

FACULTY PERSPECTIVES OF ACADEMIC INTEGRITY DURING COVID-19: A MIXED METHODS STUDY OF FOUR CANADIAN UNIVERSITIES

SARAH ELAINE EATON
UNIVERSITY OF CALGARY

BRENDA M. STOESZ
UNIVERSITY OF MANITOBA

KATHERINE CROSSMAN
BOW VALLEY COLLEGE

KIM GARWOOD
STILETTO CONSULTING

AMANDA MCKENZIE
UNIVERSITY OF WATERLOO

Abstract

Faculty members are crucial partners in promoting academic integrity at Canadian universities, but their needs related to academic integrity are neither well documented nor understood. To address this gap, we developed a mixed methods survey to gather faculty perceptions of facilitators and barriers to using the existing academic integrity procedures, policies, resources, and supports required to promote academic integrity. In this article, we report the data collected from 330 participants at four Canadian universities.

Responses pointed to the importance of individual factors, such as duty to promote academic integrity, as well as contextual factors, such as teaching load, class size, class format, availability of teaching assistant support, and consistency of policies and procedures, in supporting or hindering academic integrity. We also situated these results within a micro (individual), meso (departmental), macro (institutional), and mega (community) framework. Results from this study contribute to the growing body of empirical evidence about faculty perspectives on academic integrity in Canadian higher education and can inform the continued development of existing academic integrity supports at universities.

Keywords: academic integrity, academic misconduct, Canada, faculty, higher education, post-secondary, COVID-19

Résumé

Les membres du corps professoral sont des partenaires essentiels dans la promotion de l'intégrité académique dans les universités canadiennes. Toutefois, leurs besoins en cette matière ne sont ni bien documentés ni bien compris. Afin de combler cette lacune, nous avons recueilli, grâce à une méthode de recherche mixte, les perceptions des professeurs quant aux obstacles et aux facilitateurs en lien avec l'utilisation des procédures, politiques, ressources et services de soutien pour la promotion de l'intégrité académique. Dans cet article, nous rapportons les données recueillies auprès de 330 participants dans quatre universités canadiennes. Les réponses soulignent l'importance des facteurs individuels tels que le devoir de promouvoir l'intégrité académique. De plus, des facteurs contextuels tels que la charge d'enseignement, la taille et le format de la classe, la disponibilité du soutien d'assistants d'enseignement et la cohérence des politiques et des procédures peuvent soutenir ou entraver l'intégrité académique. Nous avons également situé ces résultats dans un cadre micro (individuel), méso (départemental), macro (institutionnel) et méga (communautaire). Les résultats de cette étude contribuent à mettre en lumière les perspectives des professeurs sur l'intégrité académique dans l'enseignement supérieur canadien. Ils peuvent également donner un aperçu des besoins en développement professionnel et du soutien nécessaire dans les universités.

Mots-clés : intégrité académique, inconduite académique, Canada, corps professoral, enseignement supérieur, postsecondaire, COVID-19

Introduction

Student academic misconduct persists as a complex issue in higher education, and one that has gained renewed attention during COVID-19. Historically, academic integrity has been viewed as a matter of student conduct. However, as research into academic integrity has developed, scholars have called for a more holistic and multi-stakeholder approach in which students, faculty, administrators, and other stakeholders within the learning institution each have different and complementary responsibilities (see Bertram Gallant, 2008; McNeill, 2022; Morris & Carroll, 2016; Wolsky & Hamilton, 2022). In this research, we attended specifically to the perceptions and needs of faculty members from four Canadian universities, to highlight the importance of the role they play not only in reporting student academic misconduct, but also in upholding academic integrity as an essential aspect of teaching and learning.

Approaches to course design and assessment, beliefs and attitudes about student learning, and everyday interactions within and between students, faculty, and administrators all influence the culture of academic integrity within institutions of higher education. Faculty members in particular are frequently viewed as institutional leaders who bear responsibility for upholding core academic values (Gottardello & Karabag, 2020). Protecting academic integrity, however, is one of many roles that faculty play in an increasingly complex and demanding higher education environment. These challenges have been compounded by the COVID-19 pandemic, which has required faculty to shift to emergency remote instruction to in-person instruction and back again. The pandemic has also heightened awareness of academic integrity and concern about academic misconduct.

To better support faculty in fostering academic integrity and preventing and addressing academic misconduct, we must first understand the specific issues and challenges they face in these efforts. Research focusing on faculty perspectives and needs with respect to academic integrity is limited, particularly in Canada; therefore, the purpose of the current study was to address this gap in the existing knowledge base. Using an online survey distributed at four Canadian universities, the current study sought to understand the barriers and facilitators that faculty encounter in using the policies, procedures, and resources currently available to them. In addition, the survey invited participants to share their thoughts on academic misconduct during the COVID-19 pandemic.

In the sections that follow, we provide an overview of extant literature, highlighting contributions from the Canadian context. Then, we provide the theoretical framing for the study, using a systems approach known as the 4M framework. This framework is based on classic systems theory, but has been adapted by Canadian scholars (specifically, Kenny et al., 2016; Poole & Simmons, 2013; Simmons, 2016) to better understand teaching and learning context in this country. In the methods section, we detail the development of an original survey instrument designed for this study and how it was validated and then implemented. In the results section, we show how faculty members from the four participating universities responded to closed- and open-ended questions of the survey, sharing examples of faculty voices. Finally, we conclude with a call to action for a variety of improved supports for faculty members.

Literature Review

Faculty members are essential to establishing and maintaining integrity in higher education (Bertram Gallant, 2008; Christensen Hughes & McCabe, 2006a, 2006b; Crossman, 2019; Eaton, 2021; McNeill, 2022; Wolsky & Hamilton, 2022), but they often disagree about how to define academic integrity and academic misconduct, resulting in inconsistent reporting of breaches (Eaton, 2021; Eaton et al., 2021; Walker, 1998). Variations in faculty experiences and beliefs can contribute to discrepancies between official university policies and enactment of them, including misconduct reporting practices. Faculty may avoid reporting academic misconduct if they feel a breach was unintentional or caused by personal stress (Paterson et al., 2003; Wolsky & Hamilton, 2022) or if they perceive penalties as too lenient or too harsh (Hunter & Kier, 2022; MacLeod, 2014).

Inconsistent faculty understandings of and approaches to academic integrity present barriers to interpreting and implementing policies (Eaton, 2021; Eaton et al., 2020; MacLeod, 2014; McNeill, 2022; Taylor et al., 2004; Zivcakova et al., 2012). Although previous studies have revealed inconsistencies between policy and practice (MacLeod, 2014; Neufeld & Dianda, 2007), there is a gap in understanding how perceptions of misconduct shape faculty approaches to it (Hudd et al., 2009). The disconnect between policy and practice may also be due to other issues that faculty face, such as growing class sizes, increasing workloads, reduced time (Altbach, 1999; Hamilton & Wolsky, 2022; Nakano et al., 2021), expanding research and supervision responsibilities, and pressing administrative duties (Grant-Vallone &

Ensher, 2017; Matthews, 2014). Other complicating factors related to academic integrity and managing teaching responsibilities include mediating various social and cultural discourses as student populations become more diverse (Statistics Canada, 2021) and navigating cumbersome bureaucracy (Eaton et al., 2020; Openo & Robinson, 2021; Thomas, 2017). Growing pressures in teaching, research, and service, and the psychological discomfort of reporting academic misconduct (Openo & Robinson, 2021) may culminate in the well-documented phenomenon of faculty burnout (Sabagh et al., 2018; Sabagh et al., 2021; Taylor & Frechette, 2022).

The COVID-19 pandemic has further increased challenges related to academic misconduct in higher education around the world, including Canada (Eaton, 2020). In a survey conducted by *The Chronicle of Higher Education* (2020), the proportion of faculty reporting extreme stress jumped from 9% in Fall 2019 to 33% in Fall 2020, which can be largely blamed on the pandemic and the pivot to emergency remote instruction. Contributing to these spikes in reported faculty stress is the heightened awareness about academic integrity and concern about academic misconduct. Remote instruction and assessment have strained faculty and institutional efforts to address academic misconduct and have brought these issues to the forefront of departmental and institutional discussions (Eaton, 2020; White, 2020). More than ever, faculty and administrators need institutional support in their efforts to instill academic integrity values, such as those articulated by the International Center for Academic Integrity (2021) and to respond effectively to academic misconduct when it occurs.

Theoretical Framing

We framed the current study within systems leadership theory, expressed as the 4M framework as applied to teaching and learning contexts (Eaton, 2021; Hunter & Kier, 2022; Kenny et al., 2016; Poole & Simmons, 2013; Simmons, 2016), and similar framings have been applied in previous academic integrity scholarship (Bertram Gallant, 2008). The 4M framework is derived from general systems theory (von Bertalanffy, 1968) as a way to explain complex and dynamic teaching and learning systems. Within the 4M framework, educational systems are examined from micro (individual), meso (departmental), macro (institutional), and mega (community) levels. Individuals are viewed as actors who exist within nested units of an organizational system.

This framework is particularly relevant to the case of

academic integrity policy and practice, as scholars have called for multi-stakeholder approaches that include supports for students, staff, faculty, and administrators, with each stakeholder group holding different and complementary responsibilities within the learning organization (e.g., Bretag et al., 2001; Morris & Carroll, 2016). Within a systems theory framing, the responsibility for upholding academic integrity extends beyond an individual (micro-level) responsibility and is instead repositioned within a larger community (mega) framework in which actors at every level of the system hold responsibilities not only for themselves, but also to the system itself.

Present Study

To support faculty in fostering academic integrity, we must first seek to understand the issues and challenges they face in these efforts. Most academic integrity literature is focused on students' perceptions and experiences, with less inquiry into those of faculty (Eaton, 2021). Research that addresses faculty perspectives often contrasts them to student perceptions (Blau et al., 2018; Kim & LaBianca, 2018) or highlights the lack of consistency among faculty about how to define academic integrity and address misconduct (Clegg & Flint, 2006; Michalak et al., 2018; Paterson et al., 2003). Other research proposes or evaluates approaches to promote integrity or discourage misconduct (Löfström et al., 2015), or focuses on faculty responses to misconduct (Harper et al., 2019). Few studies since Christensen Hughes and McCabe's (2006a, 2006b) multi-institutional Canadian study have invited reflection by faculty about how they understand their roles in academic integrity, or the challenges and opportunities encountered in their efforts to promote and maintain it. Using an online survey distributed at four Canadian universities, the current study examined faculty perceptions of academic integrity, specifically the presence of barriers, facilitators, and continued needs for support to promote academic integrity and prevent academic misconduct. In addition, the study invited participants to share their thoughts on academic misconduct during the COVID-19 pandemic. The findings provide valuable insight to guide the next steps of faculty, administrators, and policy makers toward a culture of academic integrity in Canadian higher education, and make an important contribution to the body of knowledge on this topic.

Methodology

Qualitative and quantitative survey data were gathered from faculty members at four publicly funded universities in three Canadian provinces.

Research Questions

This article focuses on a portion of a larger study that examined the following overarching research question: What roles do faculty members see themselves playing to support academic integrity? Here we report findings addressing two sub-questions: What supports do faculty members need to promote academic integrity? What do faculty members see as the facilitators and barriers to using the existing academic integrity procedures, policies, and resources?

Study Context

The estimated population for this study was 6,076 (University of Calgary, 2019; University of Guelph, 2020; University of Manitoba, 2018; University of Waterloo, 2019) (see Table 1). This number is imprecise, as the number of contingent faculty at two institutions could not be determined—it is impossible to know the number of faculty members on leave at a given time, and faculty members may begin or terminate their employment at any point (e.g., retirements). Thus, the number of employed faculty at an institution can vary at any given moment. Definitions of academic staff also varied between institutions. For example, some institutions include academic librarians and/or educational developers as faculty members. For the purposes of our study, we used the classifications of faculty members as defined by each institution.

Measure

We developed a survey with closed-ended (single-selection and multi-selection) and open-ended questions to better understand faculty members' experiences promoting academic integrity and preventing and dealing with academic misconduct (Eaton et al., 2021). Items from existing scales (Coalter et al., 2007; Cook et al., 1990; Keith-Spiegel et al., 1998; MacLeod, 2014; McCabe et al., 2012; Tabsh et al., 2017) were selected and modified as needed, and new survey items were developed when existing items could not be found in the literature. To reach consensus about the face validity of the survey items (Hardesty & Bearden, 2004; Nunnally & Bernstein, 1994), a collaborative and iterative feedback process between research team members was employed. Survey development took place from April to December 2019, with additional modifications made in 2020. The survey was then constructed in Qualtrics survey software.

A pilot study, employing a think-aloud procedure, was conducted in February 2020 with six faculty members to help us determine whether items were interpreted consistently across participants as intended by the research team (Hardesty & Bearden, 2004; Nunnally & Bernstein, 1994). Based on the feedback, we improved the phrasing of a few items. The final survey included 33 items in seven areas: (1) demographics (eight items); (2) knowledge of academic integrity (four items); (3) faculty roles for academic integrity (five items); (4) discrepancies between roles (three items); (5) awareness of existing policies, procedures, and resources (six items); (6) support needs for academic integrity (three items); and (7) facilitators and barriers to promoting academic integrity (four items). We report

Table 1

Study Population: Number of Academic Staff at Four Participating Institutions

Institution	Population*
University of Calgary	Over 1,800 full- and part-time academic staff in 14 faculties
University of Guelph	830 full-time faculty ^a in 34 departments of 5 colleges
University Waterloo	2,135 full- and part-time teaching academic staff in 21 faculties/schools
University of Manitoba	1,311 full-time faculty in 6 faculties
<i>Total</i>	6,076

^a Number of part-time academic staff could not be determined.

results from areas one, six, and seven. We also added one additional question related to COVID-19 to the final survey. A copy of the survey instrument is publicly available online (see Eaton et al., 2021).

Procedures

Recruitment and data collection occurred in October and November 2020 (during COVID-19). Participation was unincited, voluntary, and anonymous, with informed consent provided prior to accessing the final survey. This study was approved by the research ethics boards at each participating university.

Data Cleaning and Analysis

Data from 447 respondents were exported from Qualtrics to SPSS and Excel software for quantitative analysis in December 2020. We excluded data for individuals who abandoned the survey without consenting to participate ($n = 42$), identified as belonging to another institution ($n = 3$), did not provide data beyond the indication of consent ($n = 7$), self-identified as graduate students, post-doctoral fellows, teaching assistants, and research assistants ($n = 46$), or did not report their academic positions ($n = 19$). The final sample size was 330. Not all participants answered all questions. Open-ended text responses were recategorized when the text aligned with an existing response option. Frequencies of responses to closed-ended items were calculated and reported.

Results

The response rate for our survey was 5.43% (330/6,076), which is comparable to other studies using online surveys investigating faculty responses to academic integrity. For example, the faculty response rate of an online academic integrity survey (also administered using Qualtrics) in Australia was 7.32% (Harper et al., 2019).

Demographics

Of the 330 individuals in our final sample, 17.0% were from the University of Calgary, 20.0% from the University of Guelph, 30.9% from the University of Manitoba, and 32.1% from the University of Waterloo. Respondents identified as men (43.3%), women (50.0%), or self-described or pre-

ferred not to answer (5.1%). Respondents were professors and full-time faculty (81.5%), tenured (46.7%), on the tenure track (14.8%), not on a tenure track but had ongoing appointments (13.9%), not on a tenure track and their appointment was temporary (19.1%), retired (0.8%), or other (0.9%). A broad range of disciplines was represented, with the sciences (15.8%), medicine, health sciences, nursing, kinesiology (14.5%), and architecture and engineering (12.1%) rounding out the top three. Small percentages of participants were associated with education, environment and geography, interdisciplinary studies, and veterinary medicine. Less than one-fifth of our sample indicated having < 5 years of post-secondary teaching experience, and more than one quarter reported 20 or more years of teaching experience (see Table 2). In the sections that follow, data gathered from open-ended questions are reported alongside quantitative findings to provide additional context and insight.

Facilitators and Barriers to Promoting Academic Integrity

When asked which factors facilitated the promotion of academic integrity and prevention of academic misconduct at their institutions, respondents indicated the importance of instilling academic integrity as a campus-wide value, having dedicated offices and staff to promote academic integrity and provide education, and easy-to-read policies (see Table 3). Other responses included references to support from leadership and colleagues, individual educator efforts to use alternative assessment formats to reduce cheating opportunities, and personal commitments to learning and leading by example. Twelve respondents were disappointed and discouraged by academic integrity efforts on their campuses, indicating that it was “best to turn a blind-eye to most small misdeeds so I won't get fired,” or “There's plenty of knowledge and promotion, but it doesn't seem to matter to students.”

Time constraints, difficulty preparing case files and proving allegations, and inconsistencies in implementing policy were the three most frequently cited barriers to promoting academic integrity and preventing misconduct (see Table 3). Other responses elaborated on these barriers, pointing to institutional culture ($n = 11$) and that consequences for academic misconduct were not severe enough ($n = 3$). One respondent noted that “cultural norms of some departments where entire cohorts of students engage in

Table 2

Study Participants by Institution, Position, and Years of Post-Secondary Teaching Experience

	University of Calgary		University of Guelph		University of Waterloo		University of Manitoba		All Institutions	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Position										
Full professor	25.0	14	28.8	19	21.6	22	18.9	20	22.7	75
Associate professor	26.8	15	31.8	21	19.6	20	29.2	31	26.4	87
Assistant professor	17.9	10	16.7	11	21.6	22	8.5	9	15.8	52
Lecturer, instructor, librarian	14.3	8	9.1	6	4.9	5	34.0	36	16.7	55
Sessional instructor	16.1	9	13.6	9	32.4	33	9.4	10	18.5	61
<i>Total</i>		56		66		102		106		330
Experience (years)										
< 5	12.5	7	19.7	13	20.6	21	9.4	10	15.5	51
5-9	23.2	13	18.2	12	14.7	15	25.5	27	20.3	67
10-14	16.1	9	22.7	15	15.7	16	25.5	27	20.3	67
15-19	16.1	9	19.7	13	17.6	18	14.2	15	16.7	55
20+	30.4	17	18.2	12	31.4	32	24.5	26	26.4	87
Missing	1.8	1	1.5	1	0	0	0.9	1	0.9	3
<i>Total</i>		56		66		102		106		330

academic misconduct as a COLLECTIVE” (emphasis in original) serve as major barriers to promoting academic integrity. Three respondents indicated that barriers included the emotional toll of dealing with issues of misconduct, with one respondent noting that there is little to protect them from student reprisals:

I caught some pretty flagrant cheating and when I called out the students, they literally mobbed against me. My evaluations [were] horrifying, they created a campaign against me on ratemyprofessor, they told lies about stuff that happened in the course, they got their parents to call the PRESIDENT of the university, it left me literally afraid to teach. [Emphasis in original]

Statements such as these contrast with those of instructors who felt that “promoting academic integrity is absolutely part of the job of teaching. I do not feel impeded at all” and “I’m doing my job well and there are plenty [of] resources in our university to promote the target policy.”

Supports Needed to Uphold Academic Integrity

Across all four institutions, respondents indicated that reduced teaching loads, more campus-wide promotion of academic integrity, and availability of educational resources would help them better encourage academic integrity (see Table 4). “Other” responses indicated that changes in institutional culture (i.e., reporting consistency, ethical behaviours among colleagues, administration that takes the issue seriously; *n* = 23), increased penalties or enforcement (*n* = 10), more time (*n* = 7), and exam proctoring support (*n* = 6) would help faculty encourage academic integrity. Regarding institutional culture, two respondents called for “Academic leaders and fellow faculty members ensuring they are not openly plagiarizing or openly discussing copying others’ work (research proposals) as an accepted normal practice” and “Having an institution where academic integrity actual[ly] matters.” Another respondent noted the

Table 3

Facilitators and Barriers to the Promotion of Academic Integrity and Prevention of Academic Misconduct by Institution

	University of Calgary		University of Guelph		University of Waterloo		University of Manitoba		All Institutions	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Facilitators										
Academic integrity is a key value instilled campus-wide at my institution	37.5	21	53.0	35	38.2	39	36.8	39	40.6	134
Academic integrity is included in faculty orientation information, presentations, and events	28.6	16	28.8	19	36.3	37	23.6	25	29.4	97
Access to professional development at teaching and learning centres	41.1	23	19.7	13	41.2	42	22.6	24	30.9	102
Policies are easy to read and understand	33.9	19	43.9	29	37.3	38	25.5	27	34.2	113
Offices or staff dedicated to the promotion and education of academic integrity	37.5	21	28.8	19	35.3	36	34.9	37	34.2	113
Other (e.g., supportive leaders and colleagues)	7.1	4	9.1	6	9.8	10	4.7	5	7.6	25
<i>N</i>		56		66		102		106		330
Barriers										
Time constraints	46.4	26	47.0	31	35.3	36	38.7	41	40.6	134
Lack of understanding of the differences between academic integrity and misconduct	14.3	8	7.6	5	8.8	9	8.5	9	9.4	31
Inconsistencies in implementing policy	48.2	27	24.2	16	26.5	27	27.4	29	30.0	99
Fear of reprisal from students (i.e., poor course evaluations)	30.4	17	16.7	11	14.7	15	18.9	20	19.1	63
Deterred by potential conflict and emotional/psychological investment	28.6	16	22.7	15	25.5	26	19.8	21	23.6	78
Lack of training to handle academic misconduct	25.0	14	13.6	9	18.6	19	15.1	16	17.6	58
Lack of offices and staff dedicated to investigating and adjudicating cases of misconduct	23.2	13	10.6	7	15.7	16	9.4	10	13.9	46
Lack of interest (i.e., this is not my job)	10.7	6	6.1	4	9.8	10	5.7	6	7.9	26
Difficulty preparing case files and proving guilt	42.9	24	31.8	21	27.5	28	29.2	31	31.5	104

	University of Calgary		University of Guelph		University of Waterloo		University of Manitoba		All Institutions	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Lack of support from administration	28.6	16	18.2	12	16.7	17	9.4	10	16.7	55
Exclusion from conversations about sanctions	14.3	8	18.2	12	13.7	14	11.3	12	13.9	46
Belief that penalties are too harsh	3.6	2	4.5	3	7.8	8	6.6	7	6.1	20
Disappointment from previous academic misconduct penalties or decisions	35.7	20	28.8	19	13.7	14	19.8	21	22.4	74
Other	7.1	4	6.1	4	6.9	7	2.8	3	5.5	18
<i>N</i>	56		66		102		106		330	

Note. Bold entries indicate the three most common responses across all institutions.

need for more capacity to connect with students personally:

What I feel I need most is the time to build a community/relationship with students so that they don't feel the need to go elsewhere for support. Sometimes this is difficult when there are a lot of students in my classes, but not always... sometimes the community develops despite large class sizes.

However, the same respondent added that the pandemic made connection building more challenging:

Not sure how online teaching will affect the process of community building. It might be better for students who routinely miss class (they might feel a relationship by watching the class videos?), but I worry that for most students, the lack of face-to-face engagement will make it worse. The opportunities for casual interactions are much reduced.

Another respondent indicated that the demands placed on sessional instructors are high and systemic barriers impact student learning:

I barely have time to just teach the content. What I need is a shift in the academic system that changes how we even evaluate students so that they can learn and

cannot cheat. But how do I do that with no time, and little pay? We've standardized everything for efficiency, and students (and us) are paying the price.

Across all institutions, respondents indicated that reduced teaching loads, more training on preventing academic misconduct, and more student resources would help them better prevent academic misconduct (see Table 4). "Other" responses showed concern about the lack of technical or exam support (*n* = 17) and institutional culture (e.g., consistency in reporting, administrators and students taking academic integrity seriously; *n* = 22). One respondent expressed concern about the culture of academic cheating:

Again, preventing misconduct in undergrads (especially first and second year students) is like trying to shove water back into a bottle as you are pouring it out.... I'm not sure its [sic] the instructors that need the support. In my department we do a LOT to try to reduce misconduct, but the students don't have much incentive to be honest. The consequences of misconduct are so small and ineffective, and that's if we can even catch it. Honestly even my worst and most obvious incidents left my students with a 10% grade deduction on the assignment...how is that a deterrent? Especially when all their classmates and friends are getting away with it. We have culture of misconduct in our department. We need to change the expectations that misconduct can help you get a degree.

Table 4

Supports Needed to Better Encourage Academic Integrity and Prevent Academic Misconduct

	University of Calgary		University of Guelph		University of Waterloo		University of Manitoba		All Institutions	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Supports to promote academic integrity										
Educational resources (e.g., tutorials, videos, quizzes, posters)	37.5	21	43.9	29	44.1	45	22.6	24	36.1	119
Professional development	21.4	12	18.2	12	19.6	20	11.3	12	17.0	56
Campus-wide promotion	46.4	26	48.5	32	45.1	46	38.7	41	43.9	145
Student resources	31.2	18	33.3	22	42.2	43	21.7	23	32.1	106
Research funding	30.4	17	27.3	18	26.5	27	20.8	22	25.5	84
Reduced or distributed teaching load (e.g., reduced class size, more teaching assistants, fewer assigned courses)	60.7	34	48.5	32	42.2	43	47.2	50	48.2	159
Technology for detection	30.4	17	22.7	15	37.3	38	12.3	13	25.2	83
Other (e.g., institutional culture, enforcement, exam support)	12.5	7	13.6	9	10.8	11	21.7	23	15.2	50
Total		56		66		102		106		330
Supports to prevent academic misconduct										
Professional development	35.7	20	31.8	21	31.4	32	23.6	25	29.7	98
Student resources	32.1	18	27.3	18	39.2	41	17.0	18	28.8	95
Funding for teaching and research	7.1	4	9.1	6	7.8	8	6.6	7	7.6	25
Reduced or distributed teaching load	58.9	33	48.5	32	39.2	40	50.0	53	47.9	158
Other (e.g., institutional culture, technical and exam support, reporting consistency)	10.7	6	7.6	5	19.6	20	15.1	16	14.2	47
Total		56		66		102		106		330

Note. Bold entries indicate the three most common responses across all institutions.

One third of respondents indicated that the availability of academic misconduct confrontation guidelines, dedicated person or unit handling cases of academic misconduct, and the availability of more educational or remedial resources were needed to help them better deal with academic misconduct (see Table 5). The most common “other” responses related to institutional culture (e.g., administrators and students taking academic integrity seriously, consistency of responses to academic misconduct; $n = 11$), sharing information about misconduct types and the consequences more regularly ($n = 11$), and implementing existing policy ($n = 11$). Two respondents articulated that greater courage was needed to enact policy:

My university's academic misconduct policies all exist and seem sound, but there never seem to be consequential outcomes. Usually the cases drag into appeal and result it [sic] an administrative [sic] sanction of the student that is not immediate enough to make an example of the misconduct as being unacceptable. It then seems to some of the students that it is worth the risk.

Another sentiment repeated by respondents was that they would like agency in terms of determining appropriate sanctions for student misconduct. One respondent commented:

It would be very nice to have a little bit of freedom, as an instructor, to be able to apply at least small deductions or penalties if we strongly suspect a case ourselves, instead of having the administration require the evidence it typically does. IF the admin continue to dismiss cases that are brought to them, there is no point to the incredible amount of work (hours per student, typically) it takes to put together an investigation.

COVID-19

Nearly half of respondents ($n = 156$, 47.3%) answered the question about whether and how the COVID-19 pandemic shifted their understanding of academic integrity. Responses were mixed. Some participants noted spending more effort on tasks related to preventing or addressing academic misconduct and negative emotions associated with trying to uphold integrity during the pandemic, with frustration and despair being common. One participant summarized the experience as follows, “Made me feel like giving up on trying to enforce any integrity.” Another wrote,

I used to deal with [academic misconduct] once every couple years. Now, I need a spreadsheet to keep track of all the students in different stages of [academic misconduct] investigations. This has taken over my job and I hate it.

Increased workload in the form of re-thinking and re-designing course delivery and assessment were confounding factors that related to upholding academic integrity during the pandemic:

It [COVID-19] made me basically give up on exams, which is to the detriment of the learning experience and ensuring students will be prepared for the next courses and industry positions. I've had [sic] to re-think a lot of course delivery, and it has taken an immense toll on all instructors and the time they have had to invest.

Respondents noted developing greater awareness related to file-sharing services and contract cheating. One respondent shared that they first became aware of them during COVID-19: “I didn't realize until the pandemic that students could access websites with dedicated experts to answer test questions real time!” The pandemic and pivot to remote learning also revealed to instructors how easily students could outsource academic work but that they may not always be aware of the risks involved.

A subset of respondents shared that their understanding of academic misconduct had not changed during COVID-19, but that the transition to emergency remote instruction seemed to have had some impact on student behaviour due to feeling detached from instructors:

Plagiarism was alive and well before the pandemic and continues in a small percentage of students. I believe the ratio in my classes are about the same. Having said that, I also believe that in-class (and face to face) interaction does dissuade some students from plagiarising; I do have students who have plagiarized during the pandemic who never have before. Perhaps a sense of detachment from the Instructor allows a student to be less concerned about ramifications?

The dangers of conflating online learning with academic misconduct was also noted by another respondent:

The challenges are still largely the same. The online environment has its own challenges, but these are not especially novel and the assumption that seems to be

Table 5

Support to Better Address Cases of Academic Misconduct

	University of Calgary		University of Guelph		University of Waterloo		University of Manitoba		All Institutions	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
More training on handling academic misconduct	30.4	17	27.3	18	25.5	26	20.8	22	25.2	83
Availability of academic misconduct guidelines	35.7	20	19.7	13	24.5	25	13.2	14	21.8	72
More administrative time to handle academic misconduct	35.7	20	28.8	19	29.4	30	23.6	25	28.5	94
Having cases of academic misconduct handled by a dedicated person or unit	37.5	21	30.3	20	36.3	37	32.1	34	33.9	112
Improved academic misconduct policies	17.9	10	12.1	8	12.7	13	9.4	10	12.4	41
Improved set of procedures for handling cases of academic misconduct	31.2	18	19.7	13	22.5	23	19.8	21	22.7	75
More institutional resources for students (e.g., writing centres, tutors, time management or study skills workshops)	23.2	13	18.2	12	22.5	23	12.3	13	18.5	61
More educational or remedial resources to assist students who have engaged in academic misconduct	30.4	17	31.8	21	34.3	35	21.7	23	29.1	96
Availability of confrontation guidelines for approaching students with concerns	44.6	25	39.4	26	36.3	37	28.3	30	35.8	118
Other	12.5	7	4.5	3	12.7	13	9.4	10	10.0	33
<i>Total</i>		56		66		102		106		330

Note. Bold entries indicate the three most common responses across all institutions.

made, which is that students **MUST** be engaging in academic misconduct because the online environment makes certain types of misconduct easier, is not appropriate.

One respondent's understanding of misconduct had changed, showing an awareness of the difference between the concept of academic integrity and academic misconduct:

The pandemic has not changed my understanding of academic integrity. The same rules apply (from home). But the understanding of academic misconduct has changed dramatically. Students cheat at much larger scale from home, probably out of "peer pressure" because they know others do it, too.

One reason for the change in understanding of academic misconduct during COVID-19 was the increased workload due to the rapid pivot to emergency remote teaching. Respondents repeatedly mentioned developing heightened awareness of external threats to integrity posed by external commercial file-sharing and contract cheating services. Others questioned the ability of online proctoring services to prevent academic misconduct. One participant stated: "I guess I am learning more about how horrifying proctoring services can be." Overall, faculty responses to the question of how the COVID-19 pandemic altered their understanding of academic integrity and academic misconduct were varied and heterogeneous.

Discussion

The academic integrity landscape has changed considerably since Christensen Hughes and McCabe's (2006a, 2006b) multi-institutional study of faculty perceptions of academic integrity in Canada. One remarkable change over the last 15 years is that 40% of faculty in the current study reported time constraints as a barrier to dealing with suspected cases of misconduct, double the rate from previous research (Christensen Hughes & McCabe, 2006a). Consistent with the literature, faculty reported that large class sizes and perceived lack of institutional support (Eaton et al., 2020; Hamilton & Wolsky, 2022; Thomas, 2017), along with workloads, responsibilities, and burnout (Crossman, 2019; Hamilton & Wolsky, 2022; Sabagh et al., 2021; Taylor & Frechette, 2022) obstruct the promotion of academic integrity. Importantly, we found that faculty perceived inconsisten-

cies in responding to suspected academic misconduct (MacLeod, 2014; McNeill, 2022; Taylor et al., 2004; Zivcakova et al., 2012). In the early years of the 21st century, such inconsistencies were "indicative of a lack of awareness of institutional procedures or a lack of willingness to follow them" (Christensen Hughes & McCabe, 2006a).

Reports of inconsistency from faculty members in the current study correspond with findings from a comparative analysis of academic integrity institutional policies and definitions that highlighted varying definitions and approaches among post-secondary institutions across Canada (Eaton, 2017). Faculty perceptions that policy and administrative responses to academic misconduct are insufficient also continue to persist. Institutions can foster cultures of integrity by communicating how policies are enacted in accessible and easy-to-understand ways. Such communication should include consistent definitions of academic misconduct, specific procedures for reporting cases of academic misconduct, how the misconduct will be addressed, and the consequences for engaging in such behaviours (Neufeld & Dianda, 2007).

Cultures of integrity can also be hindered when power distance and academic cultural differences between learners and faculty are present (Leask, 2006). Therefore, faculty must work with, rather than against, students, sharing the responsibility of finding solutions to preventing academic misconduct (Leask, 2006; Hamilton & Wolsky, 2022; McNeill, 2022). Professional development to strengthen communication and teaching skills can help educators to reduce the academic culture shock that many students experience when they enter post-secondary education and may prevent unintentional academic misconduct. Interventions and strategies to foster academic integrity have had promising results (Hamilton & Wolsky, 2022; Prins & Lathrop, 2014) and many institutions, including the four institutions in the current study, have developed resources and promising practices.

Mapping our results into the 4M framework demonstrates that perceptions and actions of individual faculty members (and students), departments, the university, and the broader community all play important roles in promoting cultures of integrity. It is common for institutional academic misconduct policies in Canada to place the responsibility for upholding academic misconduct on individual students (micro-level) (MacLeod, 2014). The findings of the current study that suggest, however, that more concerted multi-stakeholder and multi-pronged efforts to promote academic integrity and respond to academic misconduct

would be beneficial. In other words, deeper consideration must be given to supporting students at the departmental (meso) and institutional (macro) levels, rather than simply holding them responsible for their behaviours at an individual (micro) level without sufficient supports to help them learn skills and expectations associated with upholding integrity. There is also room for faculty to be supported in their work to promote and uphold integrity through departmental (meso-level) decisions about class sizes and workload. Providing faculty members with educational development opportunities through teaching and learning centres, another meso-level unit on campuses, would also be helpful. Of course, these recommendations assume that there is institutional (macro-level) support for meso-level supports to be implemented.

We contend that the responsibility for academic integrity is best situated not only as an individual responsibility, but as a responsibility of various stakeholders within the institution. That is not to say that individuals should be absolved of their responsibilities, but rather that an individualistic approach is insufficient by itself. Supports, in the form of resources, time, professional learning, and an ongoing commitment to student success at all levels of the institution are necessary to uphold and enact academic integrity in a sustainable way. Our findings have shown that when higher education institutions fail to support faculty members through macro- and meso-level support to uphold academic integrity, students can suffer. When faculty are burnt out, overloaded with excessively large class sizes, and overworked, supporting students to act with integrity may not be as feasible as when teaching and learning conditions are more optimal; this has been particularly evident during COVID-19.

Gaps in knowledge, supports, and strategies to promote integrity, prevent misconduct, or deal with allegations have a significant impact on the perceptions of culture of integrity among faculty members and how they view their role in promoting it in their teaching and learning environments. One way that higher education can promote academic integrity is through centralized bodies, and several respondents (from each institution) in our study indicated that centralized bodies to address cases of academic misconduct would be helpful. Indeed, only a few Canadian universities have centralized academic integrity offices (including one university in our study).

Having a centralized unit to provide support across campus, such as an academic integrity office, can help to create or further develop an institutional culture of integrity (McCabe et al., 2012). We know anecdotally that compared

with countries such as Australia, the United States, and the United Kingdom, relatively few Canadian higher education institutions have a dedicated academic integrity office. One call to action from our study is for Canadian universities to explore how having a centralized academic integrity office might be helpful to promote and uphold academic integrity on our campuses. Given the need we have identified for ongoing faculty support, particular attention would need to be paid to how to support all campus stakeholders, not just students.

Limitations and Directions for Future Research

Despite the strengths of this study (e.g., mixed methods, multi-institutional), it was not without its limitations. The results from our survey may not be representative of all faculty members within each university or from across Canada, as the overall sample was relatively small in comparison to the respective faculty populations. For example, participating universities primarily offer instruction in English, therefore, our findings may not represent the views of those from francophone institutions (Peters et al., 2019). In addition, we did not gather perceptions from faculty at community colleges. In future research, it would be useful to distribute the survey to a broad range of types of post-secondary institutions to increase the richness of the data on faculty perceptions. Additionally, we did not investigate existing supports at participating institutions. Gathering an inventory of resources and supports at each institution may have helped to contextualize our findings and to understand the relationships between existing supports for academic integrity and awareness of them more fully.

Another opportunity for future research is a deeper consideration of the impact of the COVID-19 pandemic on faculty experiences and perceptions of academic integrity. The findings reported in the current study are based on data gathered in 2020, and faculty experiences have certainly evolved since that time. A follow-up study applying the 4M model would clarify how COVID-19 has impacted faculty approaches and the types of supports that are needed in response.

Finally, we acknowledge that although we collected some demographic data in our survey, we did not collect details that would have allowed us to specifically analyze the perspectives of individuals from equity-deserving groups. We contend that there is a deep need to better understand

the ways in which equity, diversity, and inclusion play a role in how academic misconduct is reported, investigated, and addressed in Canadian higher education. Such an investigation was beyond the scope of our study, though it presents a clear path forward for future research and advocacy.

Conclusion

In this study, we engaged in a mixed methods, multi-institutional study on academic misconduct in Canadian higher education, collecting one of the largest known data sets since Christensen Hughes and McCabe (2006a). Threats to academic integrity, such as commercial online file-sharing and contract cheating services, have increased their reach to more students over the last several decades. Faculty report that factors such as lack of time, increasing class sizes and workloads associated with teaching and learning activities, and perceived lack of administrative support are important barriers to promoting academic integrity and preventing academic misconduct. Although past research suggested that micro (individual) factors were largely at play when issues related to academic misconduct merged, our findings show that faculty perceive that meso (departmental) and macro (institutional) factors play a role in promoting academic integrity and preventing academic misconduct. Canadian institutional policies on academic misconduct are characterized by inconsistency (Eaton, 2017) and our study shows there are continued opportunities for policy development and implementation. COVID-19 has also had an impact on how academic misconduct is perceived by heightening awareness of various issues and feelings, such as frustration and despair, associated with identifying cases of misconduct. Our findings provide valuable insight to guide faculty, administrators, staff, and policy makers toward strengthening the culture of academic integrity in Canadian higher education.

Acknowledgements

At the time of study preparation, data collection, and analysis, Dr. Katherine Crossman was at the University of Calgary, and Dr. Kim Garwood was at the University of Guelph. We acknowledge the willing participation of those who responded to our survey, as well as the anonymous peer reviewers whose feedback was helpful in strengthening this article. We are grateful to the University of Calgary, Office of the Vice Provost, Teaching and Learning for funding this project (Grant: 10025560), with special thanks to Dr. Leslie

Reid and Dr. Natasha Kenny. We thank the D2L Innovation Guild for their in-kind and administrative support, including Brian Cepuran and Rose Kocher.

We are grateful to Dr. Amy E. De Jaeger of the Centre for the Advancement of Teaching and Learning, University of Manitoba, for her contribution to the development of the survey.

We thank Dr. Sylvie Roy, Associate Dean, Research, Werklund School of Education, University of Calgary for the translation of the abstract into French.

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Contact Information

Sarah Elaine Eaton
seaton@ucalgary.ca