases where the rules are clearly laid out, students may use cognitive strategies to rationalize their choice to cheat. Students have justified their cheating by arguing that the act was harmless or trivial, or that poor teaching or testing necessitated breaching the policies (Brent & Atkisson, 2011). Amigud and Lancaster (2019) provided a comprehensive review of the many reasons students cited for cheating but the most consistent was the feeling of being overwhelmed. Justifications suggest that students who are caught are aware that they had committed a misconduct and seek to balance the scales with

an excuse for their actions (Sykes & Matza, 1957). Although informative, these findings suggest that experiential and contextual factors are considerable influences motivating students to cheat.

The Problem

Conversely, researchers have observed other students who do not point to situational or subjective factors as reasons they cheated. In fact, they appear to have no misgivings about committing this type of academic misconduct. For example, Elias (2017) noted that business students within his sample held neutral moral beliefs about collaboration on individual assignments despite it being prohibited. They concluded that students with an increased sense of academic entitlement, defined as expecting a reward for doing nothing (Twenge, 2010), "...may believe that cheating is a legitimate mean [sic] of achieving their objective if their sense of entitlement cannot be reflected in high grades" (Elias, 2017, p. 198). Some scholars have argued that certain types of cheating have become accepted, even normalized behaviour in student culture (Burgason et al., 2019; Stephens, 2019). They have contended that strategies such as groupwork (Andrews et al., 2007), lifting sections of the internet into their work without citing (Blum, 2009), and the use of test answer keys (Hallbauer, 2020; Packalen & Rowbotham, 2022) were viewed as normalized behaviours, even when students were advised it breached their institution's policies (Hallbauer, 2020). Rather than offering justifications for cheating, these students have turned the tables and argued against the legitimacy of some institution policies (Amigud & Pell, 2020). Within academic institutions, students are theoretically immersed in a culture where integrity policies are communicated and reinforced through syllabi and learning modules (Morrow, 2022). Questions therefore remain about potential alternative sources of influence that may be misinforming students' academic integrity map.

Critics have argued that among many potential sources for students' model for academic integrity, some have suggested that learners develop digital literacies acquired through

experiences with technologies outside of school which then then transfer to their academic literacies (Blum, 2009; Pfannenstiel, 2010). Personal social media platforms provide students with access to influences and cultural norms shared by peers (Geusens & Beullens, 2018) and commercial academic services who practice deceitful marketing tactics (Amigud, 2020; Lancaster, 2019). These service providers are referred to as contract cheating websites (Rowland et al., 2018), and provide a broad range of completed academic assessments, including essays (custom and premade), test answer keys, and live tutoring services for barter or purchase. These businesses are situated as contractors that facilitate a specific type of cheating called contract cheating (Clarke & Lancaster, 2006) and represents a large body of research within academia.

Contract Cheating Discourse

This form of cheating is broad and fluid so attempting to develop a unified definition is "a work in progress" (Curtis et al., 2022, p. 6). For this study, I looked to Lancaster (2020), coauthor of the work that gave this phenomenon its name, and his simplified definition: "[t]he term contract cheating is now regularly used to describe the behaviour whereby a student uses or attempts to use a third party to complete academic work for them. This may or may not involve a cash payment" (pp. 115-116). Both Awdry (2021) and Bretag et al. (2019) have asserted that the third parties may or may not be formal businesses. Similarly, in discussion of the commercialized contractors that act as third parties in contract cheating, I defer to the comprehensive overview and investigation authored by Rowland et al. (2018) in using the term contract cheating website which provides completed materials for students to use as academic submissions, including test answers, presentation slides and scripts, essays, theses, and more. These studies, taken together constitute a scoping description of one of the key elements within this work, which student engagement with formalized, commercial contract cheating websites.

13

A distinction should be made, that contract cheating websites such as Chegg, Course Hero, and Quizlet, do provide other services that on the surface seem legitimate and unrelated to contract cheating. For example, Chegg rents textbooks, test preparation, and essay checkers for a price (https://chegg.com). Through their Thinkful services, they also offer program bootcamps in software engineering, digital marketing, and project management, among others (https://thinkful.com). Course Hero markets a sleeker menu of services specifically targeting writing support, textbook solutions, and explanations, as well as study guides, that to an academic professional appears highly questionable but to a student, may seem ethical or appropriate (https://coursehero.com). Quizlet also provides textbook solutions but packages their services as a flashcard study support tool (https://quizlet.com). It is up to the student how they use the resources offered on these sites, whether for studying or cheating. But these potentially legitimized services seem pivotal to how students perceive them as helper sites rather than cheating services. Within the survey and all participant-facing material, any reference made to these types of websites or services they may provide, is labeled as *study helper websites* (Harrison et al., 2021) to avoid biasing responses and data by using the morally laden word 'cheating'.

Furthermore, my focus was not on the act of contract cheating, but the potential endorsement and time engagement participants have with commercial contract cheating websites. In my study, these websites, and the marketing strategies they implement, theoretically serve as a source of misinformation that students' may consume while using them or engaged in other social media sites. I have argued that contract cheating websites, as well as peers, may help to normalize certain cheating behaviours. Several studies have highlighted the significant negative impact these contract cheating businesses have on higher education, and the insidious marketing strategies used to mislead and coerce students for their own profit (Adams, 2021;

Emerson & Smith, 2022; Krienert et al., 2022; Lancaster & Cotarlan, 2021) and how they use social media as a primary conduit to reach their current and prospective customers (Lancaster, 2019; Sivasubramaniam et al., 2016). Moreover, reviews of the marketing strategies of these services reveal the use of careful wording, (Kaktiņš, 2018; Rowland et al., 2018), coercion, blackmail, misrepresentation (Khan, 2022), and sophisticated technologies and chat bots to mislead and misinform students (Amigud, 2020).

Study Lens

Social media and contract cheating websites often contain deceptive or inaccurate information about academic integrity and the strategies to ensure it (Kaktiņš, 2018; Amigud, 2020; Lancaster, 2019; Seitz et al., 2011). Contract cheating websites present information in a way that makes their services appear to be ethical choices (Amigud, 2020; Rowland et al., 2018). I contended that students are forming meaning for academic integrity while interacting with peers and contract cheating websites on social media. To that end, I have used Symbolic Interactionism as a theoretical framework to build a better understanding of this troubling issue.

In Symbolic Interactionism (Kuhn, 1964), individuals are situated at the centre of their environment where they build meaning and context through interaction with artefacts and other people. Using Symbolic Interactionism helped to formulate a grasp of how students' perceptions may differ from academic professionals and how it relates to the influences in their environments. Moreover, I used this construct to organize key research factors during the implementation of the survey and evaluation of the data. Of particular focus in this study is how social media and contract cheating website engagement represent critical elements associated with student judgments of academic cheating.

The goal of the current study was to investigate potential relationships between social media use, contract cheating website use, and the judgments of cheating strategies. To that end, I

presented students with seven scenarios depicting different forms of cheating (according to generalized Canadian higher education integrity policies) and asked students to ethically evaluate the action on a scale. I also collected data on students' use of social media and contract cheating website. To differentiate other factors that have been found to influence patterns of academic dishonesty, I collected demographic information such as age, education level, academic attendance, and cultural self-identity. I asserted that students who were at the high end of engagement on these platforms would judge academic integrity scenarios differently from those who were less engaged.

Thesis Overview

This thesis is constructed to conform to the logical progression of the research it describes as well as the process I took from investigation to conclusions.

Chapter 2 is a summary of the literature in the field of academic integrity opens with a discussion of the research on policy and faculty definitions of academic integrity that serve as sources of student meaning making, followed by a discussion of the expanding phenomenon of contract cheating and their market strategies. The discourse turns to the students' perceptions and factors that inform cheating decisions, including social media, and contract cheating website messaging. The chapter ties these factors together with a description of the theoretical mechanism that potentially supports students shifting norms, Symbolic Interactionism. Finally, definitions within this research field are diverse spaces, so clarity is provided for the reader with a discussion on terms used. The chapter ends with a description of the study done in the completion of this thesis.

Chapter 3 reviews the methods I used, including my reasoning for my quantitative approach, the ethical review journey and safeguards, my recruitment strategy, administration of

the survey, and its contents. I chose to include support for my choices in writing the survey from other scholars. Finally, I review my coding process to provide clarity in assessing my results.

My results are outlined in Chapter 4, with attention to the data quality, reliability, and findings. Patterns in my data allowed me to take my analysis in a slightly different direction by splitting my sample into two groups and making some comparisons. Within this section, I also address the results framed within my two research questions. A summary is provided at the close of this chapter to provide tangential guidance to the following chapters.

In chapter 5, I discuss my findings in relation to the research in the field. I connect previous literature to this work to give it context, as well as support possible causes for the behaviours I observed. I have included a section of recommendations for the informing the gaps in this research and ways that students, institutions, and faculty might move forward in context to this study.

I conclude my work in chapter 6, where I discuss the implications of this work, the limitations of the study overall, as well as future directions for research studies.

Chapter 2: Literature Review

Academic Policies

Higher education presents students with an opportunity to learn new skills and hone abilities to enhance their opportunities for employment or quality of life. However, some lessons, such as integrity, represent nontangible skills that may impact their trajectory through school and in their future careers. Integrity is often connected to the construct of morality, which includes societal norms, respect, and a social contract. Some philosophers consider these elements are vulnerable to subjectivity, culture, and context over a lifetime (Graham, et al, 2013). Academic integrity, in turn, is a set of expectations set out by higher education institutions that inform students on proper scholarly decorum. This code of conduct is pillared by high order concepts such as trust, respect, honesty, and fairness (International Center for Academic Integrity, 2021; Lakehead University, 2019). Although documents and mandates help scaffold students' understanding of their academic responsibilities inside and outside school, gaps or conflicting expectations and definitions leave the door open for student interpretation.

Researchers suggested that the gap between student perceptions of academic cheating and university policies on integrity may be due in part to a need for more clarity in the mandates themselves. Canada does not have nationally standardized codes and definitions that would reduce misinterpretation (Eaton, 2017; Eaton & Christensen Hughes, 2022). Investigators who evaluated Canadian policies found significant vulnerabilities in institutional regulations. Eaton (2017) remarked that there was a national disparity between institutions in policy language and definitions of plagiarism. Similarly, others noted a void in Ontario policy standards that directly addressed the growing issue of contract cheating, which includes paid essay writing and test answers for money or trade (Stoesz et al., 2019). Critics argued that creating policies explicit

enough to address all the ways in which students may commit this set of misconducts is a challenging task (Stoesz et al., 2019). Students may therefore struggle with defining the boundaries of good scholarly work when referring to their schools' regulations, leading to misinterpretations and unintentional cheating.

Faculty Interpretations

Another source of student misperception may be how each faculty member interpret and enact those policies. Studies have revealed that instructors construe different meaning from policies and present different strategies for applying them that may not be applicable over other disciplines or classes. MacLeod and Eaton (2020) noted that even within a single institution, there were pronounced differences in the way that individual departments defined integrity directives and punitive responses. Even between individual faculty members, there was variation about how teachers felt cheating should be handled once discovered. When asked if there were any circumstances where policy mandates should not apply, almost 43% of higher education instructors stated that there were indeed exceptions which included compassion, perceived unfairness of procedures, mistake, and culture (Amigud & Pell, 2020; MacLeod & Eaton, 2020).

Neither the administration, nor faculty can be blamed for the difficult space in which contract cheating and cheating in general occurs. Although providing valuable guidelines and tenets for administration and communication of mandates, even a strong academic integrity policy is not a panacea that covers the minutiae of potential issues nor necessarily the scope of all the creative strategies students might use to subvert standards (Stoesz, et al, 2019). In other words, if a student decides to cheat, they will find a way and a commercial service, such as a contract cheating website, have effective methods of reaching them, with the message that they understand their troubles and are there to help (Rowland et al., 2018).

Contract Cheating

Contract cheating, a term co-coined by Clarke and Lancaster (2006), described the outsourcing of academic work to a paid third-party contractor which the student then submits as their own (see the International Center for Academic Integrity's 2022 Statement Against Contract Cheating for an excellent summary). Donald McCabe connected the rising tides of technology to the promise for innovative ways to subvert integrity mandates (2005). Predictably, internet-based businesses have also ridden this wave with new creative services to profit from students looking for ways to achieve their credentials by cheating.

Contract cheating occurs when a student submits academic work or assessments that they did not produce (Clarke & Lancaster, 2006) and involves three parties: the student, the academic institution or instructor, and an external resource that provides the completed schoolwork (Draper & Newton, 2017). Yet there is disagreement in this field as to the precise definition of this construct (Curtis et al., 2022). Bretag et al. (2018) discussed the evolution of the term beginning with Clarke and Lancaster's (2006) coining the phrase contract cheating and their initial description of it as a paid transaction to the third party. They noted that more recent adaptations of this term referred to a "cluster of practices" (p. 1838) offered by commercial and non-commercial entities to students, both through paid and unpaid transactions (Walker & Townley, 2012 as cited by Bretag et al., 2018). Alternatively, Newton (2018) equated commercial contract cheating to essay mills which was an earlier term for businesses that produced customized essays for students. His definition became a misnomer when he also included other services under this term, such as the sale of course and test answers. Finally, Awdry (2021) presented an interesting perspective on a student's use of a third party to complete academic work. She proffered that the lack of a comprehensive definition for contract cheating limited academia's reach and ability to restrict it. She pointed to diverse cultural practices, such

as seeking support from friends or family as one of the overlooked third parties that further complicated the problem faced by administrations to communicate integrity expectations to the students. She argued that informal outsourcing to friends and family would create a semantic disconnect if positioned in the academic integrity policy as *contract cheating* as no contract would exist in such a transaction (Awdry, 2021). When viewed through this long lens, contract cheating is broad and complex field, for researchers, education professionals, as well as students.

This type of cheating has been increasing in higher education along with the number of businesses and the spectrum of services they offer (Eaton et al., 2019; Newton, 2018). Students have likely been using third party resources to complete their assignments for many years, but recently the internet has made this type of cheating easier and more convenient (Newton & Lang, 2016). These businesses often market themselves as *study helper* sites (Harrison et al., 2021) to gain trust from the student but are often a ruse that makes many of their illicit services seem legitimate or even academically approved through the use of major press and academic logos (Medway et al., 2018). Certain businesses market their services as file sharing platform whereby a students can swap completed assignments to submit as their own, which many felt was not cheating (Harrison et al., 2021) to align their approach with other forms of content sharing found on social media and peer to peer sites.

Contract cheating, whether through file swapping or paid customized services, represents a highly problematic form of academic misconduct for faculty primarily due to the difficulty of detecting and proving it. In a large Australian survey, over two thirds of faculty reported suspecting a submission had been completed by a third party, while almost 40% had experienced that concern in more than five situations, but many are reluctant to report them due to systemic issues (Harper et al., 2019). Researchers have attempted to estimate the actual percentage of students engaged with purchasing and submitting assignments from contract cheating websites

and have suggested that the rate is close to 7.9% (Curtis et al., 2022). Although, this number may appear minor in contrast to all other problems faced by academia, it does not reflect other forms of contract cheating and self-report surveys are vulnerable to respondents being reluctant to being honest about a taboo subject (Bernardi & LaCross, 2004). It is likely that students are engaging in this type of cheating not just out of desperation, but potentially due to the ease of access, often through their own social media feed (Lancaster, 2019) and the perceived difficulty in of being caught (Awdry & Groves, 2023). More concerning is the student belief that this type of cheating is normalized. (Awdry & Groves, 2023; Hallbauer, 2020).

Contract Cheating Websites

Third-party academic service contractors provide students with products that effectively commercialize the acquisition of academic credentials. They specialize in offering everything from on-the-spot tutoring; essay and thesis writing; test answer keys; proxy services (hiring someone to take tests, complete coursework, or even attend classes); and anything else a student might require to successfully pass a course or complete a program (Rowland et al., 2018). These services have continued to diversify their products to match the changing needs of students who are willing to pay or trade for their services. But these services are often positioned to students to appear like good scholarly choices, emphasizing tutoring or writing support. Paid tutoring services allow students to submit questions, often from exams and tests they are taking, and receive the solution within minutes (Lancaster & Cotarlan, 2021). Services such as these aggressively market to students in a way that gives the appearance that their products are ethical, savvy, and fall within their institution's integrity mandates (Kaktiņš, 2018; Medway et al., 2018).

Many academics view violations related to the engagement of third-party services for barter or fee to be one of the most serious forms of cheating, not only for the premeditated nature of the transaction, but also the difficulty of detection (Walker & Townley, 2012). Others see it as

the commoditization of academic collaterals (Crossman, 2022; International Center for Academic Integrity, 2022) and some have extended the idea that misconducts of this nature might be viewed as a criminal act (Medway et al., 2018). In fact, Australia has successfully created legislation which criminalizes these services and any advertisements that support them (Parliament of Australia, 2020).

The most prominent contract cheating websites are Chegg, Quizlet, and Course Hero each with a reported value of over a billion dollars (Emerson & Smith, 2022). Chegg began in 2005 as a service for renting out textbooks but now boasts 6.6 million users and \$11.1 billion market capitalization, larger than Pearson (Staton, 2021). Course Hero and Chegg follow a contract cheating business model by offering essay writing, file swapping, tutoring, proxies, and test answers.

By contrast, Quizlet provides a platform for students to create and publish flashcards using their course materials (Hallbauer, 2020). Although, this service is not inherently unethical, critics cite two serious issues with this model. First, students are illegally publishing proprietary material from their course and texts to a public forum. Quizlet makes it clear to users that the liability for copyright infringement falls to the individual creating the flashcards (Emerson & Smith, 2022), and the website features an information page on copyright and advises users to "[r]emember that it's always your responsibility to make sure you have the right to use content before uploading it to Quizlet" (Quizlet.com, n.d., para. 11). The second issue is that once students upload these materials, they are easily found by students who then use them to cheat (Hallbauer, 2020). For example, a student may upload answers to a quiz they completed early in a term, to create flashcards to study for a final exam. In the next term, another student may use those uploaded questions to cheat on the quiz. The crux of the issue is that these digital cards often represent copyrighted material that becomes public and effectively become answer keys.

Students only need to search their question to have the test answers appear. The line between ethical use for studying and illicit use for cheating becomes blurry.

No matter which model they follow, contract cheating websites differ from early essay mills in both the variety of services offered, as well as their transaction model. Although monetary exchange is still an option, students may now access an extensive repository of educational materials through crowd sourcing, file sharing, or peer-to-peer exchange format (Lancaster &Cotarlan, 2021). This approach relocates their services from a *pay to pass* model (Chibry & Kurz, 2022) to something students may find more acceptable, akin to collaboration or having a friend who they have not met offer help. Students may be more likely to view this kind of transaction as acceptable or trivial cheating (Burgason et al., 2019).

Student Factors that Influence Decisions to Cheat

But the question remains, how do students come to the decision to cheat? The literature on cheating is broad and complex, citing several overlapping factors that students refer to as influencing their choice to cheat. Some students alleviate the discomfort or fear of social stigma related to cheating by employing rationalizations (Sykes & Matza, 1957). In rationalizations, students weighed subjective justifications more significantly in determining whether it was morally acceptable to cheat than incidental contextual factors (Murdock et al., 2004). Examples of rationalizations students have used include fear of failing, work overload, stress (Amigud & Lancaster, 2019; Burnett et al., 2016), poor quality teaching, unmet expectations of the teacher (Barnhardt & Ginns, 2017), or challenging or ill-favoured subject matter (Anderman & Won, 2018).

Conversely, some students feel no need to justify cheating in coursework because they do not experience dissonance between their values, judgments, and behaviour. To clarify, this subsection of individuals does not cheat unintentionally, or out of misunderstanding of what is

expected of them ethically. Instead, this group of students see their strategies for completing assessments as appropriate, even when it was explicitly prohibited. In short, these students may know that a strategy is against the rules of the classroom or institution but fail to see their behaviour is morally wrong. For this group of students, the most precise policies or the most effective communication of expectations might not be adequate in deterring academic dishonesty because the motivation to cheat comes from individual perceptions. One faculty member summarized the growing issue in a comment within MacLeod and Eaton's (2020) work:

"[c]heating isn't stigmatized among students..." that they view it as a morally neutral pathway to achieve credentials (p. 357).

Enculturation and Age

There is evidence that academic integrity is related to time spent in school. For example, Gilmore et al. (2010) noted that graduate students who spent one extra semester in their program had fewer integrity issues related to plagiarism and attributions errors than other graduate students. They credited this effect to the enculturation to academic ethical standards. In another study, a comparison of undergraduate and graduate students also found that graduate students were less likely to cheat (Christensen Hughes & McCabe, 2006; Sheard et al., 2003). Sheard et al. (2003) argued that graduate students have different goals and motivations than undergraduate students, often holding intrinsic values (personal growth or mastery of the subject) for their academic career. Latif (2002) ascribed the impact of education to be directly related to the reduction in the desire to cheating. He contended that it was evidence of the natural process of moral development that matures throughout the time spent in school.

Interpretation of academic obligations can be complicated by other factors which would result in an increase in cheating behaviours. For example, issues with cultural interpretations of academic integrity have become a salient topic within this field of research, given the growth of

international students enrolment in Canada (Usher, 2019). Scholars have suggested that international students' cultural academic norms may not align with administrative or faculty expectations for integrity of their chosen institution (Eaton & Burns, 2018; Greenberger et al., 2016). Parnther (2022) provided a helpful review of significant cultural facets that influence academic behaviour of those who study from abroad. These included familial expectations, governmental corruption, and a lack of resources including money which may set these international students apart in their perceptions of sound academic methods and cheating.

Scholars have suggested that age is a predictor of student cheating behaviour.

Researchers found that older students cheat less (Harris et al., 2020; Hendy et al., 2021;

Newstead et al., 1996; Whitley, 1998). This effect was found across various contexts including online military affiliated students (Harris et al., 2020), and among samples in both the United States and Greece (Hendy et al., 2021). Newstead et al. (1996) results showed that mature students in their sample were the least likely to justify cheating as a "means to an end" (p. 235), while most likely to deem cheating as immoral compared to younger groups. They argued that mature students were driven by intrinsic factors connected to personal goal attainment in their academic journey.

Normalization of Cheating

One factor that may influence this disconnect between academic policies and students' perceived moral integrity, is the normalization of cheating strategies. Collaboration has continued to be a contentious area for administration, faculty, and students in the literature. Students have argued they will be expected to work as part of a team in their future careers and therefore it should not be deemed a misconduct in school (Burgason, et al., 2019; Higbee & Thomas, 2002). Davis et al. (2009) found that some students assigned a take-home test did not consider collaboration to be misconduct, even when told it was proscribed. Other students

reported that groupwork or asking a peer for an answer during a test should not be regarded as cheating at all (Brent & Atkisson, 2011). Students defended their beliefs when challenged by citing the value placed on teamwork in the work world (Andrews et al., 2007).

Expectations of the 'real world' has been proffered by students in justifications for cheating with digital content in various contexts (Cole et al., 2014; Roberts & Todd, 2019). Students stated that the growth of information and research would require them to use online resources to complete work in their future careers. This real-world future employment expectations have been argued widely by students with this type of cheating (Roberts & Todd, 2019). An alternative perspective is presented by Hallbauer (2020), who revealed that students felt that cheating and learning were mutually exclusive. So long as there was some form of learning occurring, any strategy, even if a breach of integrity policies, could not be deemed cheating as they were achieving the goal of higher education. Even when explicitly informed, students chose to ignore the rules or have justifications for why they perceived cheating as acceptable. For example, 62% of students in one study stated that resubmitting their work from another course (self-plagiarism) would be acceptable under certain circumstances (Higbee & Thomas, 2002; Josien et al., 2015). Drye et al., (2018) reported that one-third of students completing a take-home test stated using their notes, disregarding explicit instructions forbidding it (also see DuPree & Satler, 2010 for similar findings). Even researchers have noted a growing comfort among student participants reporting their own successful misconduct in surveys (Newton, 2018).

Digital Influences

Another factor that may be related to the normalization of cheating behaviours may be the use of the internet and digital factors. Canadian researchers found that 95.1% of faculty within humanities and social sciences agreed or strongly agreed that occurrences of student

plagiarism in their classrooms were being supported by new technologies (Evans-Tokaryk, 2014). Other faculty have blamed digital tools for making it easier and more convenient for students to cheat (Drye et al., 2018). Even students have admitted that they use digital resources to find materials and tactics for cheating (Levin & Arafeh, 2002).

The use of the internet and its potential influence on student perceptions of cheating is not restricted to students' academics. Digital interactions outside of school expose students to messaging and trends that may influence their beliefs and judgments (Pfannenstiel, 2010) especially using social media. Scholars have cited digital influences as informing student academic integrity models related to their views of ownership (Evans-Tokaryk, 2014; Lines, 2016). Students have demonstrated misconceptions about web-based artefacts such as articles, research, and art (Blum, 2009). Many learners have claimed that information from the internet did not need citing because it was public domain (Hallbauer, 2020). Similarly, students have invoked the 'fair use' clause to support their decision to lift material from the internet and use it in their submissions. They asserted that digital media content was freely available as public knowledge and therefore, can be used without the need for attribution (Ashford, 2021; Molnar, 2015). Students have been so confident in these stances that they have used them to defend themselves when accused of using digital answer keys to cheat on tests (Hallbauer, 2020).

Blum (2009) revealed that some students saw cutting and pasting text from other sources and compiling it into a new document as meeting the integrity requirements for original work (p.58). She suggested that her students valued collaboration in their work and as such, using others' written work without attribution should not be viewed as plagiarism. The author elaborated that the root of this new perspective lay in "...profoundly different values concerning boundaries and originality and individuality" (p. 5), adding that the culture of file sharing, free applications, and games were altering their beliefs on intellectual ownership.

Other scholars extended the argument of intellectual ownership to include how original music and videos are viewed by students. Evans-Tokaryk (2014) claimed that students are exposed to alternative meanings for original work through remix culture (Lessig, 2008). This trend, popular in music and videos, encourages creators to combine two or more published artistic works, such as popular songs, to create a new artefact referred to by many as a *mashup* (Reynolds, 2009). Remix culture normalizes using others' content to create a unique work, often without attribution (Blum, 2009; Lessig, 2008; Reynolds, 2009). Broadly, this understanding of ownership may be related to students' perceptions of appropriate work in the classroom.

Researchers have identified other possible factors that may relate to the changes in students' perceptions of cheating strategies, including observed peer norms (McCabe & Treviño, 1997; Zhao et al., 2022); judging the institutional policies as unfair (MacLeod & Eaton, 2020); or that colleges and universities have become capitalist ventures, emphasizing a financial transactional model over a virtuous experience of attaining skills and knowledge (Crossman, 2022; Fredriksson, 2014). Integrity researchers have speculated that this last point may underpin the increase in contract cheating (Eaton & Christensen Hughes, 2022).

Social Media

The literature has alluded to external domains that may inform student perceptions of academic policies, specifically social media. Cited as providing many benefits to users, some critics have contended that trends and values promoted on social media platforms are reshaping students' understanding of academic integrity (Germek, 2009). With over 90% of Canadians between the ages of 15 and 24 reported using social media regularly (Schimmele et al., 2021), the ability of social media content to reach audiences is substantial. Theorists believe its influence on individual understanding of cultural expectations is enormous (Bandura, 2002; Vandebosch et al., 2013). Even the Canadian government has published work on the use of these

networks to push influential messaging to promote efforts in international and domestic agendas, and theatres of conflict (Seaboyer, 2018). Similarly, research on adolescent use of social media suggested that those who viewed alcohol-related content on social networking sites were more likely to report increased consumption and abuse of alcohol. (Geusens & Beullens, 2018; Westgate & Holliday, 2016). Furthermore, Geusens and Beullens (2018) found that positively framed alcohol-related content directly influenced the viewers' attitude toward alcohol consumption. Westgate and Holliday (2016) noted that the supportive messaging of the content was the influential factor in their results. This may suggest that users may be vulnerable to social media messaging and in turn may inform their own beliefs or behaviours.

Carefully curated artefacts (posts/messages) on social media have been shown to have some impact on the behaviour and interaction of message recipients. A study from 2012 detailed the randomized controlled analysis of sixty-one million people during the 2010 United States congressional elections. The results showed that targeted political messaging between social media networked friends and friends-of-friends increased the users' political expressions, information searching on the political topic, and, especially where users were friends and had profile pictures of their faces, impacted real-world voting behaviours (Bond et al., 2012) demonstrating the correlation between social media influence and personal belief systems.

Work on the power of media messaging to polarize attitudes has demonstrated that the phenomenon can take hold quickly, even within the span of one survey return (Bryson, 2020). Cinelli et al. (2021) argued that the algorithms that customize messaging and advertising based on user search and viewing inputs create a digital echo chamber. This phenomenon occurs when messaging from other web sources replicates and validates the viewer's opinions, echoing their beliefs and values to promote or prolong engagement (Cinelli et al., 2021). The peril lies not only in the tendency to filter information to align with the user's beliefs or interests but also in the

absence of diversity within their digital ecosystem, which can hinder their ability to critically evaluate the information on their feed. Finally, when users are exposed to consistently homogenous ideology inside the echo chamber, the takeaway may be perceived as the normalization of their interests or belief system (Cinelli et al., 2021).

Contract Cheating Website Messaging

The potential for social media to impact perceptions and normalize behaviours has important implications for the study of academic cheating, however the platforms also provide conduits for disreputable services their messaging. Prior to the pandemic, 67% of students said they used alternative digital tools to support their learning, including social media (Lieneck & Esparza, 2018). Students who use internet browser searches to find study materials or research for assignments may inadvertently trigger marketing algorithms that return static advertisements or interactive protocols called *bots* designed to market commercial solutions for every academic problem. Even posting on one's own Twitter account for homework help draws the attention of bots programmed to engage with the user in chat format to promote commercial cheating services from contract cheating websites (Amigud, 2020; Gray, 2022; Lancaster, 2019). A student clicking through search results for legitimate academic products results in digital trails that support targeted advertising of both ethical and unethical businesses.

The messages and scripts written by contract cheating commercial services are positioned to speak to student vulnerabilities that include the pressures and complexities of academic life and extend compassion for the struggles the student may be facing (Kaktiņš, 2018; Rowland et al., 2018). Gray (2022) referred to these tactics as predatory while the seamless quality and diversity of promotional strategies to draw students to their websites may make contract cheating services seem universal and normalized (Amigud, 2020; Harrison et al., 2021).

Students are encouraged through clever marketing schemes to outsource their work to contract cheating websites through promotions that present their products as a social norm, or through the appearance of adhering to academic integrity policy mandates (Clarke & Lancaster, 2013; Lancaster & Cotarlan, 2021). For example, students in a study from Baylor College implied that sites such as Chegg and Quizlet are not cheating because "[t]hey genuinely believe that their use of online resources is good and fair, presumably because the resource is available to everyone and they believe that the resource helps them learn the material" (Hallbauer, 2020 p, 74). Further, some students justified the use of these digital resources to access prohibited material by stating that it equates to asking a friend or professor for help which they are encouraged to do and therefore are acceptable resources (Hallbauer, 2020).

Marketing teams behind many of these digital tools understand common integrity policies in universities and colleges and use this knowledge to manipulate the description copy of their services to walk just on the borders of misconduct. They represent their services as ethical, easy, and not in violation of any academic policy, often utilizing messages such as '100% original' or 'plagiarism free' (Amigud & Lancaster, 2019; Kaktiņš, 2018; Medway et al., 2018). The promotional and website messaging informs student understanding, especially those who may not have a good grasp of policies with overt messages asserting that so many have used these services (normalization); offering relief for stress and overwork (emotional comfort/respite); and suggesting that everybody does it (Amigud & Lancaster, 2019; Kaktiņš, 2018). They also use subtler messages that their service is associated with higher education institutions by prominently displaying logos of major institutions on their websites (Medway et al., 2018). This type of advertising may mislead students about the ethics of the services offered.

In studying the normalization of cheating, I contend that this messaging is related to students' understanding of strategies they choose in completing their work. Considering these

findings, contract cheating websites are situated in this study as businesses that provide academic outsourcing services for profit and trade.

Making Meaning - Symbolic Interactionism

When viewed as an aggregate, I propose that there is a relationship between social media use, contract cheating website messaging and how students interpret descriptions of academic cheating. Symbolic Interactionism theory aligned with this study in three significant ways: 1) it states that meaning evolves from the environment; 2) it provides a framework for quantitative study; 3) it is a recognized construct for investigating morally charged phenomena.

Symbolic Interactionism theory views an individual's interactions with their environment to be fundamental to the process of building attitudes and expectations about their world, also referred to as *meaning-making*. The crucial tenet of this theory is that the self exists within the centre of one's perceptual world, both influencing and being influenced by the events, symbols, and interactions they encounter (Blumer, 1969). The meaning-making process continues throughout a lifetime as interactions evolve and adapt definitions to new events and contexts (Charon & Cahill, 1995). Scholars have posited that Symbolic Interactionism, although focused on the individual, aggregates to a societal level, bringing the population's values, meanings, and beliefs together through the construction of shared definitions. These collective interpretations go on to inform and support individual identities and behaviours through participation in various social activities (Ulmer & Wilson, 2003).

Manford Kuhn (1964), the co-founder of the Iowa school paradigm of Symbolic Interactionism, asserted that the seeding of meaning across a population and within individuals could be investigated through quantitative methods (Benzies & Allen, 2001; Miller, 2011). He felt that the self was a stable entity comprised of patterns of beliefs and responses that grow out of an iterative process of interactions that inform role expectations, group norms, and definitions

that. These characteristics, if prominent enough, would appear as effects within a population (Benzies & Allen, 2001).

Researchers using Symbolic Interactionism as a theoretical lens have asserted the need for sensitivity to cultural differences within their group of interest (Benzies & Allen, 2001). Scholars, therefore, emphasized efforts to remain as unbiased as possible in the evaluation of any artefact. This has made Symbolic Interactionism valuable in the analysis of morally charged phenomena, including dishonest sales methods (MacLean, 2008), the impact of appraisals on the self-identities of delinquents and non-delinquents (De Coster & Lutz, 2018), and the meaning-making of sexual behaviour (Shaw & Rogge, 2017).

Within this context, no artefact, physical or conceptual, exists as a purely objective entity within this principle but becomes woven into the meaning individuals extract from their social interactions (Meltzer et al., 1975). Theorists have included technology and social media as a major influence on meaning-making, exposing users to divergent cultures, ideas, and norms (Smith & Steffgen, 2013; Laor, 2022). For example, compared to older users, younger users, who are more likely to be born into a digital culture, perceived the presence or absence of a single comma in a text message as changing the meaning of a sentence (Riordan et al., 2018). Similarly, Symbolic Interactionist researchers have produced other work on the impact of digital interaction including illegal music downloading and digital file sharing (Cluley, 2013), self-identities and digital communities of self-harmers (Adler & Adler, 2008).

The benefit of this theoretical approach is not to determine antecedents nor contextual factors. Within quantitative study, it is directed at exploring patterns and relationships between social media use, contract cheating website messaging and judgments of situations depicting academic cheating.

Definitions

Due to the diversity of academic integrity themes in the literature and associated perspectives on motivators and systemic vulnerabilities (see Bens, 2022, for a comprehensive overview), it is imperative to clearly communicate the phenomena being studied.

Academic Integrity

Members of the academic community are bound by a code of conduct that sets expectations for behaviour, protocols, and overall decorum. Often called academic integrity, this concept is an ephemeral construct that overarches all aspects of the education system. However, this characterization oversimplifies the nature of this standard and its inherent challenges in education. Specifically, higher education comprises a wide variety of disciplines and cultures that may require different approaches in determining appropriate, context-specific conduct, where acting with integrity may have different interpretations (Sanni-Anibire et al., 2021). I argue that this is one of the contributing issues at the core of this work.

At the most elementary level, the cornerstone precepts of academic integrity used by many institutions worldwide are from the International Center for Academic Integrity and includes "...six fundamental values: honesty, trust, fairness, respect, responsibility, and courage" (International Center for Academic Integrity, 2021). Blum (2016) provided a more tangible interpretation of academic integrity, drawing on Whitley and Keith-Spiegel (2002), as well as Davis et al. (2009), "[a]cademic integrity is a set of specific practices revolving around independent work, production of original scholarship, tracing of sources and other's contributions accurately and transparently, and following stated and unstated norms of academic conduct for academic rewards" (p. 384). Institutions across Canada create their own individual codes of academic conduct to reflect similar expectations, many of them built on the fundamental values laid out by the International Center for Academic Integrity.

Academic Misconduct

Conversely, academic misconduct is understood as an act that violates the integrity standards of an institution. Institutions often make the distinction that to be a misconduct, it must result in an advantage or disadvantage for any individual within the academic community or within society (Tauginienė et al., 2019). It should be noted that potential charges of misconduct are not restricted to cheating, but include violation of any academic code mandate such as respect for others, interference, or inappropriate behaviour (Lakehead University, 2019). Eaton et al. (2019) asserted that intention or lack thereof, plays no role in the judgment of this type of offense.

Cheating

My interest in this work is academic cheating which I define as education-related behaviours that take unfair advantage or break trust. I draw from morality discourses where cheating is viewed as the act of acquiring more than one's share and is situated as the opposite of fairness (Graham et al., 2013). When applied to the academic experience, for example, attempting to get a higher mark by submitting an essay that the student did not write would therefore be considered cheating.

I took the broadest definition of cheating as my study construct. I acknowledged that operationalizing cheating is a significant problem, both in the research (Amigud & Lancaster, 2019) and in the institutions across higher education in Canada (Bens, 2022; Eaton, 2017). Moreover, there is variability in how schools define and approach cheating, so this work was pillared on a broadly generalized construct of cheating in North American style higher education. Finally, North American integrity values were conceptualized as Western values which included North America, Australia, and Western Europe.

Cheating in this study means any intentional or unintentional act that would misrepresent the student's knowledge, competency, or effort in any work submitted or presented to an institutional authority (faculty, teaching assistant, or administrative staff). This included (but was not limited to) plagiarism; using proxies to attend class or complete work; submitting work that was copied or written by anyone except the student or faculty approved individuals; unauthorized collaboration with peers, family, friends, or software; facilitation of cheating in other students; and any act that contravenes faculty instructions that govern the student assessments.

Current Study

Students' perceptions of what constitutes cheating or dishonest may be different from that of higher education institutions. One possible factor in this discrepancy is the messaging students are exposed to on social media and contract cheating websites. Current research on social media has suggested that it may influence perspectives on several topics; however, there was no literature found that directly investigated relationships between student perceptions of cheating and the use of social media and contract cheating websites. To offer some insight into this gap, I investigated student judgments of the ethics of academic cheating tactics centred on services and strategies associated with contract cheating websites. I also explored the relationship between these perceptions and time spent on a selection of popular social media sites and contract cheating websites.

With the Symbolic Interactionist approach, I worded the survey items to reflect a neutral stance on academic cheating so that respondents might provide more honest appraisals of the strategies and scenarios and not be influenced by the effect of social desirability response bias (Bernardi & LaCross, 2004). With respect to the body of literature in this field, I sought to investigate how characteristics such as age and education moderated the effects found, as the

research suggested that these factors impacted student centred academic integrity situations. Finally, due to the societal norms of cheating specific to North America, I included cultural self-identification (presented as a binary), due to potentially divergent cultural values learned outside of this geographical area (Hendy et al., 2021; Simpson, 2016).

The research questions I used to organize my investigation were the following:

- 1. Is there a relationship between social media use, contract cheating website use, and appraisal of scenarios depicting cheating in Canadian higher education?
 - a. Are high social media users more likely to endorse cheating strategies than low social media users?
- 2. How do demographic factors of age and education influence the relationship between time spent on social media and judgments of scenarios depicting cheating in Canadian higher education?

Chapter 3: Methods

Quantitative Approach to Research

I sought to explore the relationships between social media use, contract cheating website use, and judgments of academic dishonesty. According to Hanzel (2011), a quantitative approach is appropriate for this investigation. First, quantitative methods are often used to analyze a large population's relationship between two variables to determine if an association exists. Secondly, Kuhn's model (1964) of Symbolic Interactionism asserts that beliefs remain relatively consistent as they are connected to social roles and, therefore, can be measured through various methods, including self-report survey designs (Benzies & Allen, 2001). Within the field of contract cheating, several large quantitative studies have been conducted by Australian scholars which I have used to inform my study of this phenomenon (Bretag et al., 2019; Curtis et al., 2022; Harper et al., 2019; Rowland et al., 2018).

Ethical Approval

Research of socially proscribed behaviour presents ethical challenges to ensure the comfort, safety, and respect of the participants in sharing their experiences and the reliability of the data. Consideration of these issues evolved parallel to the development of the research questions and helped shape the approach and data that would be collected. Special attention was paid to the participants' anonymity, confidentiality, and awareness that their participation was completely voluntary and revokable at any point.

Final documents were submitted to the university's ethics board on December 1, 2022 (File No. 1469589) where it was assessed at three levels: Research Supervisor, Faculty Dean, and Office of Research Services. The process was logged through Lakehead University's Romeo Research Portal.

Amendments were required to clarify participant response format, data storage, detailed consent requirements. Although all these elements were in place, the research ethics board required further explanation within the application, as well as added clarity of information describing the participants' rights within the survey to ensure they understood their role and freedoms. These changes were made to the survey, informed consent, and debriefing documentation, all of which were resubmitted for review. Final ethics board approval was received on January 19, 2023.

The survey was built on the Qualtrics XM platform which provided superior tools for ensuring participants' data would be anonymized and remain confidential. Before beginning the data collection, each potential respondent was provided with an outline to the study survey (Appendix B). They were given detailed descriptions of the purpose of the study, the information that would be collected and not collected, the participants' rights, their risks, and benefits in taking part in the survey, how their data will be used, information on withdrawing from the study at any time, and contact information if they had any further questions.

On the same page, participants were asked to read and click each consent statement (Appendix C), acknowledging their understanding of seven statements related to their age (18 or over), their participation being voluntary, that they were free to withdraw at any time, and free to withdraw their consent to participate. At the bottom of the page, participants were asked to click one of the two buttons labelled "I do not agree to participate – Exit the survey" or "I agree to participate". Each page of the survey was equipped with an exit or skip option. At the end of the survey, participants were provided more information about the study, an email address where they could request a copy of the study, as well as an option to withdraw their consent to use their data.

Sampling and Recruitment

A convenience sample was obtained through public recruitment on social media sites using postings placed on Facebook, Instagram, and LinkedIn. The study was promoted as part of the requirements of a master's degree, and the banner of the posting displayed the name and logo of my university. The recruitment poster described the survey as an investigation into how students, past and present, use online tools to complete schoolwork. Due to the nature of the recruitment, I could not verify whether the respondents met the criteria for participation.

Confirmation was therefore required prior to the survey start, where participants needed to verify that they were 18 years of age or older and that they had attended a higher education institution.

Sixty-one participants entered the survey site and provided initial consent, of which 12 cases were testing entries, 2 rescinded consent. These 14 cases were deleted from the original 61, leaving 47 as the final study sample. Missing data due to skipping or abandoning was not replaced and therefore values reflect only the sample who provided responses.

Gender was weighted toward female respondents with 54.5% and males representing 45.5%. Age results showed that 82.3% of the sample were under 28 years old, with most under 23 years of age (55.6%). Culturally, 67.4% of the sample self-identified as North American, while 15.2% self-reported identification with Asian culture (Table 2.1). Questions about educational experience revealed that almost 78.3% of the sample were currently attending a higher education institution, and 13.0% confirmed that they had attended within the last five years. When asked about the level of education achieved, 60% of the sample had some university or college, and 26.7% had achieved a bachelor's degree, trade school certification or a college diploma (Table 2.2).

 Table 1.1: Overall Sample Demographic Characteristics

	%
Age Range In Years	
18-23	55.6
24-28	26.7
29 +	17.8
Culture	
North America	67.4
Asia	15.2
Other	17.4

 Table 1.2: Overall Sample Educational Characteristics

	%	
Education		
Some college or trade school	35.6	
Some university	24.4	
College diploma or trade school certification	15.6	
Bachelor's degree	11.1	
Master's degree	13.3	
Time Since Attending		
Currently attending	78.3	
Less than one year to five years ago	13.0	
Six + years ago	8.7	

Administration

Participants were invited to click on a shortened link or follow a QR code to the introduction page of the survey, which was hosted on Qualtrics' XM survey platform. The survey was optimized for use on a computer, cellphone, or tablet with no restrictions on timing, allowing completion in the time and place convenient to respondents. The platform was selected as it offered stable and reliable data collection, anonymization of responses (no record of IP addresses, location data, or contact info), and GDPR compliance (Qualtrics, n.d.).

Participants were unable to proceed until they confirmed that they were eligible to take the survey and consented to the collection of their anonymous data (Appendix A). Survey answer options were provided through clickable radio buttons or bars. The access to the survey would remain active as long as the participant remained on the site.

Survey Instrument

A cross-sectional survey design was constructed (Creswell & Creswell, 2018) with a 12item survey, representing a potential of forty data inputs (Appendix A).

I designed the survey to investigate student beliefs around the perceived legitimacy of specific cheating strategies and social media and contract cheating website engagement. Important to my design was to present the questions within a neutral framework to avoid any hesitation students may feel in reporting their true beliefs and motivations for contravening policy mandates (Sidi et al., 2019). Similarly, items were carefully worded to avoid context that may lead students to interpret environmental factors as neutralizations that might have confounded the appraisal of the use of contract cheating website services. For example, Amigud and Lancaster (2019) found that students often felt justified in cheating under many circumstances, including having exerted at least some effort on the assignment. Likewise, Hallbauer (2020) found that students felt that using contract cheating website services to commit obvious misconduct was acceptable if they used the unauthorized tools to learn rather than to cheat. My goal in constructing the scenarios was to allow participants to map their own definitions over the questions and provide their own judgment of the action depicted. The inclusion of the option 'it depends' on the response scale was to capture those that felt some level of legitimacy in the strategy contingent on subjective criteria, making it potentially acceptable. I viewed this as a necessary option in the response matrix as the research suggested that the decision to cheat was shown to be sometimes influenced by individual or situational factors.

Three components were constructed to capture participant data:

1. Demographic Information:

- Age has been shown in the research of academic dishonesty to be a factor in cheating, with older students reporting consistently lower rates of cheating, while indicating higher rates of judging these acts as immoral (Harris et al., 2020).
 Consideration of age group, therefore, became an important aspect of understanding my results.
- b. Cultural differences were investigated, and results suggested that North American definitions of academic integrity may be, in many ways, different than others. For this reason, participants were asked to declare their cultural self-identity from a list of seven which was broken down into a binary option within North America or elsewhere (Bretag, 2007; Eaton & Burns, 2018; Parnther, 2022; Sanni-Anibire et al., 2021).
- c. Education achievement emerged during my literature review as a potential influence in that those with higher education achievement may have more academically congruent integrity beliefs (Gilmore et al., 2010).
- d. Attendance status was included as a measure of the time since exposure to academic integrity culture. Changes in higher education over the past decade would mean that students who had not attended school during that time may have the dissimilar understanding of current integrity protocols.
- 2. Social Media and Contract cheating Website Use: This subset aimed to determine the frequency and use of social media and contract cheating websites. I built the instrument with guidance from Willoughby and Myrick (2019). These authors investigated the impact of entertainment and social media use on young women's desire to use tanning

services. In a related context, I explored the impact of social media and contract cheating website engagement and the participant's opinion on academic cheating strategies.

Contract cheating sites were interspersed in the list of social media sites to make them seem ethically neutral.

3. Scenario and Strategy Judgments: I built this section to differentiate the meaning participants attribute to nuanced strategies. The overarching vignettes that open each question were meant to establish context. Symbolic Interactionism asserts that definition arises from the inseverable relationship between the symbol (object or behaviour) and the environment in which it exists at that moment (Benzies & Allen, 2001). The use of scenarios or vignettes to capture student perceptions of academically or morally relevant dilemmas was well established in research, which provided this study with a proven foundation (Husbands et al., 2015; King et al., 2009; Manly et al., 2015; Murdock et al., 2007; Murdock et al., 2004; Yeo, 2007). Husbands et al. (2015) presented a case for, and a validation study of, a scenario-based instrument for use in determining integrity in medical school admissions. Further, studies have confirmed a pattern of responses related to the academic environment or context where the actions took place, specifically inperson versus online cheating (Blau et al., 2020; Burgason et al., 2019; Sidi et al., 2019). For clarity, the scenarios were anchored in the services provided by popular contract cheating websites such as Chegg, Course Hero, Quizlet, and word-swapping apps.

Coding

Social Media and Contract Cheating Websites

The survey prompted participants to indicate their daily engagement habits on eight popular social media forums and three contract cheating sites (Table 1). The contract cheating websites were interspersed in the list of social media forums to appear as one list.

 Table 2: Featured Platforms and Sites

Social Media Platforms	Contract cheating Sites
Pinterest	Chegg
Instagram	Course Hero
Facebook	Quizlet
TikTok	
Discord	
YouTube	
Twitch	
Tumblr	

During analysis, these sites were sorted into two separate categories to align with the focus of the study. As part of the scope of my evaluation, contract cheating website use was used as a grouping strategy to compare differences between users (CCWU) and non-users.

Social Media and Contract Cheating Website Engagement Scores

Respondents were prompted to indicate how much time they spent interacting with the queried platform on a typical day. These responses were labelled 'engagement' and coded from 0 to 4 (0 denoted 'I don't use at all', to 4 denoted '5+ hours per day'). To reflect the overall time spent in digital interaction, the engagement scores were added together to obtain an overall engagement value, which was not to be confused with an actual measurement of hours. Almost all respondents answered that they were active on multiple sites on a typical day, which I discuss as platform endorsement. Through this approach, whether the participant engaged in serial with these platforms, or parallel, a high score would indicate a high-intensity social media or contract cheating website user.

Situational Integrity Judgments

I constructed themed scenarios as vignettes that described seven academic integrity dilemmas or contexts. I created a fictional character for each scenario to position the respondent

as the audience instead of the actor (Husbands et al., 2015; Yeo, 2007). This character was described as having a problem with their schoolwork that reflected issues in the literature and services that contract cheating websites offer. Under each scenario, I provided respondents with three to five potential resolutions (strategies) that depicted different cheating tactics. For each strategy, the respondents were asked to indicate their ethical opinion of the resolution from a response matrix. I coded the responses to reflect a measure of the respondents' incongruence with generalized North American academic integrity policies (cheating = 0, dishonest = 1, it depends = 2, fair = 3, good = 4). The results of each strategy within the analysis became a measure of incongruity or perceived approval for the strategy.

When the strategies were grouped by their themed vignette, I obtained the mean value as an overall incongruence value for that specific scenario for comparisons between scenarios. A judgement of cheating would result in a zero, indicating perfect congruence with North American integrity standards. Anything over that value was considered a measure of acceptance or incongruity. Alternatively, the values for the strategies were summed to arrive at a total measure of incongruence for between contract cheating website user group comparisons (CCWU and non-CCWU, as well as demographic grouping).

Finally, I evaluated the individual strategy judgments incongruence scores for patterns and comparisons.

Two exclusions should be noted:

- 1. The first strategy in the fourth scenario (4A) described an appropriate integrity response to the scenario. It was inserted as a response validity check only and excluded from all other evaluations.
- 4. The third scenario described a studying context that does not strictly reflect the study's definition of cheating but grew out of research reviewed for this work. The strategies do

depict some unethical tactics including obtaining study keys or prefabricated answers and was presented in the survey to gauge the sample's acceptance for using a dubious strategy in contrast to outright cheating strategies. Special consideration was given to the ambiguous scenario and any analysis that investigated cheating, excluded these strategies.

Chapter 4: Results

Data Quality

All data analyses were conducted using SPSS v.28. First, I evaluated the sample for outliers by distance (2 or 3 standard deviations from the mean) as well as influence (Cook's d) which revealed three flagged cases. When I excluded the cases and repeated the analyses, I found only minimal differences that did not impact the overall results or significance in my findings. I decided to reintegrate the cases into the sample.

I viewed the participant drop-out rate as a concern, representing 25.5% of the initial sample, which may have indicated survey fatigue. This was potentially a threat to the validity of my data by participants entering random responses or not reading the prompts closely. In the last section, I constructed a validity check through a reverse-coded strategy identified as (4A) in the situational integrity judgment test. I structured all other strategies to depict cheating or unethical behaviours, except for 4A, which adhered to the academic integrity policies. The results of this check indicated that participants were engaging with the survey, as 100% of the respondents indicated that the strategy was *good* or *fair*. I deemed the drop-out rate was due to unknown factors, but the responses demonstrated good validity.

Instrument Reliability

I constructed the scenarios and constituent strategies with guidance from academic research (Husbands et al., 2015; Yeo, 2007). As this is an unvalidated instrument, I tested for internal consistency of the overall scenarios, indicating good reliability, Cronbach $\alpha = .827$.

Scenarios

Scenario 1 – Essay bartering on the contract cheating website. Strategies within this scenario demonstrated acceptable reliability ($\alpha = .740$).

Scenario 2 – Essay purchasing from an online writing service. Reliability was below acceptable levels ($\alpha = .661$).

Scenario 3 – Studying vignette using an unnamed online flip card service or answer key. This scenario was problematic, showing an unacceptable level of internal consistency ($\alpha = .699$).

Scenario 4 – Remote testing scenario where the instructor has advised students that they should complete the assessment individually. Internal consistency was tested without the validity item, and internal consistency was acceptable ($\alpha = .754$).

Scenario 5 – Paid course proxy search and engagement from an online service which will attend online classes, do assignments, and take tests for the character. The finding on consistency showed good reliability ($\alpha = .864$).

Scenario 6 – Unpaid course proxy involves the character wanting to avoid doing the course work altogether but cannot afford to pay for a service. Instead, he asks friends who have taken the course in the past to share their work or offers to split the work with another person. Reliability was acceptable ($\alpha = .758$).

Scenario 7 – Collaboration on assignments and tests is described as specifically prohibited in the vignette, but the character opts to reach out to friends. Internal consistency was rated as good ($\alpha = .832$).

My analysis revealed that two of the five scenarios had poor reliability. Scenario 3 was problematic during analysis due to the nature of the vignette (discussed later), while scenario 2 was found to have an issue with the fourth strategy. When I removed this strategy, internal consistency increased, $\alpha = .821$.

I opted to investigate the reliability of all the strategies and together produced stronger reliability, $\alpha = .902$. Removing the response, validity strategy 4A, resulted in a Cronbach alpha

of .904. For this reason, I decided to evaluate the strategies as stand-alone items as part of my analysis plan.

Contract Cheating Site Users and Non-Users Sample Demographics and Education

Contract Cheating site users represented a sample of central interest in this study and represented 38.6% of the overall sample. Most indicated that they were in the 18–23-year-old range and identified as North American. Educationally, most were still attending school, of which the largest proportion were college students.

Table 3: Demographic and Education Characteristics of Contract Cheating Users and Non-Users

Characteristic	Contract Chear	ting Site Use
	Non-Users	Users
_	%	%
Gender		
Male	50.0	35.3
Female	50.0	64.7
Age Range		
18-23	36.0	82.4
24-28	32.0	17.6
29 +	32.0	0.0
Culture		
North America	61.5	76.5
Non-North American	38.5	23.5
Education		
Some college or trade school	30.8	41.2
Some university	15.4	35.3
College diploma or trade	19.2	11.8
Bachelor's degree	15.4	5.9
Master's degree	19.2	5.9
Attendance Status		
Currently attending	70.4	88.2
Not currently attending	29.6	11.8

Situational Integrity Judgments

Scenario and strategy values are a measure of incongruence to integrity standards, alternatively, the level of acceptance for the cheating strategies depicted.

Scenarios

Mean incongruence values were evaluated both through overall and by contract cheating website use.

Table 4: Comparison of Scenario Mean (and standard deviation) Incongruence Scores

	Co	ontract Cheating Site Use	2
	Non-Users	Users	Overall
	Mean (SD)	Mean (SD)	Mean (SD)
Scenario 1 - Barter	1.09 (0.83)	0.70(0.67)	0.94(0.79)
Scenario 2 - Paid Essay	0.89(0.62)	0.63 (0.72)	0.79(0.66)
Scenario 3 - Study	2.80 (1.02)	3.09 (0.65)	2.91 (0.90)
Scenario 4 - Remote Test	1.34 (1.04)	1.13 (0.94)	1.26 (1.00)
Scenario 5 - Paid Proxy	0.26 (0.48)	0.26(0.60)	0.26 (0.52)
Scenario 6 - Unpaid Proxy	0.44 (0.85)	0.26 (0.39)	0.37 (0.71)
Scenario 7 Collaboration	1.11 (1.13)	0.56 (0.76)	0.90 (1.03)

Scenario 3 emerged with the highest mean overall. However, the context is arguably incompatible with the other scenarios and was removed from the integrity judgments due to the contention that it does not adhere to the definition of cheating.

The highest incongruence means were in the scenarios describing bartering for an essay, remote testing, and collaboration.

Strategies

Internal consistency was found to be an issue in two of the scenarios and tests of reliability showed that the individual strategies had higher consistency when grouped together than within the scenarios.

 Table 5: Comparison of Strategy Mean (and standard deviation) Incongruence

	Contract Cheating Site Use							
	Non-User	User	Overall					
	Mean (SD)	Mean (SD)	Mean (SD)					
1A	0.42 (0.64)	0.25 (0.68)	0.36 (0.66)					
1B	0.88 (1.14)	0.31 (0.48)	0.67 (0.98)					
1C	0.54 (0.99)	0.19 (0.54)	0.40 (0.86)					
1D	2.50 (1.45)	2.06 (1.61)	2.33 (1.51)					
2A	0.48 (0.59)	0.27 (0.46)	0.40 (0.55)					
2B	0.64 (0.91)	0.40 (0.63)	0.55 (0.81)					
2C	0.32 (0.48)	0.40 (0.63)	0.35 (0.53)					
2D	2.12 (1.48)	1.47 (1.55)	1.88 (1.52)					
4B	2.00 (1.74)	1.86 (1.29)	1.95 (1.58)					
4C	1.33 (1.58)	1.07 (1.21)	1.24 (1.44)					
4D	0.21 (0.51)	0.29 (0.61)	0.24 (0.54)					
4E	1.83 (1.49)	1.29 (1.33)	1.63 (1.44)					
5A	0.14 (0.35)	0.15 (0.55)	0.14 (0.43)					
5B	0.23 (0.43)	0.23 (0.60)	0.23 (0.49)					
5C	0.41 (0.80)	0.38 (0.77)	0.40 (0.77)					
6A	0.50 (1.19)	0.62 (1.12)	0.54 (1.15)					
6B	0.41 (0.73)	0.08 (0.28)	0.29 (0.62)					
6C	0.41 (0.91)	0.08 (0.28)	0.29 (0.75)					
7A	0.86 (1.13)	0.31 (0.63)	0.66 (1.00)					
7B	0.91 (1.23)	0.77 (1.30)	0.86 (1.24)					
7C	1.55 (1.41)	0.62 (0.96)	1.20 (1.32)					

Most strategy judgments demonstrated that participants had a fair grasp of generalized North American academic integrity standards. However, 1D and 2D emerged with high incongruence values, and became a point of interest in that they were identical strategies (rewriting a barter or paid essay). These results suggested that respondents felt that rewriting a purchased or bartered essay was somewhat acceptable. Follow up investigation showed that 88.1% of the sample did not rate rewriting a bartered essay as cheating, and 77.5% of the sample indicated the same for rewriting a purchased essay.

 Table 6: Percentage of Sample with Incongruent Strategy Ratings

Strategy	Valid %
1A	26.2%
1B	42.9%
1C	26.2%
1D	88.1%
2A	37.5%
2B	40.0%
2C	32.5%
2D	77.5%
$3A^a$	82.5%
$3B^a$	97.5%
$3C^a$	34.7%
4A-DECOY ^b	100.0%
4B	73.7%
4C	52.6%
4D	18.4%
4E	68.4%
5A	11.4%
5B	20.0%
5C	25.7%
6A	28.6%
6B	22.9%
6C	20.0%
7A	40.0%
7B	42.9%
7C	60.0%

Note. Percentage of participants who did not judge the strategy as cheating. Incongruent ratings include 'dishonest', 'it depends', 'fair', or 'good'.

^aThe third scenario refers to studying only.

^b4A is written to comply with academic integrity policies and was used as a response validity check.

Research Question 1

Is there a relationship between social media use, contract cheating website use and appraisal of scenarios depicting cheating in Canadian higher education?

Correlational analysis of the association of social media engagement and contract cheating site engagement indicated a positive relationship for the total sample, $r_s = .438$, p = .003. This suggests that as social media engagement increases, so does the use of contract cheating websites. Social media engagement of contract cheating site users was found to be higher than non-users.

Table 7: Social Media Engagement Means (and standard deviations) Comparisons

Contract Cheating Site Use	Mean (SD)
Non-Users	6.93 (3.92)
Users	10.53 (4.35)
Overall	8.32 (4.41)

Note. Excludes time engaged on contract cheating sites. Comparisons of non-contract cheating site users, contract cheating users, and total sample.

Further analysis showed that contract cheating site users engage more on social media platforms than non-users, t(42) = -2.847, p = .003. Effect size was found to be large, g = -0.866. (Hedges was chosen over Cohen's d due to the user sample being fewer than 20 participants.) Concerns about normal distribution and sample size were addressed through confirmatory analysis using Mann-Whitney, U = 339, p = .008.

Within the overall sample, no significant correlations were found between scenario judgments and social media or contract cheating site engagement.

 Table 8: Correlations of Platform Engagement and Scenario Judgments

	SC1	SC2	SC3	SC4	SC5	SC6	SC7
Social Media Engagement	0.053	0.080	0.108	0.139	0.153	0.178	0.286
Contract Cheating	-0.162	-0.140	0.112	-0.112	-0.015	-0.012	-0.195

^{**.} Correlation is significant at the 0.01 level (2-tailed).

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

Also, judgments provided by non-users of contract cheating websites did not show any relationship with their social media use.

Table 9: Correlations of Contract cheating Non-Users' Social Media Use and Scenario Judgments

	SC1	SC2	SC3	SC4	SC5	SC6	SC7
Social Media Engagement	0.030	-0.115	0.185	-0.039	0.022	0.023	0.263

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Contract cheating website users' platform engagement did result in significant correlations to their judgments.

Table 10: Correlations of Contract Cheating Site Users' Social Media Use and Scenario Judgments

Social Media	SC1	SC2	SC3	SC4	SC5	SC6	SC7
Engagement	0.464	.602*	-0.061	.580*	0.478	0.548	.637*
Contract Cheating Site Engagement	.507*	0.471	0.042	0.007	0.152	0.022	0.362

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Contract cheating users demonstrated positive relationships with social media and three scenarios, paid essay, remote testing, and collaboration. Also, contract cheating site engagement had a positive relationship with bartering services in this sample.

Correlational analysis of the contract cheating user sample found some correlations within the strategies related to bartering and paid essay writing and remote testing. Follow-up

^{*.} Correlation is significant at the 0.05 level (2-tailed).

^{**.} Correlation is significant at the 0.01 level (2-tailed).

analyses to compare contract cheating users and non-users failed to show a significant difference in their judgments of these strategies.

Table 11.1: Correlations of Contract Cheating Site Users' Platform Engagement and Strategy Incongruence (I-4D)

		v	,	_	v	0 0		0,	_	,	/
	1A	1B	1C	1D	2A	2B	2C	2D	4B	4C	4D
Total Social Media Engagement	-0.10	0.47	-0.10	0.509*	0.42	0.538*	0.44	0.604*	0.652*	0.580*	0.45
Contract cheating Sites Engagement	0.601*	0.23	0.602*	0.40	0.39	0.24	0.51	0.37	0.09	0.09	0.19

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Table 11.2: Correlations of Contract Cheating Site Users' Platform Engagement and Strategy Incongruence (4E - 7)

	J				J	0 0		0, 0	١	
	4E	5A	5B	5C	6A	6B	6C	7A	7B	7C
Total Social Media Engagement	0.39	0.23	0.48	0.49	0.30	0.43	0.43	0.51	0.44	0.34
Contract cheating Sites Engagement	-0.29	0.28	0.00	0.12	0.29	-0.32	-0.32	-0.07	0.20	0.15

^{*.} Correlation is significant at the 0.05 level (2-tailed).

In the sample of non-contract cheating site users, social media was not a predictor of any strategy ratings.

Research Question 1a

Are high social media users more likely to endorse cheating strategies than low social media users?

Social media users, divided into high and low levels, revealed a significant difference in contract cheating site engagement, t(29.381) = -3.369, p = .002, g = .931.

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Social media engagement was regrouped into a ranking of low, medium, and high engagement. Exploration using Kruskal Wallis Test revealed two significant patterns in scenario judgments:

Scenario 3 – studying, H(2) = 6.454, p = .040. This result was centred on the spread in responses between the low and medium groups, p = .034.

Table 12: Scenario 3 Incongruence Means (and standard deviations) by Social Media Usage

Social Media Usage	Mean (SD)		
Low	2.51 (0.92)		
Medium	3.17 (0.96)		
High	2.96 (0.56)		

Scenario 7 – Collaboration, H(2) = 7.625, p = .022. Post hoc testing showed that the most significant relationship was between low and high engagement, p = .036.

Table 13: Scenario 7 Mean Incongruence Scores (and standard deviations) by Social Media Usage

Social Media Usage	Mean (SD)
Low	0.91 (1.45)
Medium	3.47 (3.69)
High	3.71 (2.43)

Further investigation into the strategies showed the 7B, where the character completes a take-home exam and texts her friends when she does not know the answer.

Table 14: Strategy 7B Mean Incongruence Scores (and SD) by Social Media Usage

Social Media Usage	Mean (SD)
Low	0.09 (0.30)
Medium	1.06 (1.30)
High	1.57 (1.51)

Again, Kruskal-Wallis testing found the difference to be significant, H(2) = 8.277, p = .016. This effect was most prominent in the contrast between low and high usage, p = .024.

Research Question 2

How do demographic factors of age and education influence the relationship between time spent on social media and judgments of scenarios depicting cheating in Canadian higher education?

Demographic factor influence was evaluated in social media and contract cheating website engagement, along with judgments of strategies, both within their scenarios and on their own.

The only demographic factors influencing this data were age and education, but only related to how the respondents used digital media. No patterns were found in the appraisals of cheating strategies; however, two emerged in the studying vignette, demonstrated patterns related to education level.

Demographic Factor: Age and Digital Media

Spearman correlations indicated that age was a predictor of various measures of digital engagement, including contract cheating site use and social media engagement.

Table 15: Correlations for Age and Digital Engagement

	Contract Cheating	Social Media Engagement Time	Frequency count of Social Media
	Site Engagement	Value	Platforms
Age Range	482**	480**	465**

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Contract Cheating Site Engagement. Age was found to influence the distribution of responses in contract cheating website engagement, H(2) = 9.568, p = .008. Post hoc evaluation indicated that the relationship between the youngest and oldest age groups held the most significance, p = .011.

Table 16: Contract Cheating Site Engagement Means (and standard deviations) by Age

Age Range	Mean (SD)
18 - 23	1.43 (1.53)
24 - 28	0.55 (1.04)
29 +	0.00 (0.00)

Social Media Engagement. Data collected on the total time spent on social media responses demonstrated a pattern connected to the age of the participants, H(2) = 9.686, p = .008. Much like the previous findings, the difference was most salient in the relationship between the 18-23-year group and the 29 and older group, p = .006.

Table 17: Social Media Engagement Means (and standard deviations) by Age Group

Age Range	Mean (SD)
18 - 23	9.78 (4.56)
24 - 28	8.36 (3.47)
29 +	4.25 (2.71)

Frequency Count of Social Media Platforms. An Independent Samples Kruskal-Wallis test showed a significant effect of age on the number of social media platforms used H(2) = 10.098, p = .006). Pairwise comparison indicated a significant difference between the youngest age group (18-23) and the oldest (29 +), p = .005, with younger students using significantly more social media sites.

Table 18: Age Comparison of Mean (and standard deviations) Social Media Platforms Used per Day

Age Range	Mean (SD)		
18 – 23	5.04 (1.85)		
24 - 28	4.27 (1.68)		
29 +	2.63 (1.30)		

Demographic Factor: Education and Contract Cheating Website Engagement

Attendance Status. A t-test suggest that students who were currently enrolled in higher education were more likely to use contract cheating websites, t(41.992) = 3.124, p = .003, g = .665.

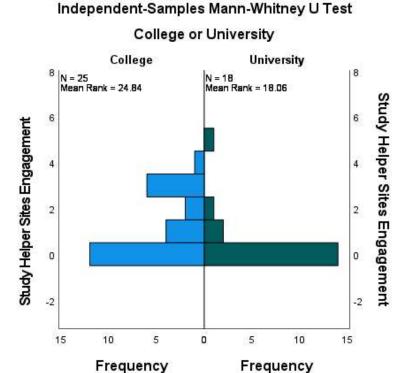
 Table 19: Mean Comparison (and standard deviation) of Attendance Status on Contract

Cheating Site Engagement.

Attendance Status	Mean (SD)		
Currently Attending	1.09	(1.46)	
Not Currently Attending	0.20	(0.42)	

College and University. A Mann-Whitney test found that those who attended a university or completed a degree were significantly less likely to use a contract cheating site than those who attended college or received a diploma or certificate, U = 154, p = .047.

Figure 1: Contract Cheating Site Engagement Comparison of College and University Students and Graduates



Summary

The data indicated that within this sample, the majority of participants who engaged with contract cheating websites were female, between the ages of 18 and 23 years old, and were currently attending a higher education institution. All respondents demonstrated a basic understanding of western framed cheating, although there were some notable incongruences where essays that were obtained from other sources were rewritten by the fictional character and submitted. Also, contract cheating website users (CCWU) responded that the use of self-authored flip-cards during a remote online test was more acceptable than non-users of these sites.

Social media engagement was found to be a predictor of contract cheating website use, and in fact CCWUs showed a significantly higher rate of engagement on social media over non-users. The CCWU group's social media engagement was also found to be correlated to judgments of three scenarios: purchasing essays, remote testing, and collaboration.

Finally, age was a factor in social media use and contract cheating website use. And the type of institution attended was also found to be significant in the use of contract cheating sites.

Chapter 5: Discussion

This study explored social media and contract cheating website use and how it related to interpretations of academic dilemmas which depicted cheating. I framed my analysis around Symbolic Interactionism theory that posits meaning develops in the process of interacting with people, symbols, and environments in which the individual exists. Accordingly, I theorized that social media and contract cheating websites engagement would be linked to participant judgments of academic integrity related scenarios.

The respondents indicated that social media use was universal in the sample, with over 68% endorsing four or more of the social media platforms listed. These findings are consistent with data showing that 95.9% of 20- to 24-year-olds in Canada regularly engage on social media (Schimmele et al., 2021).

The data also showed that for most of the scenarios and strategies, respondents demonstrated a reasonable understanding of North American academic integrity standards, with judgments showing minimal incongruence. The highest levels of incongruence were in scenarios depicting collaboration, bartering, and remote testing. Among the individual cheating strategies, respondents indicated the most acceptance for three behaviours: rewriting a paid or bartered essay and writing their own digital flip cards to use during a test even though it was not allowed. Students who attended online in another studied reported that referring to their own notes during a remote test, even though they were told not to, did not see the act as cheating or perceived it to be an inconsequential breach (Burgason et al., 2019). This is consistent with Hallbauer (2020), who found that students made a distinction between cheating and learning. The students suggested that violating integrity mandates was acceptable provided they were learning something in the process. They contended that since this was the goal in attending school, they felt any strategy that supported their learning met their academic obligations. This may suggest

that for the participants in the current study, rewriting an essay or authoring one's own digital flip cards may be a way of encoding class learning, even if it fails to meet the level of ethical standards set out by faculty and administration.

My first research question examined whether use of social media and contract cheating websites were related to students' ethical judgements. Evidence suggested that they were not significantly related. Contrary to my initial predictions, there were no significant relationships between the widespread use of social media and ratings of strategies. However, I found significant differences in how the scenarios were judged when the social media use was grouped by intensity, specifically low, mid level and high.

Mid-level users of social networks reported the most acceptance for the studying scenario, which included purchasing answer keys or using publicly available answer flashcards for studying. This scenario was based on the Quizlet model, in which students often build their own flashcards, or use pre-existing flash cards created by peers, which is considered problematic (Hallbauer, 2020; Kerr, 2018; McKenzie, 2018; Norris, 2019; Schultz et al., 2022). It is important to note, however, that some faculties do encourage the use of Quizlet and similar software. A search of the Omni system revealed peer-reviewed publications promoting the use of this app for students, teachers, and researchers to boost vocabulary (Sippel, 2022; Zeitlin & Sadhak, 2022). Similarly, the University of Lethbridge lists Quizlet in its student success section under online resources (University of Lethbridge).

Conflicting messaging on what is cheating may contribute to students' perceptions or misperceptions about this model of contract cheating sites. Students may feel that accessing or building resources on this type of platform is acceptable for studying and may also feel that referring to it during a test does not breach academic cheating policies. This scenario has played out in two major misconduct events in the United States, both with Quizlet at the centre

(Hallbauer, 2020; Kerr, 2018). Students defended their use of the platform by suggesting that they had never encountered a problem using it in this way during high school (Hallbauer, 2020) or that the site had been recommended by their university-paid tutor (McKenzie, 2018). Taken together with the results from the current study, this model of contract cheating website needs more direct and thorough examination in research.

High-level social media users were more accepting of collaborative cheating than low-level users. These findings may relate to the nature of social media and its community-based design that promotes social interaction. By reinforcing these relationships online, students may feel comfortable acting unethically with friends, knowing that the close relationships will protect them (Weidman et al., 2020). In an alternative perspective, researchers set up a Facebook academic cheating group to study the reasons students used for cheating. They found that students used the forum to vent their frustrations over the unfairness of systems in education and society which became their rationalizing for cheating (Parks et al., 2018). The authors argued that social media groups such as these build a collective movement that supports academic fraud through social learning and collective action theory. I would argue that it also normalizes the behaviour in such a close-knit community.

Although I found no other significant relationships between social media and judgments of cheating scenarios in the overall sample, my data demonstrated that participants' social media use was a predictor of contract cheating website engagement. When I investigated further through grouping the sample by contract cheating website users (CCWU) and non-users, I discovered that CCWU were significantly more active on the listed social media platforms than non-users, measured through engagement time and the number of platforms they used daily. These results are important for understanding this type of academic misconduct because of the unethical nature of contract cheating services. The participants in the current study had an overall

reasonable grasp of North American integrity standards when responding to the scenarios, but paradoxically almost 40% of the sample self-reported the use of websites that offer unethical academic services. This finding was surprising in that study done in Australia estimated that the percentage of students who upload their work or purchase completed work from a commercial contract cheating site was 7.9%, while 11.4% barter for a completed assignment (Curtis et al., 2022). Understanding how students are using contract cheating websites would likely provide insight into this wide gap. However, I contend that the use of contract cheating websites is a potential signal of the normalization of cheating in this work.

Market statistics on the growth of these services support the argument that contract cheating websites normalize cheating. Contract cheating website services are thriving in the commercialized academic market. During the recent digital migration during the COVID-19 lockdown Chegg, a popular contract cheating website, saw subscriptions rise 67%. According to a report in 2021, their market capitalization was \$11.1 billion for that year (Bethan, 2021). Students self-report data affirms this trend, reporting that in 2014, 15.7% of students paid someone to complete an assignment for them (Newton, 2018). Furthermore, advances in the sophistication of the technology and strategies used on contract cheating websites gives students confidence that cheating through these services will not be detected through traditional methods (Rogerson, 2017), that their instructor would not investigate, or that it is just part of the normalized academic culture (Awdry & Groves, 2023). The author asserted that a review of previous data, the trend was on the rise but also likely under-reported.

The connection between social media use and contract cheating website use could have several different causes, which are beyond the scope of this study. Some research has speculated that elevated levels of social media consumption could lead to students' subjective sense of stress or overload that results in seeking out contract cheating website services to remedy their

academic problems. For example, in previous work, students who are high-end consumers of social media experienced adverse effects on their academics through loss of time, distraction (Voorveld et al., 2014), and decreases in learning and ability to complete assignments (Tang et al., 2015), as well as social media fatigue (Malik et al., 2021). Scholars have connected these factors to participants' subjective sense of being overwhelmed and stressed, which has been linked to students making unethical academic decisions (Amigud & Lancaster, 2019). Students who expressed their academic struggles on social media often demonstrated a breaking point where they gave up on completing an assignment on their own and sought to outsource their work through peer or commercial *helpers*.

A second theory for the relationship of social media and contract cheating website use may be a matter of opportunity and message prevalence leading to normalization. A high level of social media use may position students in the right place at the right time for continual solicitation strategies of contract cheating website services. Lancaster (2019) completed an assessment of the variety of ways that contract cheating service contractors leverage social media to reach students and persuade them to outsource their work to their businesses. In a disturbing review of the current tactics, the author highlights that "... social media is fuelling a black-market trade in ghost writer accounts for contract cheating services". (p. 1). Students who post messages of frustration or requests for support from their peers on social media unwittingly become a target for solicitation from contract cheating site contractors. These sales agents use sophisticated strategies of keyword flagging, likes, follows, and replies that trigger interaction with these students either through chatbots or human interaction (Amigud, 2020; Gray, 2022). The contractors' systems are automated and well-distributed such that when the author posted a message requesting help, it triggered 21 engagement events (replies, likes and follows) in five minutes. On the day that followed, a total of 36 individual businesses attempted to engage with

the researcher with offers of help (Amigud, 2020). Being highly engaged in social media may mean a greater comfort level in interacting with some of these messages, especially if they were crafted to sound friendly and compassionate or from individuals who have experienced similar problems (Kaktinš, 2018; Lines, 2016; Rowland et al., 2018).

In conjunction to the solicitation strategies, students may also be viewing posts by other people in similar situations, who share questionable solutions or recommendations. A sizable meta-analysis concluded that the strongest predictors for student cheating are the belief that peers are cheating as well (Zhao et al., 2022). Contract cheating service contractors have been found posing as students who are experiencing similar challenges and emotional duress as a way of gaining trust from vulnerable individuals, only seeking to sell them their services (Lancaster, 2019). Exposed to enough of this content, at the right time, the student may either perceive normalization of the behaviour or be influenced by the actions of their real or fabricated peers.

Contract cheating website users showed correlations between their social media engagement and three scenarios. The first two were paid essay writing, where the character purchases an essay from an online contract cheating website; and remote testing, where the individual uses a contract cheating service or friends to cheat on a test. I contend that the most obvious support for the finding is the survey scenario alignment with services offered by contract cheating websites and the normalization of purchasing an essay or obtaining an answer key for a school assessment. Students who use contract cheating websites regularly would have increased exposure to many messages that that build credibility and normalize these services. The intensity of these messages would be greater on these sites, but based on marketing algorithms, reinforced by similar content in their social media feeds.

Group collaboration was the third scenario that demonstrated a relationship to social media use within contract cheating website users. This scenario depicted sharing answers with

friends when group work was strictly prohibited and taps into a controversial topic in the literature and schools. Some students have stated collaboration in many situations, should not be deemed cheating, asserting that teamwork is valued in the workplace (Andrews et al., 2007), but more germane to this work, other students suggest that using contract cheating websites is a form of collaboration, equating the acquisition of test answers to asking a professor or peer for help. They argue that the outcome is the same, they obtain the answer from another person. Hallbauer (2020) refers to this type of normalization as "an online friend" (p. 77). Reasonings like these may connect the users' positive appraisal of these illicit sites and approval of prohibited group work.

My second research question addressed whether demographic factors impacted the relationship between scenario judgements and social media. I evaluated demographic data on several key factors that have been shown to be influential in literature (Krienert et al., 2022; Newstead et al., 1996; Whitley, 1998; Zhao et al., 2022). However, only age and education were found to be significant contributors to the patterns of responses.

Age was related to social media and contract cheating website engagement, but not the scenario judgments. The youngest participants in my sample were the most likely consumers of social media in time engaged, and platforms frequented on a typical day. Similarly, they were also the most likely to use contract cheating websites and had the most engagement time on them, while the eldest grouping of participants, who were 29 years and over, did not use them at all.

Education was significant in the distribution of scores for contract cheating website use, which seems understandable as those who were currently attending used it more than those who had left school. Although sites do offer other services that would continue to support individuals in the workforce, such as business correspondence and report writing, services like Chegg target

learners and students with a growing diversity of academic services and engagement strategies (Chegg, Inc., 2023).

Contract cheating website engagement was found to be related to the type of school participants attended. Respondents who attended or graduated college engaged more with contract cheating sites than those who had attended or had graduated university. Factors accounting for this finding are difficult to determine and beyond the scope of this study.

Significance

This work presented findings that in many ways, echoed findings from Australia, the United States, and Canada. It represents a voice in the chorus of academics who are attempting to challenge the growing insurgence of contract cheating websites and contractors that flood digital spaces where students frequently communicate with friends and peers. Most significant of these findings is that nearly 40% of this sample admit frequenting contract cheating sites. This statistic is startling in light of other studies that suggest that contract cheating is occurring at a lower rate (Curtis et al., 2022). Time spent on a website does not necessarily indicate that cheating is occurring but raises the question about normalization of the behaviour and the potential impact of high-pressure academic demands and compassionate but coercive marketing strategies used by these businesses.

Social media's relationship to the use of these commercial cheating sites was also revealing. At this point, there is no data to suggest what supports this connection, or what confounding features may exist to negate the significance of this finding. However, Lancaster's (2019) article on the dark side of social networking strategies and Amigud's (2020) detailed description of technological deception used by contract cheating services should cause concern about their reach and influence on students in the classroom.

Finally, the pattern of incongruence found in strategies describing purchased and bartered essays, remote testing, and collaboration mirrors findings in other studies, suggesting that student perceptions may be changing, despite academia's best efforts.

Recommendations

This study was limited, both in size and in scope however I contend that the findings were supported by the use of compassionate language in the survey facilitated more honest feedback. I feel that a larger study that uses this approach may help provide further insights, especially if it can provide information on how students are using contract cheating websites, as well as their perception of the websites overall.

One element that repeatedly arose in both the findings and the background research was that some students chose to cheat, even with full knowledge that the behaviour was forbidden by the school or the faculty. This presents a troubling trend that may be at the root of many cheating behaviours. Awdry and Groves (2023) asserted that strong clear policies, consistent education, and implementation, as well as faculty support when contract cheating is detected, would contribute to a culture of academic integrity thus, normalizing behaviours that reinforce it.

Academic integrity is a challenging aspect of higher education, but I argue that it should be considered a collaborative space. Many researchers have revealed that integrity does not have a unified definition. For example, Amigud and Pell (2020) worked with faculty, researchers, administration, and support staff in compiling situations where these professionals felt integrity mandates should not apply. Eaton and MacLeod (2020) found that faculty reported different responses in how they handled minor or major breaches of the integrity policy. From this and the results of this work, I perceive the expectation of the one 'perfect' integrity policy as an illusion and counterproductive to the efforts to reduce cheating.

Within higher education, those interpretations must be co-created between administration, faculty, and the students. Students are exposed to divergent sources of information and norms that inform their understanding of integrity. Faculty and administrations need to help students navigate this information as part of a discourse (Bretag et al., 2018). Rather than viewing academic integrity as some external target that must be hit, it should be viewed as values that are fostered as the student progresses in life and in school, guided by a supportive scholarly culture. Thomas Lancaster (2022) provided brilliant strategies to achieving partnerships between academic staff and students that "...put academic integrity at the heart of the educational discussion" (p. 229).

Chapter 6: Conclusions

The key takeaway from this work is that there is evidence that supports the theory that contract cheating websites are becoming prevalent within higher education. Students who use these resources tend to be greater consumers of social media. These findings may relate to the theory that social media could be pushing messaging that supports or informs this trend, either through peers sharing their experiences or through insidious and predatory marketing strategies that extoll their use. Finally, in this work, remote testing emerged as one of the central topics related to social media use. This type of assessment has been identified in the literature as being problematic in academia, especially considering the lockdowns during the COVID-19 crisis. In reviewing the ratings for the individual strategies, I encountered a discomforting trend: The opening description of this scenario included phrasing that informed the respondent that the teacher had explicitly forbidden the use of other resources. Despite this caveat, in three out of the four strategies, at least 50% or more of the overall sample stated that they did not judge them as cheating, even though they clearly violated the test instructions.

Limitations

These findings should be considered circumspectly for several reasons. First, my sample was small and therefore confirmatory tests were limited. Additional research is required to replicate these findings in a larger sample. Second, as with any self-report measure, I have no way of verifying participant answers. I cannot be sure that participants responded honestly, or even that they were active students in a North American context. Additionally, wording of the scenarios and strategies may have resulted in some confounding factors in my results. Any time a third-person scenario is used, there is the opportunity for misunderstanding or misinterpretation, and it is impossible to know how participants interpreted these scenarios as intended. This limitation is compounded by lack of multi-language support, meaning that participants who were

not fluent in English may have experienced difficulty in understanding the questions. It is also important to note that the scenarios included in this study did not account for all possible factors that influence a decision to cheat. Several studies have shown that cheating behaviour does not emerge from a single factor. Rather, a myriad of influences are at play which are impossible to tease apart in a scenario format such as this.

Future Directions

Future research should include qualitative work that would inform the perceptions behind these findings, as some responses were contradictory to the theories suggested by scholars.

Studies that present the interpretations of the strategies in the students' own voice would help to expand these results. Furthermore, research into how students are using contract cheating websites and social media, and whether they deem their actions on these platforms as a breach of North American academic integrity standards would provide a fuller picture of the shifting interpretations of sound academic work.

Finally, recent advances in artificial intelligence that have led to tools such as Chat GPT may have serious implications to not only the future viability of contract cheating services, but also to how students understand their responsibilities in school. Investigating the perceptions of students and messaging within social media on strategies that include artificial intelligence would provide valuable insights to institutions.

Overall, the results indicate that social media engagement was a factor in many of the significant relationships within this study, most profoundly, the use of contract cheating websites. These results raise concerns for institutions and scholars about the ways in which social media may be related to students' understanding of appropriate academic standards and expectations. Participants' judgments showed that they largely understood academic policies on cheating, however there were patterns in their responses that indicated some discrepancies. It

should also be noted that none of the scenarios or strategies had perfect congruence which may be evidence of moral malleability. The variability in ratings may signal the use of justifications or meanings respondents may have inserted into the evaluation. This *meaning* is the nucleus of work that needs to be explored to inform our understanding of the prevalence of cheating.

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Appendix A: Student Digital Engagement Survey



	UN	IIV	E	R S	I T	Υ	Studie
PART ON	E - ALL A	BOUT YOU					
Please in	dicate you	ır gender					
Male							
Female							
Non-bina	ary						
Prefer no	ot to say						
Please in	dicate you	ır age rang	е				
				E RANGE II			
	18-23	24-28	29-35	36-45	46 +	Pref	er not to say
Please indicate your age range	0	0	0	0	0		0
Within wh	hich geogi	raphical are	ea do you	most ider	ntify? (e.g.,	birth cultu	ire, family):
Asia							
North An	merica						
South Ar	merica						
Western	Europe						
Eastern	Europe						
Middle E	East						
Other							
Prefer no	ot to say						



Please indicate your education level

Some college or trade school
College diploma or trade school certification
Some university
Bachelor's degree
Master's degree
Terminal degree
Prefer not to say

Please indicate the time since you last attended school

Currently attending

Less than one year to five years ago

Six to ten years ago

10+ years ago

Prefer not to say



PART TWO - DIGITAL EXPERIENCE

Please indicate the amount of time spent on each of these platforms on a typical day.

	Less than one hour	1-2 hours	3-4 hours	5+ hours	I don't use at all.
Pinterest	0	0	0	0	0
Instagram	0	0	0	0	0
Facebook	0	0	0	0	0
Chegg	0	0	0	0	0
TikTok	0	0	0	0	0
Discord	0	0	0	0	0
Course Hero	0	0	0	0	0
YouTube	0	0	0	0	0
Twitch	0	0	0	0	0
Quizlet	0	0	0	0	0
Tumblr	0	0	0	0	0
	Less than one hour	1-2 hours	3-4 hours	5+ hours	I don't use at all.

EXIT SURVEY

Back

Next



PART THREE - SCENARIOS

You will be given a short description of a school problem. To each problem you will find possible solutions to this dilemma. Please indicate for EACH solution, whether you think the idea listed is a good, fair, it depends, dishonest or cheating.

Jane needs to complete an essay but only has a rough outline. While researching, she finds a site that offers a similar essay for trade of one of her old assignments. She uploads an old essay of hers and gets the one she needs.

What's your opinion?

	Good	Fair	It Depends	Dishonest	Cheating
She hands in the web essay.	0	0	0	0	0
She passes the web essay through a word swapping app and submits it.	0	0	0	0	0
She copies and pastes the whole document into her own file and changes a few words and submits it.	0	0	0	0	0
She rewrites the whole essay into her own words and submits it.	0	0	0	0	0

Back

Next



Jim read through the assignment and did a quick web search. He found a website that will write his paper for him for a price, promising that it will be plagiarism free. He enters his credit card and the assignment description. In two days, he gets his essay.

	What's your opinion?					
	Good	Fair	It Depends	Dishonest	Cheating	
He hands in the web essay.	0	0	0	0	0	
He passes the web essay through a word swapping app and submits it.	0	0	0	0	0	
He copies and pastes the whole document into his own file and changes a few words and submits it.	0	0	0	0	0	
He rewrites the whole essay into his own words and submits it.	0	0	0	0	0	



Dar is studying for an exam the next day with study questions provided by the instructor.

	What's your opinion?						
	Good	Fair	It Depends	Dishonest	Cheating		
She finds the exam answer key on a study helper site and downloads it to study.	0	0	0	0	0		
She reads through the notes she took in class and makes flash cards online to help her study.	0	0	0	0	0		
She finds flash cards online that match her course and uses them to study.	0	0	0	0	0		



Anna's test is remote online. Her teacher has said that the test should be done individually, and they can use the slides from the course but nothing else to complete the test.

What's your opinion?					
Good	Fair	It Depends	Dishonest	Cheating	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
0	0	0	0	0	
	0 0	Good Fair O O O O O O	Good Fair It Depends O O O O O O O O O	Good Fair It Depends Dishonest O O O O O O O O O O O O O O O O	



Tee searches online for someone to help him with an online course he's signed up for. He finds a company that offers to attend the classes, do the assignments, and take the tests for a price.

What's your opinion? Good Fair It Depends Dishonest Cheating He pays the service and forwards his credentials so they 0 0 0 0 0 can access the course waits to see his final mark. He pays the service and gives them 0 0 0 0 0 access but reads through the text. He pays the service and gives them 0 0 0 0 0 access but checks in to go over the material.



Jay also wants someone to take the course for him, but he can't afford the fee.

	What's your opinion?					
	Good	Fair	It Depends	Dishonest	Cheating	
He talks to his friend who took the course last semester and uses his notes, assignments and test answers to submit as his own.	0	0	0	0	0	
He uses his friend's course work but translates it into another language and then back into his school's language to submit it.	0	0	0	0	0	
He asks a friend in his class to split the work up between them, using word swapper apps to make their assignments look different.	0	0	0	0	0	



Jo knows her teacher doesn't allow group work on tests and assignments.

	What's your opinion?					
	Good	Fair	It Depends	Dishonest	Cheating	
She makes plans to meet up with friends from her class to work together on a take home exam.	0	0	0	0	0	
She works alone at home but texts friends when she doesn't know the answer.	0	0	0	0	0	
She finished the test on her own but double checks her answers on a group chat for the class.	0	0	0	0	0	

EXIT SURVEY

Back

Next



Thank you for participating in this study!

The goal of this study was to examine student perspectives on academic misconduct and cheating. We believe that some forms of academic misconduct stem from different ways of interpreting particular study strategies. We are not looking to identify cheating behaviours but rather highlight different interpretations of study strategies.

If for any reason, you are uncomfortable with sharing your survey data with us, you may choose to have your responses deleted from this study by pressing the button below. Once your data is submitted, we will not be able to remove you from the study, because it's anonymous and we won't know which data is yours.

If you have any further questions, please email gradresearch778@gmail.com

I approve the use of my anonymous data for this study

I do not wish to participate, please destroy my responses

Appendix B: Survey Introduction and Informed Consent



Dear Potential Participant:

You are being invited to take part in this research study about online study strategies that students use.

Before you decide whether you wish to take part in this project, please read this section carefully to understand what is involved.

PURPOSE

This study is research being conducted by Suzanne Connell as part of her master's thesis at Lakehead University under the supervision of Dr. Tanya Kaefer. We are looking for opinions about how students use digital tools to do schoolwork. We are also interested in how those opinions link up to social media use.

WHAT INFORMATION WILL BE COLLECTED?

During the survey, you will be asked for your opinion on different online study strategies that students may use. You will also be asked for generalized demographic information, such as your gender, age range, culture, and social media use. Your name, IP address and other information that may identify you will not be collected.

WHAT IS REQUESTED OF ME AS A PARTICIPANT?

If you agree to participate, you will enter the survey portal and asked to answer questions. The survey should take no more than 15 minutes to complete. The survey asks for your opinions, there are no right or wrong answers. If you wish to participate you are asked to ensure that you meet the requirements of the survey, including being 18 years of age or older, attending or have attended a college or university in North America, Western Europe, or Australia and that you are fluent in written English. We also ask that you answer the questions as honestly as possible.

WHAT ARE MY RIGHTS AS A PARTICIPANT?

Participation is completely voluntary. If you decide you would like to take part in the survey but

change your mind, you can withdraw at any point during the survey. None of the survey questions are mandatory beyond the initial consent page. If you do not want to answer a question, you may skip it and continue to the next question.

WHAT ARE THE RISKS AND BENEFITS?

This survey has only minimal risk. The questions you will be asked are not of a personal nature, and you won't be asked to provide any information about your own study habits. The primary benefit of participating in this study is the contribution to research, by adding your viewpoint to help understand students in colleges and universities.

HOW WILL MY CONFIDENTIALITY BE MAINTAINED?

Your privacy will be carefully protected. The survey is anonymous. Your personal data, including the IP address will not be available to researchers. Your answers will only ever be reported in group statistics – never individually.

WHAT WILL MY DATA BE USED FOR?

This study is part of work done towards a MEd degree. It may also be presented at academic conferences and published in a peer reviewed academic journal.

WHERE WILL MY DATA BE STORED?

During the period of analysis, data will be stored on a password-protected server. Once analysis is complete, all data is stored on a hard drive that is password protected. The hard drive is stored in a locked cabinet within a locked room (Dr. Kaefer's office) and will be maintained for a minimum of 7 years.

HOW CAN I RECEIVE A COPY OF THE RESEARCH RESULTS?

If you wish to receive a copy of the results, you can contact gradresearch 778@gmail.com and a copy of the final project will be sent to you.

WHAT IF I WANT TO WITHDRAW FROM THE STUDY?

You may withdraw at any point during the survey. Each page of the survey will have an opt-out button which you may click to withdraw your participation in the study. You will also have the option to withdraw your participation at the end of the study. Once you have submitted your data, we cannot remove it from the study. Because the study is anonymous, we won't know which data is yours.

RESEARCHER CONTACT INFORMATION

If you have any questions about this study, please contact Suzanne Connell at gradresearch 778@gmail.com.

RESEARCH ETHICS BOARD REVIEW AND APPROVAL

This research study has been reviewed and approved by the Lakehead University Research Ethics Board. If you have any questions related to the ethics of the research and would like to speak to someone outside of the research team, please contact Sue Wright at the Research Ethics Board at 807-343-8010 ext. 8283 or research@lakeheadu.ca.

Appendix C: Consent Affirmation



CONSENT AFFIRMATION

Please read and click EACH item to confirm your consent to participate with this survey.

If you don't consent, please click the back button to exit the survey.

I understand that my participation is completely voluntary.

I affirm that I am over 18 years of age.

I understand that I may exit this survey at any time.

I understand that I may skip any question(s) I do not want to answer.

I understand that I will be given an opportunity, upon exiting, to withdraw my permission to use the data I have entered during my survey session.

I understand that I will not be able to withdraw my permission to use my data after I exit.

I understand that my data will be confidential and anonymous.

By clicking the button below and starting the survey, I agree to participate in this study.

I DO NOT AGREE TO PARTICIPATE -EXIT THE SURVEY

I AGREE TO PARTICIPATE