ACADEMIC INTEGRITY: FACULTY ATTITUDES AND BEHAVIORS OF STUDENT SELF-PLAGIARISM

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ABSTRACT
This study examined faculty perceptions and accusations of academic misconduct related to both student plagiarism and self-plagiarism. Twenty-four faculty responded to survey questions that asked about plagiarism perception, self-plagiarism perception, detection of plagiarism, and perceptions and accusations of students using previous coursework in current courses. Descriptive analyses showed differences based on the instructors' own writing practices, perceptions higher than accusations, and faculty who identified as non-White, used fewer detection strategies, and were younger had higher perceptions of academic misconduct. Overall, faculty varied on perceptions about what students should be able to recycle in courses. Thus, while the characteristics of instructors plays a role in perceptions about student self-plagiarism, there continues to be a question regarding the role of student recycling and practices that instructors use to adjudge scenarios involving academic misconduct. Implications for self-plagiarism research and instructor responses are made.
Keywords: student self-plagiarism, academic misconduct, faculty perceptions, faculty accusations

Introduction

The meaning behind academic integrity is undergoing construction in the aftermath of the COVID-19 pandemic. With the increase in online instruction, some college campuses have seen a spike in reported cases of academic misconduct, including self-plagiarism (Bailey, 2021). There are many online software programs available for checking plagiarism, and while some debate about the quality of those programs, it has been mentioned that it is near impossible to have 0% similarity. Anti- plagiarism software such as Turnitin, has made great advancements, now with the capacity to address the originality of students' work by comparing it to University databases of previously submitted assignments. Further, Turnitin can serve as a tool to cross-reference citation integrity and types of student assignments (e.g., presentations). Some evidence has pointed to the fact that such anti-plagiarism software should be used to assess the content of the similarity rather than the percent of similarity (Balbay & Kilis, 2019). Since the pandemic onset, there has been an increase in academic integrity violations across some institutions as result of using anti-plagiarism software. Internet search metrics have shown that there was an increase in interest in cheating on exams during the pandemic (e.g., Comas-Forgas et al., 2021; Joshi & Bhaskar, 2020; Lancaster & Cotarlan, 2021).

The increased technological presence in higher education presented challenges to institutions and their instructors when examining the proper use and re-use of textual information. Published literature has examined student behaviors and how instructors constitute academic misconduct such as plagiarism (see Amzalag et al., 2021; Fontaine et al., 2020). There has been demonstrated variability in definitions of academic misconduct, levels of severity, and an overall lack of consensus. The general thought of "appropriateness" and the scale of ethical or mechanical writing errors, whether intentional or not, continues to be debated.

Academic Misconduct

There have been strategies implored to be proactive with students about academic integrity; having academic misconduct defined on the syllabus, early discussions about the problems associated with cheating, providing clear instructions that are specific (e.g., using a checklist that lays out what is allowed and what it isn't allowed), and

connecting with students to interrupt feelings of isolation. Another change in attitudes is the shift from academic misconduct/dishonesty to academic integrity, a more contextual approach to understanding the environment in which misconduct occurs. This can be helpful when providing support to students and preparing for professional roles beyond the academy. Behaviors and attitudes around academic misconduct can influence professional development (such as trustworthiness) and retention in the academy (such as a reduction in academic violations) (Jian, Emmerton, & McKauge, 2013). Academic misconduct has also been linked to professional misconduct (Carpenter et al., 2004). From informal to formal administrative processes, students are often sanctioned in more severe instances when academic misconduct is identified, and the penalties for these acts is often contingent upon perceived severity. This is a noted challenge because institutional policies heavily influence responses to academic misconduct, during a time where students are being encouraged to learn and develop identities by linking information to their existing thoughts. This can further create some burden on students as they navigate and learn citational mechanics and apply them.

One of the most common forms of academic misconduct is plagiarism (Awasthi, 2019). There are a number of working definitions of plagiarism including copying, cheating, paraphrasing without appropriate referencing, and taking content from a source and representing it as one's own. In a systematic review of plagiarism literature (N=366) on college campuses, factors related to plagiarism included: poor time management, lack of self-control, easily accessible information, and misunderstanding on what constitutes plagiarism (Awasthi, 2019). In the same study, authors posed that University librarians should play a larger role in mitigating plagiarism by increasing trainings, access to citation resources, and explaining the consequences of plagiarism (Awasthi, 2019). It is possible that some groups of students are more likely to engage in plagiarism as males in one study viewed plagiarism as more acceptable than female counterparts (Jereb et al., 2018) but these gender differences have not been replicated (Pagaddu, 2021).

Student Self-Plagiarism

Student self-plagiarism appears to be more ambiguous than plagiarism, especially when it comes to student behaviors and operationalizing it. Self-plagiarism has been conceptualized by researchers as, "The reuse of significant, identical, or nearly identical portions of one's own work without acknowledging that one is doing so or citing the original work" (Gregory & Leeman, 2021, p.3). Some of self-plagiarism dialogue stems from instructors who engage in scholarly writing and how textual reuse can be deemed as appropriate or inappropriate in certain circumstances. While student work is not weighted as the same as writing for peer-reviewed publication, many of the criteria used in scholarly writing is incorporated in the assessment and grading of student work, such as policies on the submission of assignments which mirror the peer review process.

Views on recycling work vary with perspectives differing between faculty and students (Halupa, 2013). While there is no consensus, a common thought on the faculty and instructor side is that students should create new products for each class because course learning objectives change from course to course. Reusing material for different course goals and objectives would be deemed insufficient. Students, however, do not always consider copying their own work as self- plagiarism. Halupa (2013) described their journey as a doctoral student and being intentional in connecting as much of their writing in courses to their dissertation, linking every assignment to parts of the dissertation and deeming that as making good use of their time and resources. Further, some feel that students are not taught how to present reused text transparently (Bailey, 2021). In other words, using text recycling from an editorial standpoint, has been suggested that rewording might be less ethical than recycling because it obscures the fact that the material has been used (O'Grady, 2021). If there is a lack of guidelines on this topic with research ethicists and journal editors, it is likely that the idea of recycling, or self-plagiarism, might also be under question by students. Programs and universities have institutional and instructional policies written to ensure compliance with policies and expectations, yet there are differences in the ways that instructors and students view this issue. While there are multiple issues related to understanding violations of academic integrity post-pandemic onset, it is in the best interests of students to begin measuring and understanding faculty perceptions of different learning behaviors.

Pandemic Learning in Higher Education

Through innovation and flexible options, technology was channeled to spark creativity and provide opportunities for students through expanded admission processes and teaching modalities to maintain connection. Online learning increased prior to the pandemic and after the onset of the pandemic, online enrollment grew, especially among undergraduate programs (Lederman, 2021). As a result, there were permanent changes made to education in America. In light of this type of transition, it makes understanding student behaviors more important.

Present Study

The purpose of this study was to describe how faculty at institutions of higher learning understood behaviors that constitute plagiarism and self-plagiarism, and how they have experienced them post pandemic-onset. The present study is concerned with exploring instructors' perceptions about both plagiarism and self-plagiarism among students, and the *beliefs* about how students participate in acts of student misconduct compared to *accusations* of student misconduct. The authors believe that an important behavioral predictor (i.e., accusations) is beliefs about the prevalence of academic misconduct. The authors also believe that self-plagiarism is under identified and there is less consensus about what self-plagiarism is, as aforementioned. Across disciplines, types of universities, and other characteristics related to teaching, programs, and instructors, there are differences in the defining self-plagiarism and beliefs about its occurrence.

First, this study assessed how instructors associated behaviors such as plagiarism, the more common term associated with academic misconduct, followed by self-plagiarism. Participants were asked about their knowledge of the university academic misconduct policy and strategies used to detect plagiarism. Lastly, a set of 16 questions about beliefs and behaviors were used, similar to the Hard et al., (2006) study about academic misconduct.

The research aims of this study were as follows:
Research Aim 1: Describe variability in instructor perceptions of plagiarism, self-plagiarism, sources of information on academic dishonesty, and knowledge of university policy on academic misconduct.
Research Aim 2: Describe instructors' definitions of plagiarism and self-plagiarism.
Research Aim 3: Describe instructors' beliefs about student academic misconduct and if they have challenged students on the behaviors.

Methods

The present research was undertaken at a large public university in the southeastern U.S. Data collection occurred in the fall of 2022.

Procedures

Approval from the university's Institutional Review Board was gained prior to implementing the survey. Participants were recruited through academic listservs at the primary investigator's institution with a request that listserv members share the announcement. The PI also emailed invitation letters to previous co-authors and collaborators. The invitation letter explained the purpose of the study and included a flyer. Instructors were invited to participate by clicking on the hyperlink provided or scanning the QR code provided. If clicked, the hyperlink opened a new web browser and directed the participant to the study's consent page. If the reader consented to participate in the study. The reader was prompted through the survey questions. On completion of the survey, participants were given the opportunity to provide their names and emails addresses on a separate webpage for a gift card drawing. There was a second opportunity to provide contact information for follow-up interviews to further understand classroom practices related to students' recycling work, academic policies, and academic outcomes. There was no connection between the survey and either the gift card drawing or interview signup after the completion of the study.

Participants

A total of 36 faculty began the study, with a final sample of 24 providing complete data for this study. Ages of the participants ranged from 30-70 (M= 41.78, SD=9.64), and most identified as female (79.2%), followed by male (16.8%), and non-binary (4.2%). Nearly half identified as White (n=13), nine identified as Black, one person identified as bi-racial, and one person identified as multi-racial. Two people identified as being Hispanic. Participants encompassed the full spectrum of instructor ranks: five were instructors/lecturers, 12 were assistant professors, six were associate professors, one person was a full professor, and one person was a senior faculty fellow. The majority (70.9%) of faculty reported being from social work depts, 12.6% were from human services, 8.3% being from nursing, one individual from public health, and one individual from engineering. More than half (66.7%) taught in both undergraduate and graduate programs, followed by 25% in undergraduate programs only, 8.3% in graduate programs only, and less than one percent teaching in other programs. Over half of the faculty (58.3%) indicated that they had been in the academy for over six years, followed by those who had been there for 2-4 years (20.8%), 4-6 years (12.5%), less than one year (4.2%) and 1-2 years (4.2%). The majority reported being at public universities, two reporting being at private institutions, one of which was a private, Christian institution. There were four institutions represented across four states: Kentucky, Indiana, North Carolina, and Pennsylvania.

Materials

Participants completed an online survey designed specifically for this study. In addition to demographic items, the survey included four open-ended questions, seven self-rated plagiarism perception items, eight self-rated self-

plagiarism perception items, eight items on detecting plagiarism (i.e., any strategies they had used to detect or address academic misconduct), 16 scaled items on student behaviors related to using previous coursework in current courses, and 16 scaled items on instructors' accusations of students of using previous coursework in current courses (Hard et al., 2006; Sweet-Holp & James, 2016). These items were asked to assess the participants' belief that students engage in the behavior, as well as if they had accused a student of that behavior. The open-ended questions were self-reported definitions of plagiarism and self-plagiarism. In addition, participants were asked to rate their knowledge of university policy on academic misconduct on a scale of 1 to 10 (Hard et al., 2006; Sweet-Holp & James, 2016).

It was felt that the demographic questions might be contributing factors to participants' perceptions of both plagiarism and self-plagiarism. These questions intended to assess participants' awareness of these concepts. The 16-scaled items on behaviors and accusations were intended to evaluate the participants' previous experiences, and account for their thoughts about what students did as well as what they had dealt with.

Perceptions of what constitutes plagiarism
Participants were asked about what constitutes plagiarism by providing a list of seven behaviors (see Bennett et al., 2011). Participants rated each behavior on 1 (I definitely do not think this behavior constitutes plagiarism) to 7 (I definitely think this behavior constitutes plagiarism) scale.

Perceptions of what constitutes self-plagiarism
Participants were asked how much they agreed with statements about student self-plagiarism by providing a list of eleven behaviors. Participants rated each behavior on 1 (totally disagree) to 7 (totally agree) scale.

Beliefs and behaviors related to academic misconduct
Participants were asked to rate 16 academic misconduct behaviors on their belief that the typical university student had participated in that behavior, and on their behavior of accusing a student of the behaviors (Hard, Conway, & Moran, 2006). These items were scaled at 1 = Never, 2 = Seldom (once or twice), 3 = Occasionally (several times), 4 = Often (5 to 10 times), and 5 = Very Often (more than 10 times). The author added an item for participants to add any misconduct examples they felt were missing.

The open-ended data were analyzed using qualitative thematic analysis (Creswell, 1998; Denzin, 2012). The aim of thematic analysis is to identify themes which capture a broad picture of a phenomenon. The analytical process involved deductive approaches and included two phases. The analysis process was nonlinear; the researchers moved back and forth between the phases. The analyses were conducted in collaboration with the authors. In order to confirm the reliability of the findings, triangulation was utilized (Denzin, 2012). In the first phase, open-ended responses were uploaded from Excel to a website for analysis of word frequency, to assess both the frequency as well as word proximity. This was completed by the first author. It was expected to see terms related to plagiarism such as cheating, copying, and phrases such as 'other people's work'. It was also expected to see these same words with self-plagiarism, in addition to the word's re-use, recycling, and the phrase, 'using one's own work'. The second phase was data coding by the second author, using the frequencies from both open-ended questions to confirm the occurrences of words that showed up in phrases compared to single words. The trustworthiness of the coding was checked by the third author. After the authors reconciled through discussion differences in coding, the tables were created, and the word images were used to illustrate the data findings. In this instance, no word codes were utilized, rather the size of the words indicated the higher frequency that word/phrase was used. Conversely, the smaller size indicated less occurrence. The goal of integrating the use of the word images was to lay out a common procedure to guide using a text analyzing software.

Data Aggregation
For aim 1, the research team analyzed individual beliefs (i.e., perception of plagiarism and self-plagiarism). For aim 2, individual sources of information on academic dishonesty and strategies used to deter academic dishonesty were analyzed. For aim 3, regarding the 16 beliefs and behaviors, responses were aggregated across the beliefs and behaviors. For self-reported misconduct (beliefs and behaviors), the faculty's mean response (on the 7-point scale) was used across the 16 behaviors as their total misconduct belief score and did the same for the behaviors. Using measures of central tendency, patterns in the data among different groups were examined. Crosstabs allowed us to examine how variables related to one another. Based on the different categories of data, the research team decided to use Chi-Square test to measure the relationship between the characteristics of the respondents and different variables, where appropriate. Some of the categories used included rank, level of teaching, and discipline.

Results
Quantitative Results
Sample characteristics can be seen in Table 1.

Table 1 *Sample Characteristics (N = 24)*

Characteristic	Faculty	
	n	*%*
Teaching Classification		
Instructor/Lecturer	5	20.0
Assistant Professor	12	48.0
Associate Professor	6	24.0
Professor	1	4.0
Senior Faculty Fellow	1	4.0
Length of Time in Academia		
< 1yr	1	4.2
1-2 years	1	4.2
2-4 years	5	20.8
4-6 years	3	12.5
More than 6 years	14	58.3
Level of Instruction		
Undergraduate	6	25.0
Graduate	2	8.3
Both	16	66.7
Other	5	0.7
Primary Discipline		
Social Work	17	70.9
Nursing	2	8.3
Human Services	3	12.6
Public Health	1	4.2
Engineering	1	4.2
Gender Identity		
Non-Binary	1	4.2
Female	19	79.2
Male	4	16.8
Age	*M*=41.78	*SD* (9.64)
Race		
Black	9	
Bi-racial	1	
Multi-racial	1	
White	13	
Ethnicity		
Hispanic	2	
Non-Hispanic	22	

Chi-square tests of crosstabs enabled the researchers to examine the association between the levels that people taught at (one program vs. both programs) and discipline (social work vs. non-social work). This was the only significant finding among demographic variables, $\chi^2 (1,24) = 12.20$, $p<.001$.

Related to perceptions of plagiarism (Hard et al., 2006), faculty most frequently endorsed that a student submitting an assignment written or completed by a student in the prior semester was plagiarism. Following behind that was downloading information from the internet and presenting it as their own. The item with the most variability was that a student submitted a correctly cited and referenced assignment twice for separate classes, as seen in Table 2.

Table 2 *Faculty perceptions of plagiarism*

|		Faculty Mean Perception	Faculty Range Perception
	1(not plagiarism) -7(plagiarism)		
1	A student submits an assignment with his or her name on it that was written or completed by a student in a previous semester	6.79 (0.58)	5-7
2	A student downloads information, text, computer code, artwork, graphics, or other material from the Internet and presents it as his or her own without acknowledging from where it came	6.25 (.98)	4-7
3	A student uses direct quotes from a source without acknowledgment of from where the quotes were taken	5.87 (1.29)	2-7
4	A student takes material from an acknowledged source, changes a word or two in each sentence, but does not use quotation marks	5.05 (1.44)	3-7
5	A student paraphrases material from a source without acknowledgment	5.16 (1.55)	1-7
6	A student prepares a correctly cited and referenced assignment and then hands part or all of that work in twice for separate classes	3.90 (2.30)	1-7
7	A student copies from other members while working in a group	5.16 (1.68)	1-7

Related to self-plagiarism (Hard et al., 2006), faculty most frequently endorsed that students could own their own ideas. The item with the most variability was that students should be able to recycle assignments between courses, as seen in Table 3.

Table 3 *Faculty perceptions of self-plagiarism*

		Faculty Mean Agreement	Faculty Range Agreement
	1 (totally disagree)-7 (totally agree		
1	Students should be able to recycle assignments from one course to another for a grade	3.5 (1.76)	1-7
2	Students should be able to submit excerpts from a previous paper, not a whole paper, in a course for a grade	5.0 (1.54)	2-7
3	Students should submit original work in a course for a grade	6.08 (1.27)	3-7
4	A student can own their own ideas	6.68 (.56)	5-7
5	There is a hierarchy of skills involved in citation practices.	6.13 (.91)	4-7
6	Faculty can determine the intention of one's writing based on an assessment.	3.85 (1.42)	1-6
7	Errors in citation are the result of deeper, cultural discrepancy between cultures of students and faculty.	4.04 (1.58)	1-7
8	Errors in citation are the result of a lack of writing of skill.	4.17 (1.69)	1-7
9	Grading is a form of validation of course work.	5.09 (1.23)	3-7
10	Students have to make as many mistakes as possible and learn from it.	3.85 (1.92)	1-7
11	Emphasis should be placed on constant iterations allowing students to acquire the ability to cope with failure and bounce back.	5.27 (1.48)	2-7

Nonparametric testing was used to determine significant differences between these items as the data were not normally distributed. After reviewing the plagiarism and self-plagiarism item endorsements, two self-plagiarism items were significantly different based on instructors' self-reported writing practices. For item 3, "Students should submit original work in a course for a grade", there was a statistically significant difference in agreement between those that were collaborators (n=9) and those who were 1st/2nd authors (n=11), H (6.25,22), p<.05. As it can be seen in Figure 1, different writing practices held different perceptions about original work.

Figure 1 *Mean Rank Scores of Submitting Original Work*
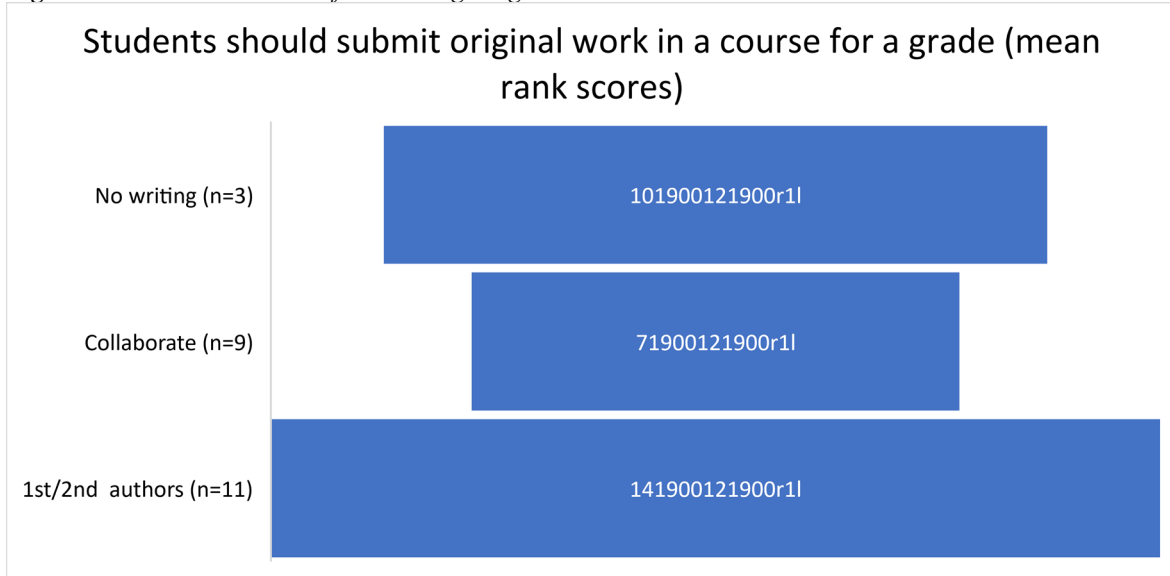
For item 10, "Students have to make as many mistakes as possible and learn from it", there was a statistically significant difference in agreement between those that did not write for publication (*n*=3) and those that were $1^{st}/2^{nd}$ authors (*n*=10), H (5.55, 22), $p<.10$). As it can be seen in Figure 2, those who did not write to publish were in more agreement with this item than those who led/authored papers.

Figure 2 *Mean Rank Scores of Students Making Mistakes to Learn*
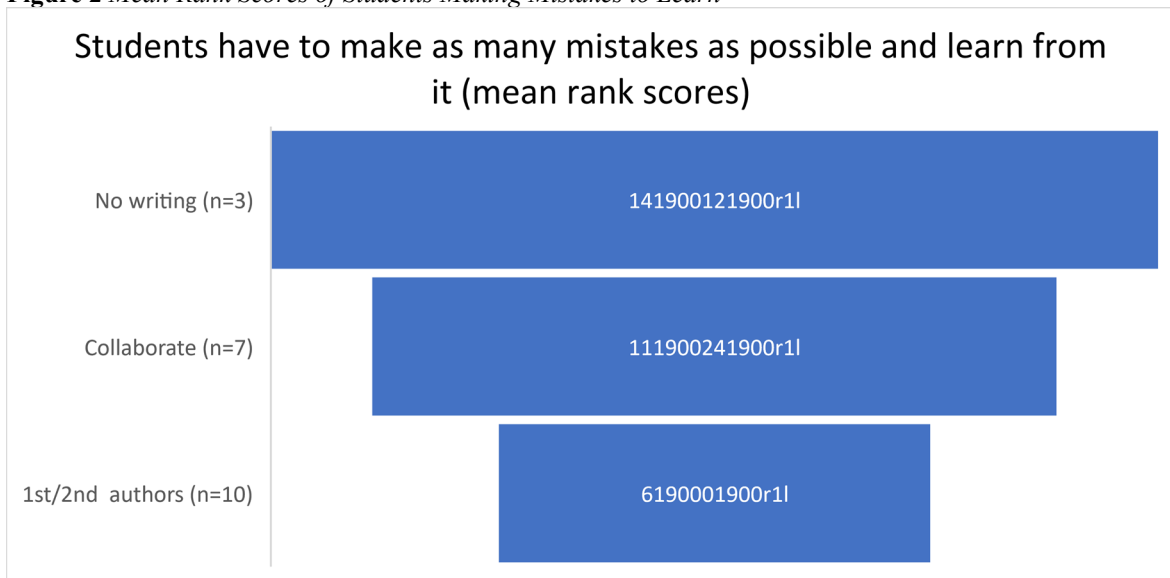
About 70% of respondents indicated that they had a range of knowledge of their university's academic misconduct policy.

When asked about strategies used to detect plagiarism, all respondents reported including a statement of academic integrity on their course syllabi (see Figure 3). A majority reported using plagiarism detection software, such as Turnitin (75%), and clear communication about the penalties associated with academic integrity issues (66%). A little over a third (37%) had pursued disciplinary action, and only two respondents quizzed students on the course policies during course orientation.

Figure 3 *Strategies Used*
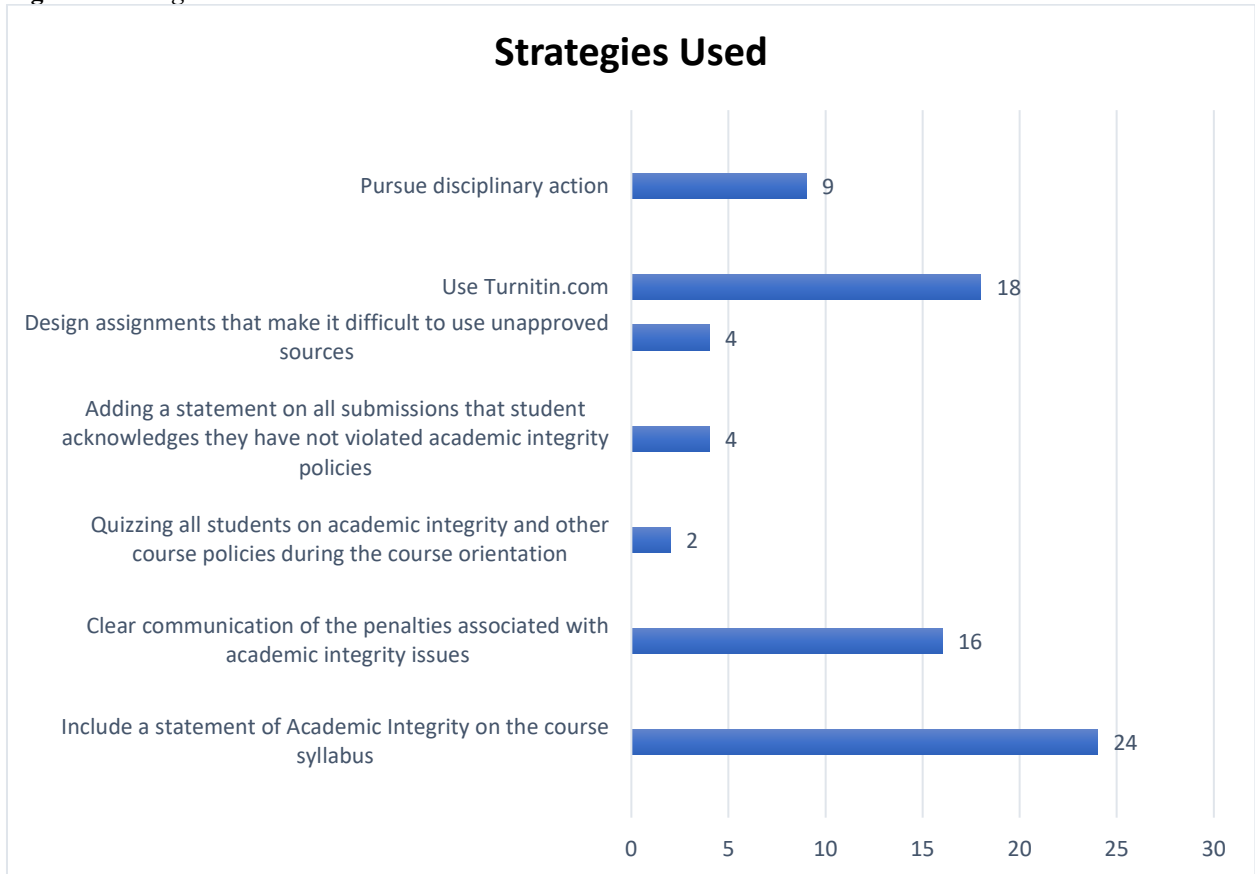
Beliefs and Accusations

Analysis was conducted on the calculation of faculty belief and corresponding response to students (accusations), as seen in Table 4. Table 4 shows the findings by displaying the questions in order from largest to smallest belief response means on a 1-5 scale. As the table shows, apart from two items, which were #8: a student submitted another's material as their own, and #13: a student copied material with proper acknowledgement for the original source, the beliefs were higher than accusations that faculty made. Item 8 had been the accusation made more frequently, and items 7,9,15, & 16 the least.

Table 4 *Faculty Beliefs and Accusations*

		Beliefs (M, SD)	Accusations (M, SD)	% Faculty accusing at least once
1	Planned and then copied from another person's paper or received unauthorized aid from another person during an examination	2.25 (.84)	1.68 (.99)	22.7
2	Did not plan to but did copy from another person's paper or received unauthorized aid from another person during an examination	2.37 (.76)	1.54 (.91)	13.6
3	Planned to and then used unauthorized materials or devices during an examination or any other form of academic evaluation and grading; for example, used signals, notes, books, or calculators during an examination when the instructor has not approved their use	2.08 (.77)	1.18 (.50)	9.1
4	Did not plan to but did use unauthorized materials or devices during an examination or any other form of academic evaluation and grading	2.16 (.81)	1.22(.52)	13.6
5	Planned to and then allowed another person to copy from your paper during an examination	2.16 (.81)	1.27 (.63)	9.1

6	Realized during an exam that another student wanted to copy from your paper, and allowed that student to copy (or did not prevent the student from copying)	2.16 (.81)	1.18 (.50)	9.1
7	Improperly acquired or distributed examinations; for example, stealing examinations before the test period or taking a copy of an examination from a testing room without the permission of the instructor	1.70 (.95)	1.04 (.21)	4.5
8	Submitted another's material as one's own for academic evaluation	1.87 (.67)	1.90 (.97)	36.4
9	Prepared work for another student to submit for academic evaluation	1.83 (.63)	1.22 (.61)	4.5
10	Worked with another student on material to be submitted for academic evaluation when the instructor had not authorized working together	2.83 (1.00)	1.72 (.93)	22.7
11	Submitted the same work, or substantially similar work, in more than one course without prior consent of the evaluating instructor(s).	2.91 (1.01)	1.86 (1.03)	22.7
12	Used unauthorized materials or fabricated data in an academic exercise; for example, falsifying data in a research paper or laboratory activity	1.87 (.89)	1.22 (.42)	22.7
13	Copied sentences, phrases, paragraphs, tables, figures or data directly or in slightly modified form from a book, article, or other academic source without using quotation marks or giving proper acknowledgment to the original author or source	3.16 (.96)	3.22 (1.37)	18.2
14	Copied information from Internet websites and submitted it as your own work	3.16 (.91)	2.86 (1.42)	31.8
15	Bought papers for the purpose of turning them in as your own work	2.04 (.95)	1.13 (.46)	4.5
16	Sold or lent papers so another student could turn them in as his or her own work	1.87 (.85)	1.04 (.21)	4.5

Univariate analysis of the summed scores of reported perceptions and accusations were performed to test assumptions for parametric testing. Assumptions of normality were met; therefore, independent t-tests were used to investigate group differences on perceptions and accusation scores. To examine the correlation between variables, Spearman's rho and Pearson correlations were run to explore the strength and direction of the relationship between variables. Given the small sample size, correlation analyses were run to examine both the ranks and values of the data (Rovetta, 2020). Race and writing practices showed to be significant factors for perceptions of self-plagiarism among students. Based on the means of White (M=34.15, SD=10.61) and non-White respondents (M=40.5, SD=7.96), non-White respondents had a higher perception of academic misconduct than White respondents (t(21) =-1.57; p<.10). There was a significant difference in writing practices and perceptions (F(2,21) = 2.52, p=.10). Post-hoc analyses revealed that those who collaborated on manuscripts differed in their perception of academic misconduct (M=41.3, SD=11.08) compared to people who were 1st/2nd authors (M=32.18, SD=7.35). When examining perceptions by age, younger participants had higher perceptions of academic misconduct, and older participants had lower perceptions (r=-.38, p<.10). Age explained 14.4% of the variance in perceptions.

When examining reported perceptions of self-plagiarism by number of preventive strategies used (summed score of total strategies used), the fewer strategies used, the higher the perception of academic misconduct (r= -.48, p<.05). The number of strategies used explained 23.0% of the variance in perceptions of self-plagiarism among students.

Based on reported accusations of students' behaviors, instructors who had taught for six or more years had higher mean scores of accusations (M=29.16, SD=7.8) compared to those with less teaching time (M=20.8, SD=5.15), and this difference was significant (t(20) =2.89, p<.05). Those who identified as White had higher mean scores of accusations (M=27.00, SD=7.85) compared to those who identified as non-White (M=22.37, SD=7.92), and this difference was significant (t(19) =1.30, p=.10). Older participants had a higher mean of accusations of academic misconduct (r= .40, p<.10). Age explained 16.0% of the variance in behaviors.

To determine if there was a change among respondents, the overall mean scores of perceptions (M=36.13, SD =10.05) and accusations (M=25.36, SD=7.84) were compared using dependent-samples t-test (t(21)=4.20, p<.01). The research team examined each item to explore differences between perceptions and accusations. There were several changes in perceptions and behaviors that were significant, as listed in Table 5. These results provide evidence that faculty's reported perceptions of academic misconduct are much higher than their reported accusations of academic misconduct.

Table 5 *The Difference Between Faculty Perceptions and Accusations*

	Question	Significance
Item 3	Planned to and then used unauthorized materials or devices…	p=.10
Item 4	Did not plan to but did use unauthorized materials or device	p=.05
Item 7	Improperly acquired or distributed examinations…	p=.00
Item 9	Prepared work for another student to submit for academic evaluation	p=.06
Item 12	Used unauthorized materials or fabricated data in an academic exercise	p=.01
Item 16	Sold or lent papers…	p=.08

Qualitative Results

A grounded theory approach was utilized to analyze text responses from the open-ended electronic survey questions, asking respondents to provide their definition of plagiarism and self-plagiarism (Creswell,1998). There were 22 responses for the definition on plagiarism and 20 for self-plagiarism. The first and second author independently read the responses and created categories for the responses as the first stage of content analysis (Neuendorf, 2002). After keywords and phrases were identified, secondary coding was performed to highlight the discovered themes. The other two authors reviewed themes and rated the themes as agree/disagree. There was 100% agreement of both the content of the themes and the overall theme itself. The authors came together and developed tables to illustrate the frequency of top words and phrases (see Tables 6 and 7).

Table 6 *Top Plagiarism Words and Phrases*

Top Words		Two-Word Phrases		Three-word Phrases	
Word	Frequency	Phrase	Frequency	Phrase	Frequency
Work	11	Someone else's	4	Copying someone else's	3
Copying	9	Copying someone	3	Someone else's work	3
Without	6	Else's work	3	As one's own	3
Credit	6				

Table 7 *Top Self-Plagiarism Words and Phrases*

Top Words		Two-Word Phrases		Three-word Phrases	
Word	Frequency	Phrase	Frequency	Phrase	Frequency
Work	11	The same	4	Submitting the same	2
Using	5	More than	2		
Previously	4	Was presented	2		
Without	4	Submitting the	2		

Due to the amount of duplication in words and phrases, the authors agreed to use a semantic tool which would provide a view of the definitions. The authors used an online content analyzer and entered both sets of responses into Text Analyzer (Online-Utility.org, n.d.) first, followed by Word Counter. Both are online tools that can be used for content analysis, specifically, word frequencies and phrase frequencies. Text Analyzer did not reveal substantive information about the data, and Word Counter was the preferred option for analysis, yielding both two- and three-word phrases, a word image, and the ability to compare the word files for similarities and differences.

The word cloud images show words used most often in the responses and assist in deriving key ideas based on the images. When defining plagiarism, the following words were most frequently used: copying, work, without credit, ideas, and else's. When defining self-plagiarism, the following words were used: work, without, using, previously, and replication. By using the generated image from the tools, the words used more often were bigger, and the

words used less often smaller. Figure 4 illustrates results for the definition of plagiarism, and Figure 5 for the definition of self-plagiarism.

Figure 4 *Results of Plagiarism Words*

Figure 5 *Results of Self-Plagiarism Words*

Discussion

While there are numerous studies of academic misconduct and acts of plagiarism, the majority of this research is based on retroactive experiences of faculty or students. Even though the results of the study are not generalizable, the purposive sampling strategy provided an opportunity to gain valuable insight on the practices of different types of teaching faculty, as well their reported perception and behaviors.

Similar to previous studies (Amzalag et al., 2021; Fontaine et al., 2020), our sample was aware of their institutions academic misconduct policy, used plagiarism detection software, and had agreement on what constitutes plagiarism However, their perceptions about students being able to recycle assignments from course to course varied quite a bit. The quantitative analyses did reveal that faculty who did not participate in writing as a scholarly activity compared to those that did, were different in their perceptions about self-plagiarism. This brings to light that instructors who participate in scientific writing may hold their students to the same or similar standard. Along this line, this study suggests that greater exploration of how self-plagiarism is seen; as a means to doing less work or a time saving strategy of using one's resources? If faculty perceptions of self-plagiarism are known, does that influence how they assess students' work?

By asking plagiarism questions first, the hope was that participants would recognize the difference in actions related to self-plagiarism. Overall, faculty agreed that students submitting other's work as their own was indeed plagiarism, with a mean score of 6.69. What is interesting is that faculty disagreed about *how* students should be able to recycle their coursework. The mean score was 3.5, which indicated disagreement, yet the actual scores ranged from 1 (totally disagreed) to 7 (totally agree). This is another contribution of this study, in that it could lead to the investigation of the interpretation about recycling work and how it varies among faculty. This echoes earlier discussion about the intent of recycling work and its utility.

The findings encourage future studies to address a couple of areas: what are differences by age, race, use of detection strategies, and authorship with perceptions of self-plagiarism? And What is the variability in consensus about what constitutes student self-plagiarism? This study found that higher perceptions of academic misconduct

existed among respondents who identified as non-White, used fewer detection strategies, and were younger. When asked about *accusations* made against student behaviors, participants who were older, had more teaching experience, and identified as White made more accusations of student behaviors. Future studies might also consider doing additional work to tease apart plagiarism and self-plagiarism, as they mean something different yet might be grouped together. This study found that perceptions were higher than accusations of academic misconduct, yet it wasn't established how much difference there was between the two concepts.

Implications for Practice and Future Research
Results from this study imply several strategies that can be addressed with faculty when revisiting academic integrity issues post pandemic onset. Considerations for how faculty engage in authorship should be accounted for when establishing policies or protocol for assessing students and academic misconduct issues. Curriculum committees should help faculty establish parameters for student behaviors that involve recycling prior work. This will help instructors see the differences between students not wanting to do work and recycling information for knowledge development. This might require departments to conduct annual or bi-annual assessments using faculty data to categorize recycling behaviors and identify parameters for diversion or intervention if they foster or support self-plagiarism. It is also important that instructors who have writing components in their courses communicate with students what the expectation for knowledge development in the course is as it relates to existing knowledge. Scientific writers spend hours, days, and weeks finessing their skills in writing and citing, and students are being held to standards that mirror this arduous process. That said, if a student spent a course perfecting their citational skills, how can those skills be transferred to a new course and built upon? Instructional and institutional policies are written to ensure compliance, therefore, having this much variability on what students can and can't do should be examined more closely.

Perhaps it is the lens of which instructors are reviewing student materials that needs adjustments. Is the goal of identifying that a student has recycled their work deemed a negative occurrence? There are quite possibly more questions raised by this research than can be answered by a single study.

Limitations and Future Research
The current study had several limitations. Because of the research design, we cannot make any inferences about the data to other populations. This was a descriptive study, and while it sheds light on variability of views about aspects of academic misconduct, it was taken from a small, convenience sample and does not lead to generalizable results. This sample was diverse, with just under half being racially diverse, representing various titles, and was geographically concentrated in Southern and Midwest areas. While small, there were benefits from the insight gained from the sample. Along this line, being correlational rather than experimental, we cannot be sure about the nature of cause and effect.

Second, we recruited from within one unit at one university and shared the flyer with two internal research groups and word of mouth. Our participants, while knowledgeable of plagiarism and academic misconduct issues, could have responded differently in important ways that others who were not reached do. For example, our participants may represent the more engaged instructors at one site, possibly limiting the generalizability of these findings. This study is also limited by the use of measures selected for this study. While the measures utilized were based on previous studies, future studies with larger samples will shed light on their psychometric properties and add in questions that remain unanswered. For example, why is student recycling important? When can it become problematic? Should students master citational practices as a part of their academic training or professional development? As it relates to student recycling, should students refer to their previous work in a way that is similar to authors citing themselves? What is more important, detection or prevention? Third, the difference between disciplines should be further explored. Ideas for how to manage misconduct will vary between disciplines. For example, disciplines that require the use of programmable calculators will experience difference types of misconduct compared to those who test using computers compared to those who require some type of demonstration, collaboration, or hard copy assessment. Lastly, the question that remains is how can instructors increase mastery of material and prevent self-plagiarism? It has been mentioned that both plagiarism and self-plagiarism prevention is more important than detection (Bennett et al., 2011). The authors believe that this study has made a contribution and future research is needed. Important questions remain. Student perceptions and behaviors need to be explored.

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