

An Attribution Theory Lens on Plagiarism: Examining the Beliefs of Preservice Teachers

Lauren D. Goegan, University of Manitoba, Canada

Lia M. Daniels, University of Alberta, Canada

Abstract

Academic misconduct is a prominent issue at postsecondary institutions. This issue includes the act of plagiarism, which has received considerable attention on campuses. There is a growing body of research examining why students engage in plagiarism, and what they know about plagiarism, but little of this research is guided by a theoretical framework. Although all students may be tempted to plagiarize, students in teacher education programs represent a unique population because they are concerned with developing their own academic performance alongside the skills necessary to manage situations of academic misconduct as future teachers. Therefore, our first aim was to examine preservice teachers' beliefs about plagiarism. Then, following the principles of attribution theory, our second aim was to investigate how beliefs of controllability related to acts of plagiarism and impacted participants' views on responsibility, emotions, help giving, and reporting. We used a within-person repeated measures design with three levels of controllability manipulated through hypothetical scenarios of plagiarism to collect data from 201 preservice teachers. Overall, preservice teachers had strong beliefs about plagiarism. Moreover, when scenarios included students who engaged in plagiarism that was controllable, participants were more likely to view the student as responsible, feel anger towards them, support punishment, and recommend reporting the student, than when the act of plagiarism was not seen as controllable. We provide recommendations for educators and administrators to support students and highlight limitations and directions for future research.

Keywords: academic misconduct, attribution theory, Canadian, controllability, plagiarism, preservice teachers

Introduction

Academic misconduct is recognized as a problematic issue worldwide (Fu & Tremayne, 2021; Madara & Namango, 2016) and at all levels of education (Fontaine et al., 2020). This can include students who are using a friend's paper as their own, taking information from an online source without acknowledging the original author, or forgetting to cite a source. While reported rates of plagiarism vary widely, a startling statistic suggests that 92% of students have cheated at least

once or they have known someone who has (Jones, 2011). Nevertheless, it is difficult to determine how often students are engaging in this behaviour because researchers must rely on self-report data from students, detection rates by staff, or reporting by faculty (Kwong et al., 2010; Parker, 2003). One thing that researchers tend to agree on, based on media report, is that plagiarism cases are on the rise (Morasse, 2021).

While previous researchers examining academic misconduct, and by extension plagiarism, primarily focused their efforts on describing what type of behaviours students engage in and why, less research has focused on examining the cognitions, emotions, and actions of people who discover instances of academic misconduct (see Eaton, 2021, as an exception). Beyond this, there is disagreement in how constructs like academic misconduct and plagiarism are conceptualized (see Jamieson & Howard, 2019, for review). Nevertheless, one group that may provide particularly interesting views on plagiarism are preservice teachers. As students, preservice teachers need to secure high grades while avoiding plagiarism in their own work. However, as emerging professionals, preservice teachers must develop the professional judgement necessary to manage situations when their future students plagiarize. In understanding these perspectives, Attribution Theory offers a useful framework that explains responses to important, negative, and unexpected outcomes and may be particularly useful in guiding research on plagiarism. Therefore, the purpose of this paper is to examine preservice teacher beliefs on plagiarism as one form of academic misconduct from an attribution theory lens.

What is Plagiarism and How is it Changing?

Academic dishonesty is an umbrella term used to discuss a wide range of behaviours considered to be misconduct (Madara & Namango, 2016), including many forms of plagiarism (Ahmed & Anirvan, 2020; Awasthi, 2021; Parker 2003; Wilhoit, 1994). Researchers conceptualize acts of plagiarism along a continuum of severity (Fish & Hura, 2013; Parker, 2003; Wilhoit, 1994). At one end of the continuum is direct plagiarism wherein the individual presents word-for-word text from another source as their own (Ahmed & Anirvan, 2020). An example could be buying a paper from a website, or directly copying and pasting content from another source without citing. On the other end of the continuum, students can engage in accidental or unintentional plagiarism because they lack knowledge about how to incorporate sources into their text correctly (Ahmed & Anirvan, 2020; Parker, 2003). In the middle of the continuum are all of the instances in which students insufficiently paraphrase original sources producing what is referred to as mosaic, hybrid, or patchwork paraphrasing where the end product is a combination of various works from several authors but presented without proper citations for the work (Khaled & Al-Tamimi, 2021).

Researchers have long been interested in the reasons why students engage in academic misconduct. Based on a review of the literature on academic motivation and cheating, Anderman et al. (2022) determined that students often justify their cheating by blaming external factors

such as poor instruction, bad assessment practices, or heavy course schedules. Fu and Tremayne (2021) found that negative emotionality operationalized as stress, anxiety, or depression significantly and positively predicted students' positive attitudes towards plagiarism. Tindall and Curtis (2021) found that positive affect among students was a significant negative predictor of positive attitudes towards plagiarism. Faculty members also have ideas about why students cheat. For example, Awosoga et al. (2021) identified two significant factors that faculty members believed related to misconduct: situational or contextual factors, such as feeling pressure to obtain certain grades, and dispositional or psychological factors, such as a student's attitudes towards a course.

Regardless of the reasons students engage in academic misconduct, most postsecondary institutions in Canada and elsewhere, have some form of a Student Code of Conduct that describes academic dishonesty, including plagiarism, and possible repercussions. By extension, as much as students need to learn what plagiarism is, educators need to be able to identify instances of plagiarism. To do this, instructors may use software such as *Turnitin* that examines the originality of students' work and is marketed to higher education institutions (Turnitin, LLC., 2022). Additionally, since the COVID-19 pandemic began, news reports have described elaborate ways instructors tried to curtail academic dishonesty through strategies like creating unsolvable questions and then planting answers online so that students would only be able to answer them correctly if they had cheated to find the answer (Tripathi, 2022). Despite these efforts, faculty members rarely report cases of academic misconduct, and instead attempt to resolve cases based on their own judgements (Kwong et al., 2010; Thomas, 2017).

A reason for dealing with plagiarism at the personal judgement level instead of adhering to policy could be that instructors view plagiarism as a changing concept that requires judgement (Fyfe, 2022). As a case in point, as teachers continue to use formative assessments that are not graded, they may believe plagiarism is less relevant in an ungraded context (Goegan et al., 2023). Furthermore, some recommendations suggest the only way forward is to work with the technology rather than against it by intentionally building artificial intelligence (AI) into assessments (Fyfe, 2022). One way to bring theoretical structure to thinking that involves judgements of responsibility is attribution theory (Weiner, 1985). The interpersonal perspective on Attribution Theory suggests that people function as an "everyday judge" casting judgment and making decisions about right and wrong (Rudolph & Tscharktschiew, 2014, p. 344). This metaphor of judge connects well to the role of teachers in making decisions about plagiarism and is situated within the Attribution Theory literature below.

Attribution Theory

Attribution theory examines causal explanations individuals make for why situational outcomes occur (Anderman et al., 2022; Madara & Namango, 2016; Weiner, 1985; 2010; 2018). According to this theory, individuals are assumed to be both motivated to understand their environment

and why outcomes occur (Hareli, 2014; Pintrich & Schunk, 2002). Because cognitive resources are limited, individuals typically engage in causal search for why an outcome occurred when that outcome is negative, unexpected, and/or perceived as important (Graham, 1991; Weiner, 2000). Arguably when a teacher detects plagiarism it would fit these criteria.

Weiner (1985) describes the process by which an individual seeks to understand why the outcome occurred. First, the individual begins by gathering information about the outcome through a process known as *causal search*. During the process of causal search, it is suggested that there are an infinite number of causes for an outcome from which the individual ultimately picks one, known as a *causal ascription* to explain the current outcome. All causal ascriptions can be classified according to three underlying causal dimensions: locus, stability, and controllability (Hareli, 2014), which in turn influences the *psychological* and *behavioural consequences*. Locus refers to whether the cause of the outcome is internal or external to the actor. Stability refers to how stable or unstable over time the perceived cause is. Lastly, the controllability dimension is closely linked to responsibility toward the outcome either being volitional or not.

A classic example used to describe the causal dimensions of attribution theory, is the situation where a student performs poorly on an exam. If this outcome is attributed to lack of effort on the part of the student, this would be considered internal, unstable, and controllable, whereas ability would be considered internal, stable, and controllable. Alternatively, poor performance due to task difficulty would be considered external, stable, and uncontrollable, and luck would be categorized as external, unstable, and uncontrollable. Based on the causal ascription, and the associated causal dimensions, psychological and behavioural consequences will follow (Weiner, 1985; 2018). Specifically, attribution theory proposes two chains of action: a judgement of responsibility (e.g., lack of effort) tends to lead to anger and punishment; whereas a judgement of non-responsible leads to sympathy and help (e.g., luck). In other words, the idea of responsibility is associated with the controllability dimension.

A foundational research project examining psychological and behavioural consequences was conducted by Weiner and colleagues (1988). They examined the perceived controllability and stability of the causes of 10 stigmas. Of particular interest to this research is their second experiment, wherein they systematically manipulated information regarding controllability from the onset of the stigma and provided participants with three different pieces of information about the stigma. This information changed the controllability of the stigma as either (a) ambiguous about control, (b) controllable, and (c) uncontrollable. As an example, a person could be blind (ambiguous about control), be blind because of a work accident due to the individual's negligence (controllable) or be blind because of a work accident caused by a co-worker (uncontrollable). Based on the information provided in scenarios, participants reported more pity and less anger (psychological consequences) towards individuals when the stigma was uncontrollable. Furthermore, participants were less likely to provide personal assistance or donations to charity (behavioural consequences) when the stigma was controllable. This pattern

of results has been replicated for decades (Menec & Perry, 1995; Muschetto & Siegel, 2019; Tiggemann, & Anesbury, 2000) and most recently was used to explain behaviors associated with the COVID-19 pandemic (Yao & Siegel, 2021).

The use of Attribution Theory to examine why students plagiarize could not be found in the literature. Nevertheless, the process outlined above can be applied to a teacher who has found a case of plagiarism. Indeed, a teacher would find the situation negative, important, and unexpected. That teacher would then begin to consider why the student plagiarized (*causal search*), which could include a student whose actions are considered to be direct plagiarism and therefore seen as more responsible (controllable), compared to a student who is thought to have engaged in accidental plagiarism, and might not be seen as responsible (uncontrollable). Once the teacher has decided on the reason why they believe the student plagiarized (*causal ascription*) this reason why can be linked to the *causal dimensions*, and by extension, the cognitions, emotions, and actions directed towards the student (Weiner, 1985, 2010, 2018). As such, the purpose of the current study was to examine the continuum of plagiarism, and the dimension of control, from an attribution theory lens.

Attribution theory also offers a methodological alternative to the common self-reported approach to academic misconduct through the use of scenarios. It is well documented that students are hesitant to report instances of academic misconduct with incidence rates ranging from 15-80% (DiPaulo, 2022; Fish & Hura, 2013; Fontaine et al., 2020; Parker, 2003; Romanowski, 2021; Tindall & Curtis, 2021). The use of scenarios removes the need for participants to identify their own academic dishonesty, and places them in the position of judge, in line with their future roles as teachers rendering judgements on their own students.

Finally, the present study advances the current literature by focusing on preservice teachers who may hold unique perspectives as they are simultaneously students and teachers. Indeed, Romanowski (2021), describes preservice teachers as the “future gatekeepers of academic integrity” (p. 289) as they are responsible for educating young people but are also concerned with their own academic outcomes. Research examining the practices and beliefs of preservice teachers regarding academic dishonesty has been increasing in recent years. However, this research largely focuses on the behaviours that preservice teachers engage in (e.g., DiPaulo, 2022; Fontaine et al., 2020), their knowledge about plagiarism (e.g., Bautista & Pentang, 2022; Merkle, 2022; Romanowski, 2021), and why they believe students plagiarize (e.g., Bautista & Pentang, 2022). Considering preservice teachers in the role of judges recognizes their prospective professional role in managing academic misconduct.

The Current Study

In the current study we utilize Attribution Theory as our theoretical model (Weiner, 1985) to examine preservice teacher beliefs of plagiarism. Moreover, we were interested in exploring the

cognitions, emotions, and actions selected when scenarios of plagiarism varied in terms of controllability. As such, our three research questions were as follows: (a) How do preservice teachers define plagiarism, (b) What are preservice teachers' beliefs on what constitutes acts of plagiarism, and (c) Does the perceived controllability of plagiarism (i.e., intentional vs. accidental) impact their cognitions, emotions, and actions?

Method

We developed a single administration survey to collect data on participants' beliefs and perceptions toward plagiarism. Specifically, we utilized a within-person design with three levels of independent variables to examine controllability. Ethics approval was obtained from the Human Ethics Research Office at the University of Alberta.

Procedure

Preservice teachers were enrolled in an assessment course as part of their teacher education program and one of the units of the course specifically addressed academic success and misconduct. As part of this unit, students learned about the various forms of academic success and misconduct, reviewed previous research examining reasons why students cheat and various perspectives on cheating (e.g., student, teacher, parent, principal), and finally, they were provided with resources and strategies for handling cases of academic misconduct including plagiarism. After the lecture portion of the class, the preservice teachers completed an online activity via GoogleForms© that involved a questionnaire that included a variety of Likert scale items and short answer responses. The items specific to this research project are provided below. Once students completed the activity they were asked, "*Can we include your responses here for research purposes?*" (for clarity, here being the GoogleForm© completed). Consent was granted by answering yes. Data were anonymized and analyzed after the completion of the course.

Participants

There were 226 students enrolled in the course, of which 201 students consented to their data being used for research purposes after completion of the course-based activity. Participants ranged in age from 19 to 43 years ($M = 26$ years, $SD = 4.96$ years). A total of 121 participants identified as women, 75 as men, and 5 as non-binary. Moreover, participants identified with various racial identities including Arab, Black, Chinese, Filipino, Indigenous peoples, Latin American, South Asian, however, the majority identified as White (64%).

Measures

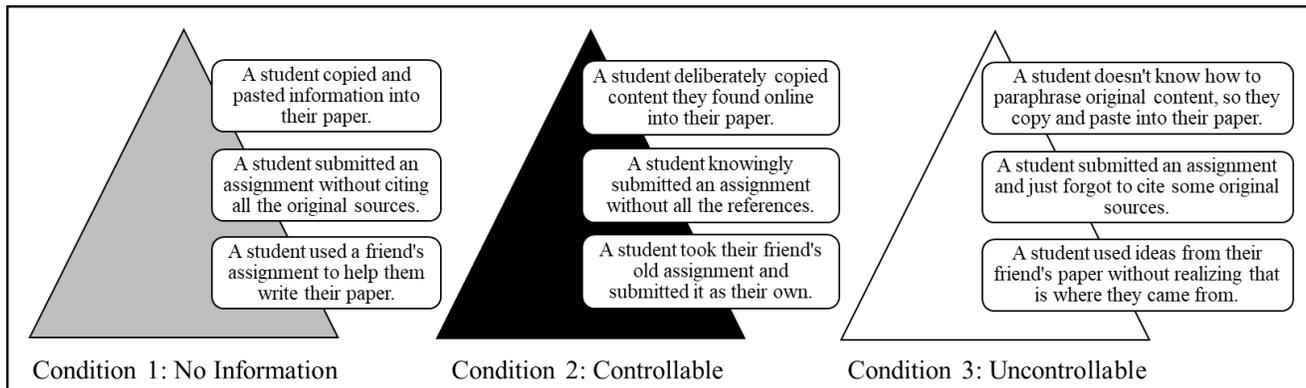
Beliefs on Plagiarism

We began the survey by asking participants “Write a definition of plagiarism in your own words.” Then we presented participants with 12 Likert-scale items related to their beliefs on plagiarism, for example, “It is always wrong to plagiarize.” The first 11 items required participants to respond by using a scale from (1) completely disagree to (9) completely agree. Item 12 asked participants: “In your opinion how much of a document (i.e., paper, project, essay, poem, report, solution, etc.) has to be copied for you to consider it plagiarized?” and they responded on the scale of (1) 0-10%, (2) 11-20%, (3) 21-30%, (4) 31-40%, (5) 41-50%, (6) 51-60%, (7) 61-70%, (8) 71-80%, (9) 81-90%, and (10) 91-100%.

Plagiarism Scenarios: The Independent Variable

To examine participant beliefs on specific plagiarism cases, we developed three scenarios and adapted each one based on three levels of control. These scenarios were developed based on the work of Weiner et al. (1988), discussed above. We created three common plagiarism events: (a) copying and pasting information, (b) not citing sources, and (c) using a friend’s paper. Each scenario was adapted to fit the conditions of being (a) ambiguous about control, (b) controllable, and (c) uncontrollable. See Figure 1 for a breakdown of the scenarios and conditions.

Figure 1. Controllability Conditions for the Plagiarism Scenarios



The Dependent Variables

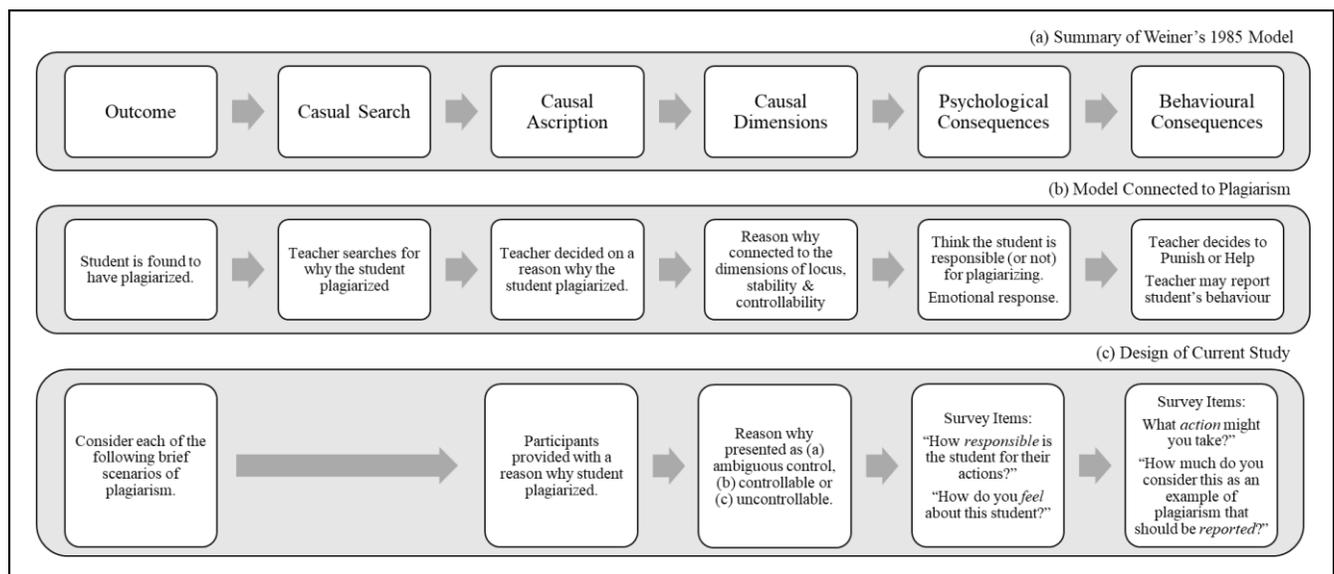
For each of the nine scenarios, participants answered four questions to measure psychological and behavioural consequences (Weiner, 1985). Before the participants answered any questions, they were presented with the prompt “consider each of the following brief scenarios of plagiarism.” The first question was “How responsible is the student in the scenario for their actions? How much do you hold each student responsible?” and participants responded on a scale from 1 (not at all) to 9 (a lot).

The second question was “How do you feel about this student ranging from angry to sympathetic?” and students responded on a semantic differential scale that described 1 as angry,

5 as ambivalent, and 9 as sympathetic (Stoklasa et al., 2019). The third question was “What *action* might you take for each student ranging from determining a consequence for their action (i.e., punishment) to giving them help?” Again, we used a semantic differential scale that described 1 as punishment, 5 as ambivalent, and 9 as give help. We decided to use two semantic differential scales to reduce the number of questions and to align with the theoretical foundation relating uncontrollable to anger and punishment and controllable to sympathy and help giving.

The fourth question was “How much do you consider this as an example of plagiarism that should be *reported*?” and participants responded on a scale from 1 (not at all) to 9 (a lot). The scenarios were randomized, while the questions themselves were presented in the same order based on the sequence consistent with attribution theory. See Figure 2 for a visual representation connecting attribution theory to plagiarism and the study design.

Figure 2. Connecting Attribution Theory to Plagiarism and The Study Design.



Plan for Analysis

We conducted our analyses in four stages with quantitative analyses all using the software JASP 0.17 (JASP Team, 2023). First, we ran a word cloud analysis by taking all of the definitions of plagiarism and entering them into a word cloud program to see which terms preservice teachers used to describe plagiarism. Second, we ran descriptive analyses for the first 11 items related to beliefs on plagiarism, including means, standard deviations, ranges, skewness, and kurtosis. For the final item related to the amount of a document that must be copied to identify it as plagiarized, we provide frequencies. Third, we ran one-sample *t*-tests on the first 11 items to determine if participants’ responses differed from 5 (neutral). Fourth, turning to the scenarios, we examined the effects of varying controllability information on the beliefs of the participants in

Stemming conventions (e.g., frequencies for *using*, *used* and *use* all included within the stem use) were utilized, as well as the removal of common words like “*and*” and “*the*”. The three most common words were work, own, and idea, followed by someone, credit, else’s, without, use, take, original, give, and pass included in the top 12 most frequent words. Table 1 includes sample definitions from the participants. Taken together, students appear to have similar general definitions of plagiarism.

Table 1. Write a definition of plagiarism in your own words.

Word	Example
Work	Copying work of others <u>without crediting</u> their work .
Own	intentionally <u>using someone else's work</u> as your own
Idea	<u>Using</u> others' ideas or content without <u>credit</u> .
Someone	Presenting someone else's work as your <u>own</u> .
Credit	Using <u>someone else's work without</u> crediting them.
Else’s	<u>Take someone else's work</u> and <u>passing</u> it of as their <u>own</u> .
Without	Using the ideas of others without proper citation or acknowledgement.
Use	When you use <u>someone else's</u> words or <u>ideas</u> and <u>pass</u> them off as your <u>own</u> .
Take	Take <u>credit</u> for thoughts and words that are not your <u>own</u> .
Original	Copying of <u>someone else's original work</u> and claiming it as your <u>own</u> .
Give	Take the <u>work</u> of others and claim it as their <u>own</u> and do not <u>give credit</u> to the <u>original</u> author.
Pass	Passing off <u>work</u> as your <u>own</u> when it actually came from <u>someone else</u> .

Note. Target word identified in bold and other high frequency words identified in bold/underline.

Beliefs About Plagiarism

The means, standard deviations, ranges, skewness, and kurtosis for the first 11 items related to participants’ beliefs on plagiarism are presented in Table 2 and we hereby highlight some important findings. First, participants strongly disagreed with the item “It is not plagiarism if the assignment is not for marks,” and strongly agreed with the item: “It is always wrong to plagiarize.” In terms of how much of a document needs to be copied to be considered plagiarized, almost half of the students (43.5%) said between 0-10%, with another quarter of participants (24%) saying 11-20%. Next, we ran 11 one-sample *t*-tests to examine how much participants’ responses differed from neutral (represented as 5 on the 9-point scale), with higher scores indicating agreement and lower scores, disagreement. All the *t*-tests significantly differed from neutral except for the item: “There is no excuse for plagiarism.”

Table 2. Descriptive Statistics

Variable	<i>M</i>	<i>SD</i>	Range	Skew	Kurtosis	<i>t</i> -value	Cohen's <i>D</i>
1. It is always wrong to plagiarize.	7.74	1.49	1-9	-1.840	3.903	26.01***	1.834
2. There are times plagiarism is okay.	2.13	1.50	1-9	1.815	3.998	-27.04***	-1.908
3. It is not plagiarism if you just forget to include a source in your paper.	2.71	1.63	1-8	0.809	-0.110	-19.91***	-1.404
4. Plagiarism requires intent - you can't do it by mistake.	3.76	2.24	1-9	0.478	-0.762	-7.87***	-0.555
5. People who plagiarize should have consequences.	6.39	1.60	1-9	-0.492	0.228	12.37***	0.872
6. There is no excuse for plagiarism.	5.06	1.99	1-9	0.013	-0.676	0.43	0.030
7. It is not plagiarism if the information comes from an open source.	2.45	1.57	1-9	1.429	2.415	-22.98***	-1.621
8. You can't plagiarize yourself.	4.28	2.47	1-9	0.336	-0.961	-4.11***	-0.290
9. You can re-use your work exactly it's not plagiarism.	2.80	2.01	1-8	1.090	0.311	-15.51***	-1.094
10. It is only plagiarism if the assignment is graded.	1.69	1.09	1-8	2.519	8.999	-42.92***	-3.027
11. It is not plagiarism if the assignment is not for marks.	1.62	0.98	1-8	2.579	10.515	-49.02***	-3.457

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. For the one-sample *t*-test, the alternative hypothesis specifies that the mean is different from 5.

Plagiarism Scenarios

Psychological Consequences

First, we examined how *responsible* the participants felt the student was for plagiarizing. The one-way ANOVA showed that the effect of controllability was significant, $F(2, 400) = 576.77$ $p <$

.001, $\eta^2 = .743$. Post hoc analyses indicated that participants rated the students in the controllable scenarios as the most responsible, and the students in the uncontrollable scenarios as the least responsible. The students in the unknown scenarios were rated in the middle.

Second, we examined how the participants *felt* about the student (e.g., angry, ambivalent, sympathetic). The one-way ANOVA showed that the effect of controllability was significant, $F(2, 400) = 693.18, p < .001, \eta^2 = .776$. Post hoc analyses indicated that participants felt anger towards the students in the controllable scenarios, felt sympathetic towards the students in the uncontrollable scenarios, and felt mostly ambivalent towards the students in the no information scenarios.

Behavioural Consequences

Third, we examined what *action* the participants said they would take (e.g., punishment, give help) as a result of plagiarism. The one-way ANOVA showed that the effect of controllability was significant, $F(2, 400) = 666.73, p < .001, \eta^2 = .769$. Post hoc analyses indicated that participants felt punishment was deserving for the students in the controllable scenarios, identified that help was needed for the students in the uncontrollable scenarios, and felt more ambivalent towards the students in the no information scenarios.

Fourth, we analyzed if participants were likely to *report* the incident of plagiarism (e.g., not at all, a lot). A one-way ANOVA showed that the effect of controllability was significant, $F(2, 400) = 598.39, p < .001, \eta^2 = .749$. Post hoc analyses indicated that participants rated the controllable scenarios as the most likely to be reported, and the uncontrollable scenarios as the least likely to be reported. The unknown scenarios were rated in between the two. See Table 3 for all the means and standard deviations based on the ANOVAs and post analyses.

Table 3. Mean Values for 3 Conditions on 4 Variables Related to Perceived Controllability

Condition	Rated Variables							
	Responsible		Affect		Help		Report	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
NI	7.32	1.28	3.91	1.23	4.88	2.04	6.66	1.41
C	8.47	.87	2.26	1.13	2.60	1.73	8.36	.77
UN	4.87	1.77	6.30	1.52	7.21	1.51	4.85	1.81

Note: Brackets indicate a significant difference between conditions ($p < .01$). NI = no information, C = controllable, UC = uncontrollable.

Discussion

We examined the beliefs of preservice teachers in terms of plagiarism from an Attribution Theory lens. Overall, the participants had strong beliefs about what constituted plagiarism. Moreover, the results showed a clear attributional pattern in terms of the effect of perceived controllability of plagiarism on the psychological and behavioural consequences. We discuss how our results advance the field of research in two specific ways. First, we highlight the advantages of bringing attribution theory to bear on understanding preservice teachers' cognitions, emotions, and actions when confronted with instances of plagiarism. Second, we make recommendations for educators and administrators on how to respond to the issue of plagiarism, with considerations for the changing landscape of plagiarism itself. In closing, we discuss the limitations and potential avenues for future research.

Preservice Teachers Definitions of Plagiarism

Overall, the preservice teachers had similar definitions of plagiarism. Most definitions included more than one of the 12 most frequent terms identified. Moreover, their definitions are consistent with the institution's description of inappropriate academic behaviour which states "No student shall submit the words, ideas, images or data of another person as the Student's own in any academic writing, essay, thesis, project, assignment, presentation or poster in a course or program of study" (University of Alberta, 2022a). Therefore, the participants here seem to have a uniform definition on what is plagiarism. Nevertheless, their definitions do not address the complexity of defining plagiarism (Jamieson & Howard, 2019). As such, future research could examine definitions of plagiarism from a more nuanced perspective.

Preservice Teachers Beliefs

Preservice teachers had strong beliefs on all Likert-scale items apart from "there is no excuse for plagiarism" which scored near neutral on the scale. This finding is important because it shows preservice teachers see room for judgment when it comes to plagiarism that could be unintentional (Fish & Hura, 2013) or accidental plagiarism (Ahmed & Anirvan, 2020). For example, not knowing how to properly incorporate sources into one's work might be considered a valid justification by some teachers. This is a noteworthy finding because the participants also overwhelmingly agreed that "it is always wrong to plagiarize." The difference in the two responses suggests that preservice teachers understand that it is wrong to plagiarize as clearly stated in institutional policies, while also acknowledging students might have an explanation why as their professional judgment may indicate. From an attribution theory lens, understanding this "why" is important, because the causal ascription identified to explain the outcome leads to various cognitions, emotions, and actions (Weiner, 1985; 2000, 2010). Indeed, Fish and Hura (2013) raise the question of punishing students if they were not aware that they had plagiarized. From our results, perceived controllability plays a key role in the actions preservice teachers

intended to take when confronted with instances of plagiarism. These perspectives do not negate the importance of educating students on the use of sources in their papers, and how to avoid instances of even unintentional plagiarism in their work (Fish & Hura, 2013; Parker, 2003). As such, future research could examine the 'excuses for plagiarism' to further our findings and examine situational factors when plagiarism occurs.

An Attributional Theory Framework

In the same vein as previous research, our study demonstrated that when an observer, such as a preservice teacher, believes an event is uncontrollable, they are more likely to feel sympathetic and give help (Tscharaktschiew & Rudolph, 2016). Therefore, the causal ascriptions that preservice teachers identify to explain instances of plagiarism have a meaningful role in subsequent psychological and behavioural outcomes (Weiner, 1985; 2018). In particular, the controllability dimensions investigated in our study showed significant, and multiple point differentials on items related to responsibility, affect, help giving, and reporting. Thus, attribution theory is a valuable way to examine instances of plagiarism. Moving forward, future research could extend our results and examine other causal dimensions of plagiarism. For example, group work provides an interesting dynamic for examining locus. Indeed, at the institution where this data was collected, information about academic integrity and plagiarism specifically notes that definitions of plagiarism also apply to group projects (University of Alberta, 2022b). The involvement of various group members in plagiarism could provide different views on the locus as being internal and external, as well as controllable and uncontrollable. Moreover, an examination of repeat offenders of plagiarism would provide context for the stability dimension. These are important considerations that were beyond the scope of the current study but remain theoretically relevant.

Recommendations

Based on our results and the findings of previous research, we make recommendations for individuals who come across cases of plagiarism in terms of understanding how their beliefs about occurrences of plagiarism impact their cognitions, emotions, and actions. While we did not provide participants with a specific policy to follow, we do see that how one perceives controllability matters in the context of plagiarism. Even though each scenario was identified as an act of plagiarism, participants responded to them differently depending on the explanation of *why* the student plagiarized in terms of controllability (Weiner et al., 1988). Therefore, it is important for preservice teachers and educators to be more aware that there are factors in situations that make them significantly more sympathetic to acts of plagiarism. The power of empathy more broadly can also be seen in the work of Okonofua and colleagues who utilized an empathetic-mindset intervention with teachers, which lead to a significant reduction in student suspension rates (Okonofua et al., 2016), particularly among Black and Hispanic students who

traditionally show higher rates of suspension (Okonofua et al., 2020). Future research could extend their work to situations of plagiarism.

Moreover, de Maio and colleagues (2020) examined the disconnect between student plagiarism policies and staff actions. They found that if academics prioritized the student or themselves, then their responses to plagiarism are more inconsistent and do not align with what is expected as a response from the institution. The bias created by perceptions of control can be considered similar to other potential biases in terms of responding to plagiarism. For example, it has been suggested that female students cheat less than male students (e.g., Awdry & Sarre, 2013; Gibson et al., 2008; Witmer & Johansson, 2018) and there is a higher propensity to cheat in certain ethnic groups than others (e.g., Martin et al., 2011). Therefore, understanding how one's beliefs impact their perceptions of plagiarism is vital, particularly for educators who need to make regular judgements about instances of plagiarism in the classes.

Another avenue to consider the controllability dimension of plagiarism is through properly educating students as to what is considered plagiarism and what is not. This would eliminate the need for "proof of intent" (Fish and Hura (2013, p. 34) if appropriate and informative instruction was provided to all students. Indeed, a thematic analysis by Babaii and Nejadghanbar (2017) examined the reasons why students plagiarize, with the two most common reasons being they are unfamiliar with plagiarism (50.74%), and have low academic writing skills (46.26%), both of which could be considered controllable. For instructors to be more likely to report plagiarism, they need to perceive the student who plagiarized as responsible. One way to do this is to reduce the propensity for students to claim lack of knowledge or skill by providing adequate resources and/or training through, for example, a stand-alone course on academic integrity (DiPaulo, 2022). For preservice teachers specifically, this course could also be incorporated into the required ethics course that is common among teacher education programs in Canada (Maxwell, et al., 2015). This promotes an academic culture that supports academic integrity, not from a punitive or punishment space but from a proactive and learning one (Eaton et al., 2017; Kwong et al., 2010).

Finally, while postsecondary institutions have policies around academic integrity, they must be reviewed comprehensively with students to not only ensure understanding and compliance, but also to ensure that educators see acts of plagiarism as controllable. Moreover, such policies need to be updated and reviewed frequently in order to keep up with the rapidly changing nature of plagiarism such as buying a paper from a website or using AI to create content for a paper. Therefore, before instances of plagiarism occur, avenues need to be considered for educating students (i.e., provide help). This will ensure that everyone involved is clear on how plagiarism is perceived, and the consequences for engaging in this behaviour.

Limitations and Future Research Directions

The results presented should be considered in light of three limitations. First, this study focused on one causal dimension (controllability) of attribution theory (Weiner, 1985; 2010; 2018), and it would be advantageous to extend our finding here to locus and stability as well. For example, the scenarios provided did not address if the student had engaged in comparable or the same behaviour in the past which would address the stability dimension. This could further impact an individual's beliefs about control if the student forgot to cite a source across multiple assignments, it might be interpreted as carelessness making it seem more controllable.

Moreover, examining locus as internal vs. external to the individual might be an interesting space to examine group work as mentioned above, or if a fellow student helps another by providing them with a copy of a paper to help them come up with ideas, not knowing the original student would then submit it as their own. Additionally, how the dimensions of controllability, stability and locus interact with one another is an important avenue for future research. Moreover, we provided the students with the causal ascription piece of attribution theory and adjusted for controllability. Future research should further consider causal search that influences causal ascription.

Second, in terms of the scenarios, we did not pilot them beforehand which could be a valuable step for future research. This would have helped reduce potential ambiguity in the items such as *use of a friend's paper* which could be inferred differently by participants. Similarly, we did not have a manipulation check, and future research should consider incorporating a question about control after each scenario to ensure that they are indeed interpreted as ambiguous, controllable, and uncontrollable. Nevertheless, the scores on the responsibility items would provide some evidence to suggest that the participants saw the scenarios as representing students with different levels of responsibility and controllability.

Third, we focused our efforts on examining scenarios of plagiarism, and other types of academic dishonesty were not included, for example, cheating on an exam. Moreover, Khaled and Al-Tamimi (2021) make the distinction between literal plagiarism (e.g., direct copy-and-paste of text) and intelligent plagiarism (e.g., ideas), wherein we did not systemically control for one versus the other. Fish and Hura (2013) found that students in their study believed that taking any amount of text (i.e., text replication) is a more serious offense than taking another's thoughts and ideas. As such, future research should extend to other forms of academic dishonesty, or systematically explore different types of plagiarism to expand on our findings.

Conclusion

Our findings contribute to the growing research examining academic dishonesty and preservice teachers, by incorporating the theoretical framework of Attribution Theory. Indeed, our findings advance the field of research on academic dishonesty by examining controllability when it comes

to situations of plagiarism. When instructors are faced with an instance of plagiarism, their beliefs about controllability are crucial and lead to important cognitions, emotions, and behaviours. As such, results from our study provide researchers, educators, and administrators who must respond to instances of plagiarism important additional consideration to keep in mind when responding. As the nature of plagiarism continues to change, educators must stay knowledgeable themselves, while also ensuring that students understand the parameters of what is considered plagiarism.

References

- Ahmed, S., & Anirvan, P. (2020). The true meaning of plagiarism. *Indian Journal of Rheumatology*, 15(3), 155-158.
<https://www.indianjrheumatol.com/text.asp?2020/15/3/155/291587>
- Aickin, M., & Gensler, H. (1996). Adjusting for multiple testing when reporting research results: the Bonferroni vs Holm methods. *American Journal of Public Health*, 86(5), 726-728.
<https://doi.org/10.2105/AJPH.86.5.726>
- Anderman, E. M., Tilak, S., Perry, A. H., von Spiegel, J., & Black, A. (2022). Academic Motivation and Cheating: A Psychological Perspective. In D. A. Rettinger & T. B. Gallant, (Eds.), *Cheating Academic Integrity: Lessons from 30 Years of Research* (pp. 75-92). John Wiley & Sons
- Awasthi, S. (2019). Plagiarism and academic misconduct: A systematic review. *DESIDOC Journal of Library & Information Technology*, 39(2), 94-100.
<https://doi.org/10.14429/djlit.39.2.13622>
- Awdry, R., & Sarre, R. (2013). An investigation into plagiarism motivations and prevention techniques: Can they be appropriately aligned? *International Journal for Educational Integrity*, 9(2) 35- 49.
- Awosoga, O., Varsanyi, S., Nord, C., Barley, R., & Meadows, J. (2021). Motivators for student academic dishonesty at a medium sized university in Alberta, Canada: Faculty and student perspectives. *Canadian Perspectives on Academic Integrity*, 4(1), 91-109.
<https://doi.org/10.11575/cpai.v4i1.71475>
- Babaii, E., & Nejadghanbar, H. (2017). Plagiarism among Iranian graduate students of language studies: Perspectives and causes. *Ethics & Behavior*, 27(3), 240-258.
<https://doi.org/10.1080/10508422.2016.1138864>
- Bautista, R. M., & Pentang, J. T. (2022). Ctrl C+ Ctrl V: Plagiarism and knowledge on referencing and citation among pre-service teachers. *International Journal of Multidisciplinary: Applied Business and Education Research*, 3(2), 245-257.
<https://doi.org/10.11594/ijmaber.03.02.10>

- Brun, L., Pansu, P., & Dompnier, B. (2021). The role of causal attributions in determining behavioral consequences: A meta-analysis from an intrapersonal attributional perspective in achievement contexts. *Psychological Bulletin*, 147(7), 701–718. <https://doi.org/10.1037/bul0000331>
- de Maio, C., Dixon, K., & Yeo, S. (2020). Responding to student plagiarism in Western Australian universities: the disconnect between policy and academic staff. *Journal of Higher Education Policy and Management*, 42(1), 102-116. <https://doi.org/10.1080/1360080X.2019.1662927>
- DiPaulo, D. (2022). Do preservice teachers cheat in college, too? A quantitative study of academic integrity among preservice teachers. *International Journal for Educational Integrity*, 18(1), 1-14. <https://doi.org/10.1007/s40979-021-00097-3>
- Eaton, S. E. (2021). *Plagiarism in higher education: Tackling tough topics in academic integrity*. ABC-CLIO.
- Eaton, S. E., Guglielmin, M., & Otoo, B. (2017). Plagiarism: Moving from punitive to pro-active approaches. In A. P. Preciado Babb, L. Yeworiew, & S. Sabbaghan (Eds.), *Selected Proceedings of the IDEAS Conference 2017: Leading Educational Change Conference* (pp. 28-36). Werklund School of Education, University of Calgary.
- Fish, R., & Hura, G. (2013). Students' perceptions of plagiarism. *Journal of the Scholarship of Teaching and Learning*, 13(5), 33-45.
- Fontaine, S., Frenette, E., & Hébert, M. H. (2020). Exam cheating among Quebec's preservice teachers: The influencing factors. *International Journal for Educational Integrity*, 16(1), 1-18. <https://doi.org/10.1007/s40979-020-00062-6>
- Fu, K. W., & Tremayne, K. S. (2021). Self-efficacy and self-control mediate the relationship between negative emotions and attitudes toward plagiarism. *Journal of Academic Ethics*, 1-21. <https://doi.org/10.1007/s10805-021-09415-3>
- Goegan, L. D., Tulloch, S. L. P., & Daniels L. M. (2023). Preservice Teacher Beliefs about Academic Dishonesty: An Attribution Theory Lens to Causal Search. *Journal of Applied Learning & Teaching*, 6(2), 1-11. <https://doi.org/10.37074/jalt.2023.6.2.6>
- Gibson, C., Khey, D., & Schreck, C. (2008). Gender, internal controls, and academic dishonesty: Investigating mediating and differential effects. *Journal of Criminal Justice Education*, 19(1), 2-18. <https://doi.org/10.1080/10511250801892714>
- Graham, S. (1991). A review of attribution theory in achievement contexts. *Educational Psychology Review*, 3(1), 5-39. <https://doi.org/10.1007/BF01323661>
- Graham, S., & Taylor, A. Z. (2016). Attribution theory and motivation in school. In K. R. Wentzel & D. B. Miele (Eds.), *Handbook of motivation at school* (pp. 11-33). Routledge.

- Hareli, S. (2014). Making sense of the social world and influencing it by using a naïve attribution theory of emotions. *Emotion Review*, 6(4), 336-343.
<https://doi.org/10.1177/1754073914534501>
- Jamieson, S. & Howard, R. M. (2019). Rethinking the relationship between plagiarism and academic integrity. *Revue internationale des technologies en pédagogie universitaire / International Journal of Technologies in Higher Education*, 16(2), 69-85.
<https://doi.org/10.18162/ritpu-2019-v16n2-07>
- JASP Team (2023). JASP (Version 0.17.2)[Computer software].
- Jones, D. L. (2011). Academic dishonesty: Are more students cheating?. *Business Communication Quarterly*, 74(2), 141-150. <https://doi.org/10.1177/1080569911404059>
- Khaled, F., & Al-Tamimi, M. S. H. (2021). Plagiarism detection methods and tools: An overview. *Iraqi Journal of Science*, 2771-2783. <https://doi.org/10.24996/ijs.2021.62.8.30>
- Kwong, T., Ng, H. M., Mark, K. P., & Wong, E. (2010). Students' and faculty's perception of academic integrity in Hong Kong. *Campus-Wide Information Systems*, 27(5), 341-355.
<https://doi.org/10.1108/10650741011087766>
- Madara, D. S., & Namango, S. S. (2016). Faculty perceptions on cheating in exams in undergraduate engineering. *Journal of Education and Practice*, 7(30), 70-86.
- Martin, D., Rao, A., & Sloan, L. (2011). Ethnicity, acculturation, and plagiarism: A criterion study of unethical academic conduct. *Human organization*, 70(1), 88-96.
<https://doi.org/10.17730/humo.70.1.nl775v2u633678k6>
- Maxwell, B., Tremblay-Laprise, A. A., & Filion, M. (2015). A survey of ethics curriculum in Canadian initial teacher education. *McGill Journal of Education/Revue des sciences de l'éducation de McGill*, 50(1), 15-37. <https://doi.org/10.7202/1036104ar>
- Menec, V. H., & Perry, R. P. (1995). Reactions to stigmas: The effect of targets' age and controllability of stigmas. *Journal of Aging and Health*, 7(3), 365-383.
- Merkel, W. (2021). Simple, yet complex: Pre-service teachers' conceptions of plagiarism at a Norwegian university. *Scandinavian Journal of Educational Research*, 1-13.
<https://doi.org/10.1080/00313831.2021.1939778>
- Morasse, M. E. (2021). Quebec universities have seen cases of plagiarism double since the start of the pandemic. *Toronto Star*. <https://www.thestar.com/news/canada>
- Muschetto, T., & Siegel, J. T. (2019). Attribution theory and support for individuals with depression: The impact of controllability, stability, and interpersonal relationship. *Stigma and Health*, 4(2), 126-135. <https://doi.org/10.1037/sah0000131>

- Okonofua, J. A., Goyer, J. P., Lindsay, C. A., Haugabrook, J., & Walton, G. M. (2022). A scalable empathic-mindset intervention reduces group disparities in school suspensions. *Science advances*, 8(12), 1-10. <https://doi.org/10.1126/sciadv.abj0691>
- Okonofua, J. A., Paunesku, D., & Walton, G. M. (2016). Brief intervention to encourage empathic discipline cuts suspension rates in half among adolescents. *Proceedings of the National Academy of Sciences*, 113(19), 5221-5226. <https://doi.org/10.1073/pnas.1523698113>
- Park, C. (2003). In other (people's) words: Plagiarism by university students--literature and lessons. *Assessment & Evaluation in Higher Education*, 28(5), 471-488. <https://doi.org/10.1080/02602930301677>
- Peritz, A., (2022). *A.I. Is Making It Easier Than Ever for Students to Cheat*. <https://slate.com/technology/2022/09/ai-students-writing-cheating-sudowrite.html>
- Romanowski, M. H. (2022). Preservice teachers' perception of plagiarism: A case from a college of education. *Journal of Academic Ethics*, 20(3), 289-309. <https://doi.org/10.1007/s10805-21-09395-4>
- Rudolph, U., & Tscharaktschiew, N. (2014). An attributional analysis of moral emotions: Naïve scientists and everyday judges. *Emotion Review*, 6(4), 344-352. <https://doi.org/10.1177/1754073914534507>
- Stockman, F., & Mureithi, C. (2019). *Cheating, Inc.: How Writing Papers for American College Students Has Become a Lucrative Profession Overseas*. <https://www.nytimes.com/2019/09/07/us/college-cheating-papers.html>
- Stoklasa, J., Talášek, T., & Stoklasová, J. (2019). Semantic differential for the twenty-first century: Scale relevance and uncertainty entering the semantic space. *Quality & Quantity*, 53(1), 435-448. <https://doi.org/10.1007/s11135-018-0762-1>
- Thomas, A. (2017). Faculty reluctance to report student plagiarism: A case study. *African Journal of Business Ethics*, 11(1), 103-119.
- Tiggemann, M., & Anesbury, T. (2000). Negative stereotyping of obesity in children: The role of controllability beliefs. *Journal of Applied Social Psychology*, 30(9), 1977-1993. <https://doi.org/10.1111/j.1559-1816.2000.tb02477.x>
- Tindall, I. K., & Curtis, G. J. (2020). Negative emotionality predicts attitudes toward plagiarism. *Journal of Academic Ethics*, 18(1), 89-102. <https://doi.org/10.1007/s10805-019-09343-3>
- Tripathi, S. (2022). *Teacher Adds A Fake Question To Test Paper To Catch Cheating Students, Finds 14 Cheats*. <https://www.msn.com/en-in/news/other/teacher-adds-a-fake-question-to-test-paper-to-catch-cheating-students-finds-14-cheats/ar-AA10Yums>
- Tscharaktschiew, N., & Rudolph, U. (2016). The who and whom of help giving: An attributional model integrating the help giver and the help recipient. *European Journal of Social Psychology*, 46(1), 90-109. <https://doi.oclc.org/10.1002/ejsp.2135>
-

- Turnitin, LLC. (2022). *Turnitin for Higher Education: Everything you need to uphold integrity at your institution*. <https://www.turnitin.com/divisions/higher-education>
- University of Alberta (2022a). *Code of Student Behaviour*. <https://www.ualberta.ca/governance/media-library/documents/resources/policies-standards-and-codes-of-conduct/cosb-updated-december-05-2022.pdf>
- University of Alberta (2022b). *How to Avoid Plagiarism*. <https://www.ualberta.ca/current-students/academic-resources/academic-integrity/plagiarism.html>
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548-573. <https://doi.org/0033-295X/85/S00.75>
- Weiner, B. (2000). Intrapersonal and interpersonal theories of motivation from an attribution perspective. *Educational Psychology Review*, 12(1), 1-14. https://doi.org/10.1007/978-1-4615-1273-8_2
- Weiner, B. (2006). *Social motivation, justice, and the moral emotions*. Lawrence Erlbaum Press.
- Weiner, B. (2010). The development of an attribution-based theory of motivation: A history of ideas. *Educational Psychologist*, 45(1), 28-36. <https://doi.org/10.1080/00461520903433596>
- Weiner, B. (2014). The attribution approach to emotion and motivation: History, hypotheses, home runs, headaches/heartaches. *Emotion Review*, 6(4), 353-361. <https://doi.org/10.1177/1754073914534502>
- Weiner, B. (2018). The legacy of an attribution approach to motivation and emotion: A no-crisis zone. *Motivation Science*, 4(1), 4-14. <https://doi.org/10.1037/mot0000082>
- Weiner, B., Perry, R. P., & Magnusson, J. (1988). An attributional analysis of reactions to stigmas. *Journal of personality and social psychology*, 55(5), 738- 748. <https://doi.org/10.1037/0022-3514.55.5.738>
- Wilhoit, S. (1994) Helping students avoid plagiarism, *College Teaching*, 42(4), p. 161-165.
- Witmer, H., & Johansson, J. (2018). The role of gender when faculty members assign consequences for academic dishonesty. *New Directions for Community Colleges*, 2018(183), 73-82. <https://doi.org/10.1002/cc.20319>
- Yao, E., & Siegel, J. T. (2021). The influence of perceptions of intentionality and controllability on perceived responsibility: Applying attribution theory to people's responses to social transgression in the COVID-19 pandemic. *Motivation Science*, 7(2), 199-206. <https://doi.org/10.1037/mot000022>