Cheating Academic Integrity

LESSONS FROM 30 YEARS OF RESEARCH

EDITED BY

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FIRST EDITION

CHAPTER 8

Celebrating 30 Years of Research on Academic Integrity: A Review of the Most Influential Pieces

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The origins of the contemporary academic integrity research and practice movement can be traced back to 1992 when the International Center for Academic Integrity (ICAI), then the Center for Academic Integrity (CAI), was formed in response to Don McCabe's findings that the majority of students across in US higher education institutions were regularly cheating (McCabe, 1992). Since that time, thousands of studies have been conducted, and articles, books, and book chapters have been written, all of which shine light on the academic misconduct

problem and the possible solutions. To celebrate this research, ICAI published a Reader[1] to highlight the foundational articles and book chapters that should be read if new to the field. The first edition of the Reader was published in 2012 in honor of ICAI's twentieth anniversary, and the second was published in 2022 to honor the 30th anniversary.

The Reader pieces were chosen by members of ICAI—the practitioners and researchers who work every day in the field of academic integrity. The pieces chosen were considered those to have most influenced scholarship, research, and practice. In this chapter, we analyze the Reader to glean lessons for practice and research and to elucidate trends in the topics and research methods over the last 30 years.

After describing the process used to create the Reader, we delve into our review of the Reader, comparing the range of themes, methods, and approaches between the two editions. This approach is possible because, in both editions of the Reader, we used the same criteria to choose pieces for inclusion. We begin our comparison with the prevalent themes identified, followed by a discussion about methodological differences found in the pieces included in the two editions. Then we explore the scholarly works and issues that are missing from the Reader yet still relevant to understanding the full academic integrity picture. Finally, we end with suggesting ideas for further research into motivations, prevention, detection, intervention, and compliance, which are critical to ensuring learning and attributing authorship.

[1]See **https://academicintegrity.org/resources/academic-integrity-reader** for the full list of pieces in both editions, summaries of the pieces, as well as a write-up about the history of the formation of ICAI and the influence of Don McCabe and others.

THE CREATION OF THE ICAI READER

The ICAI Reader was established as a collection and bibliography of the most influential scholarly pieces published on the topic of academic integrity between 1992 and 2020. This collection provides a reading list for new practitioners and scholars entering the field while also providing trusted sources to others who are interested in research on academic integrity. To create the collection, ICAI members were invited to nominate pieces that they found particularly influential in their own practice or research. Next, ICAI members were solicited to serve as editors and reviewers for the Reader to both compile the list of possible pieces to include, as well as to conduct evaluations of those pieces and make final decisions about inclusion.

For the Reader's first and second editions, editors were instructed to find possible scholarly articles for inclusion by conducting a Google Scholar (**https://www.scholar.google.com**) search for a specific year using each of the following terms: academic integrity, academic dishonesty, academic honesty, cheating, and plagiarism. From those search results, editors narrowed their selection of pieces according to the following criteria: 1) scholarly sources only (i.e. journal articles or book chapters, not books[2]); 2) focus on academic integrity in education (rather than, say, business ethics); 3) number of Google citations or downloads/views from a publisher's website; 4) broad appeal (e.g. not specific to one school or one geographic area); or 5) editors' choice. For the latter criteria, editors were allowed to nominate pieces that perhaps did not meet the first

[2]We did not include full books in the Reader simply because of the scope of the project, however interested readers can visit the ICAI website for a list of recommended books.

four criteria but did greatly influence their practice, had been referenced in their own writings, enlightened their understanding of academic integrity research or practice, and/or influenced their own research direction or design.

Once the Editors' lists were complete, the Lead Editor assigned two Reviewers to each piece. Reviewers were instructed to read each assigned piece and evaluate it based on the following four criteria: 1) enhanced the literature/knowledge base; 2) appealed to a broad, international audience; 3) offered something new to the field (e.g. perspective, research methods) at the time of publication; and 4) was of excellent overall quality (e.g. in study design, methods, writing, literature review). Pieces were rated on a six-point scale from zero (0) = not an important addition to the Reader through to five (5) = should definitely be included in the Reader. Those pieces that ultimately scored at least four (4) out of five (5) in the evaluation were selected for inclusion.

At the end of this exhaustive process, 42 scholarly pieces were selected for the first edition, and 44 were selected for the second. To prepare this chapter, we used Leximancer, a text mining software (**https://www.leximancer.com/**), to uncover key themes as well as trends. First, we explore our interpretation of the themes, trends and developments in academic integrity research topics, then we look at the research methods, participant pools, and data analyses that were used to uncover those themes.

CONTENT THEMES

The focus of academic integrity research and writings has both stayed constant and shifted over the last 30 years. Authors and researchers have constantly been interested in better

understanding student behaviors—what they are doing and how often they are doing it. However, the range of behaviors that have been studied have shifted from analog (e.g. exam cheating and plagiarism) to digital (e.g. contract cheating via online platforms like Twitter). Likewise, authors and researchers have been consistently interested in the ways in which institutions can and should address cheating, but this interest has expanded to include the ways in which national governments can and should be partnering with institutions to address cheating. In this section, we explore these constants and shifts, highlighting what we see as the most interesting and relevant to both future research and practice.

The first edition helped confirm academic integrity as a significant issue for education and institutions while establishing a baseline for measuring and analyzing problems associated with academic misconduct. McCabe and colleagues, authoring 13 of the 42 articles in the first edition, are obviously key to this. McCabe's surveys of tens of thousands of students served to establish that baseline of self-reported cheating rates, but his findings (e.g. McCabe and Treviño, 1993; McCabe, Treviño and Butterfield, 2002) on the influencers of academic misconduct (e.g. cultures of integrity, peer behaviors/norms, and integrity policies) also helped establish the paths of inquiry for subsequent academic integrity research. For example, Bertram Gallant and Drinan (2006) applied institutionalization theory to explain the process by which academic integrity policy becomes inculcated to an institution's culture. Stearns (2001) examined the influence of instructors and their behaviors on academic integrity, while Whitley and Keith-Spiegel (2001) used the existing knowledge base to spell out all of the programmatic elements that need to be implemented to create an integrity culture.

The second edition builds on some of the issues identified in the earlier edition while broadening the scope of educational integrity as a global concern that can be seriously undermined by technology and social media. Primarily, we see a shift from a heavy focus on plagiarism in the first edition to a concentration of focus on contract cheating in the second, with over one quarter of selected articles related to this issue. Other themes of interest are policy and legal perspectives and student motivational and behavioral factors.

It is notable that contract cheating does not appear at all in the first edition given that it was first defined in the 1992–2009 time period by Clarke and Lancaster (2006). While the topic lacked traction as a sufficiently significant issue of interest to be included in the first edition, 13 pieces focus on the topic in the second edition. And a number of these papers take the definition by Clarke and Lancaster (2006)—students outsourcing assessable work to external contractors—and build on it to include other actions by students such as sharing and trading materials and answers, using ghost writers and impersonators (Bretag et al., 2018). Bretag et al. (2018) also note that the majority of contract cheating happens not by a paid professional on behalf of a student but rather more normally by family and friends for free or favor.

The prediction that contract cheating would present greater challenges for upholding academic integrity (Walker and Townsley, 2012) has certainly come true. Two of the articles in the second collection examine a range of literature about contract cheating, one being a meta-analysis of the prevalence of contract cheating in recent literature (Curtis and Clare, 2017). The other was a systematic literature review related to the purchasing of assignments between 1978 and 2016 (Newton, 2018). These

articles present evidence to suggest that the level of contract cheating is increasing, highlighting that research into the issue is of continuing importance, and also an urgent imperative so that we can understand more.

There are two additional studies on contract cheating worth mentioning. Amigud and Lancaster (2019, 2020) used discourse analysis of Twitter exchanges to enhance our understanding of how students interact with contract cheating services to purchase assessments. As a result, the authors suggest that life issues outside a students' control and poor time management and planning may influence a student's outsourcing requests.

Beyond the focus on contract cheating, some pieces in the second edition explored the antecedents of misconduct. Personality and motivational factors influencing cheating are particularly prevalent, including one study on goal setting and achievement (Van Yperen, Hamstra and van de Klauw, 2011), one on the Big Five personality traits (Giluk and Posthelthwaite, 2015) and one on student confidence at the commencement of studies (Newton, 2016). Other psychology-based perspectives examined students' justifications for cheating (Stephens, 2017; Simkin and McLeod, 2010). Continuing the work of Eisenberg (2004) in the first edition, these studies provide insights into why students choose to breach educational integrity policy and how they justify their actions to themselves and others.

Not surprisingly, given the importance of policy in practice, both editions of the Reader include pieces that explore academic integrity policies. In the first edition, there was a prominent focus on honor codes given McCabe's work. However, in a nod to McCabe and Treviño's (1993) finding that honor codes are not the only policy solution to creating cultures of integrity, other authors explored policy alternatives. Aaron (1992), as well

as Bertram Gallant and Drinan (2006), surveyed administrators to determine if and how academic misconduct was being addressed at the tertiary level of education, while other authors (e.g. Bertram Gallant and Drinan, 2008; Cole and Kiss, 2000; Kibler, 1993; Whitley and Keith-Spiegel, 2001) used previous research to theorize about what should be done at the institutional level. Together, these pieces represent the beginning of a global shift from a stance of institutional denial of cheating to institutional accountability for academic integrity. Although each of these pieces have been influential in research and practice, Kibler's (1993) work to connect academic misconduct with student development theory deserves special note for helping shift institutional responses to cheating from being more punitive to being more educational and developmental.

In the second edition, we see several more pieces that dig into institutional policies through empirical research. Bretag et al. (2011) identified essential elements of effective academic integrity policy through an exhaustive review of institutional policies across Australian universities (Bretag et al., 2011). A later study compared academic integrity policies across the UK and Europe (Glendinning, 2014) to conclude that while the majority of institutions have policies, they are not applied in a consistent manner. As we learned in the first edition from McCabe's work, understanding of policies is a key determinant of student behaviors and thus inconsistency in the application of policy is detrimental to achieving a culture of academic integrity.

While a focus on institutional policies existed in both editions, the exploration of legal frameworks for addressing cheating appears in the second edition, no doubt influenced by the intense focus on contract cheating over the last 10 years. In particular, Draper and Newton (2017) examined potential

legal approaches to legislating against contract cheating in the UK (Draper and Newton, 2017). However, Sutherland-Smith (2014) cautions us against taking a legal approach to plagiarism management and advises us instead to focus on teaching and learning rather than punishment. In recommendations and practice, most of the legal solutions being explored to tackle contract cheating are focused on the providers of the services rather than the students themselves (Draper and Newton, 2017), so it is possible to have both a legal response to contract cheating as well as an educational one.

The identification of articles of interest in the legal and policy domain are indicative that academic integrity extends beyond the boundaries of an institution and into the commercial sphere. While institutions can design and administer policy around academic integrity, they have no jurisdiction over commercial enterprises, which are regulated by local and national governments. Therefore, in order to truly mitigate the negative impact of the contract cheating industry on learning and educational quality, institutions need the support of legislators to, as a starting point, outlaw the commercial industry as well as their deceptive marketing strategies.

Despite the presence in both editions of pieces that explored policy and legal approaches to reducing or preventing cheating, there are few studies in either edition that examined interventions directed at students to change attitudes and behaviors. This is interesting considering that much of the talk in practice is about such interventions. There are pieces in the first edition that theorized about what could be done (Bertram Gallant and Drinan, 2008; Hutton, 2006; Whitley and Keith-Spiegel, 2001); however, in the second edition, there are pieces that empirically examine interventions. For example, Dee and Jacob (2012)

conducted a field experiment to see if they could reduce plagiarism by increasing students' understanding through a tutorial. Elander et al. (201) evaluated an intervention designed to enhance student "authorial identity" and found that by increasing student writing self-efficacy, as well as their understanding of authorship, could be a successful strategy. Similarly, Perkins et al. (2020) examined whether a class in "academic English" could help reduce plagiarism. Plagiarism wasn't the only area of interest for intervention studies. Ellis et al. (2020) assessed the effectiveness of "authentic assessments" for reducing contract cheating, while Ives and Nehrkorn (2019) conducted a meta-analysis of the research on interventions to find that similarity detection can work, as can education, honor codes and proctoring. While this is a good start to increasing research on interventions, the findings are variable and more research must be conducted.

RESEARCH APPROACHES: TRENDS AND DEVELOPMENTS

The quantity of research and the diversity of researchers and authors investigating academic integrity (and it's opposite, academic misconduct which includes cheating and plagiarism) has expanded over the last 30 years. Consequently, the ways in which the research is undertaken deserves exploration as the chosen methods greatly influence what we know, do not know, and are continuing to learn. In this section, we will examine and compare the methods, participant pools, and data analyses used throughout the pieces in the Reader across the two periods of the first edition (1992–2009) and second edition (2010–2020).

Methods

The majority of works in the Reader applied quantitative methods. Surveys appear as a popular method of data collection, likely because they allow for voluntary participation and the anonymity of a survey might help with self-disclosure of cheating behaviors (even though social desirability bias is still an issue). In the first edition, the works by McCabe stand out as setting the stage for much of the other research that followed, including further survey collection and descriptive analysis by Davis and Ludvigson (1995), Nonis and Swift (2001), and Eisenberg (2004). Toward the latter years of the first edition, some additional correlation and regression studies using survey data appear, including those by Jordan (2001) and Passow et al. (2006).

In the second edition, a new trend appeared. A handful of studies analyzed data promoting the purchase, trade, or exchange of assessment content collected from electronic media sources, including Twitter (e.g. Amigud and Lancaster, 2019, 2020), Google searches (e.g. Lancaster, 2020; Neville, 2012), RSS feeds (e.g. Ellis et al., 2020), and internet-based contract cheating sites (Rowland et al, 2018). These data sources are not found in the first edition, representing an innovative approach to taking advantage of relatively new technology to investigate larger patterns of threats to academic integrity. The applications of these new data sources are all focused on aspects of contract cheating showing some promise of revealing broader social and cultural predictors, as well as relevant personal characteristics of those with a propensity for academic misconduct.

The utilization of qualitative methods for understanding academic misconduct is less common in the Reader. However,

when used, plagiarism was a common topic explored in the first edition. Two studies, for example, utilized content analysis, one to analyze graduate student writing samples (Pecorari, 2003), and the other to analyze focus groups and interviews with first- and second-year American undergraduate students (Power, 2009). These two studies help readers understand how plagiarism is understood and experienced by students as a moral issue (Power, 2009) and how plagiarism may often be the result of an unintended action rather than a malicious practice (Pecorari, 2003). There are two other qualitative pieces of note in the first edition. One, by Bertram Gallant (2007), used a case study approach (including interviews, document analysis) to take a deep dive into the integrity culture creation process on one campus. Another, by Payne and Nantz (1994), used the "long interview" to explore with students a situation in which they perceived themselves to have cheated (or been tempted to cheat) and how they interpreted that situation as well as their reactions to it. These qualitative approaches were unique at that time and, unfortunately, remain in the minority as quantitative studies still dominate.

Having said that, there are also some qualitative studies in the second edition, and these also used some interesting approaches. For instance, Amigud and Lancaster (2019) used discourse analysis to assess the market demand for contract cheating, while Rowland et al. (2018) used categorical coding to better understand the marketing strategies used by contract cheating websites to attract students to their services. Qualitative elements are also included in five mixed methods studies in the second edition. The qualitative data in these studies included analyzing students' justifications for ratings of samples of plagiarism (Hu and Lei, 2012), conducting focus groups to identify

changes in authorial identity related to an intervention (Elander et al., 2010) using discourse analysis to examine price variation and assignment demands for contract cheating based on Twitter messages (Amigud and Lancaster 2020) and employing semi-structured interviews to understand higher education approaches to academic integrity education (Sefcik, Striepe and Yorke, 2020).

Participant Samples

The pieces in the first edition focused primarily on college students in the US, which is not surprising given that, up until the early twenty-first century, the ICAI was known as the Center for Academic Integrity (CAI), a national organization that only focused on researching student academic integrity. The US-centric focus of the first edition, represents the research powerhouse that was Don McCabe, his collaborators, and other North American researchers he inspired. For context, the Asia Pacific Forum on Educational Integrity (APFEI) was established 11 years after CAI in 2003 (Bretag, 2015). The Academic Integrity Council of Ontario (AICO), the first academic integrity organization in Canada, was formed another five years later in 2008 (Ridgely, McKenzie and Miron, 2019). In addition, during the timeframe of the first edition, researchers in Australia and the UK were primarily focused on plagiarism rather than the broader academic integrity conversation, leading to the first International Plagiarism Conference held in the UK in 2004 (Bretag, 2015). It was not until the timeframe of the second edition that academic integrity researchers in UK/Europe formed the European Network for Academic Integrity in 2017 (**https://www.academicintegrity.eu/**).

While the main student population studied in the first edition was undergraduate students, there are two pieces that featured K-12 students (Eisenberg, 2004; Strom and Strom, 2007) and one that featured graduate students (Pecorari, 2003). There are also several pieces that assessed faculty views, including faculty commitment to integrity (e.g. McCabe et al., 2003) and investigations of faculty-student relationships for links to trust and cheating behaviors (e.g. Stearns, 2001). Administrative staff are also included in both quantitative and qualitative studies as related to academic integrity policy, creation, promotion, and institutionalization (e.g. Aaron, 1992; Betram Gallant 2007; Bertram Gallant and Drinan, 2006).

In the second edition, the focus continues to be on collegiate students, but it is far more international, including studies with populations from Europe, Africa, and Asia. The availability of technological or social media-based data may have played a part in this. One study, which compared student cohorts in the US and Israel, found that personality traits, staff attitudes, institutional policies and course type are better predictors of cheating behavior rather than socio-demographic variables (Peled et al., 2019). A further study found higher rates of contract cheating among students who are not native speakers of the dominant language and are struggling to understand or complete work (Bretag et al., 2018). Another study, although conducted in the US, found that searches for cheating and contract cheating services are more likely to originate from US counties with higher income inequality gaps (Neville, 2012), elucidating a possible growing equity gap in integrity behaviors. What is apparent from the second edition is that while there are a couple of papers that look at the influence of nationality or language groups (for example Hu and Lei, 2012; Pecorari and

Petric, 2014), there appears to be fewer investigations into socio-demographic factors related to academic integrity involving race and ethnicity, gender identity, and age. Whether the lack of these types of studies is due to the potential of establishing perceptual biases of aligning cheating behaviors to any particular socio-demographic group is unclear; however, it is likely to be a factor in how this type of data is collected, studied, and reported.

Data Analysis

A further legacy of Don McCabe may be the heavy focus in the first edition on the use of descriptive statistics to explore self-reported cheating rates and student perceptions of the issue. These studies were instrumental in establishing a baseline rate of self-reported student cheating and the extent to which factors—such as honor codes (McCabe and Treviño, 1993; McCabe et al., 2002), peer behaviors (McCabe et al., 2001a; McCabe et al., 2001b), faculty behaviors (McCabe, 1993), moral obligations and neutralizations (McCabe, 1992), and individual characteristics (McCabe and Treviño, 1996)—are associated with increased levels of self-reported cheating at tertiary institutions.

In comparison to the quantitative works in the first edition, which generally reported descriptive statistics, the quantitative works included in the second edition spanned a wider range of statistical analyses. This includes more complex statistical applications, such as: analysis of variance—ANOVAs (e.g. Curtis and Vardanega, 2016; Dee and Jacob, 2011; Elander et al., 2010; Shu, Gino and Bazerman, 2011), regression (e.g. Cronan, Mullins and Douglas, 2018; Rundle, Curtis and Clare, 2019), pathway analysis (e.g. Simkin and McLeod, 2010), factor analysis (e.g. Rundle, Curtis and Clare, 2019), structural equation modeling—SEM (e.g. Peled et al., 2019), and Rasch analysis (e.g. Ehrich et al., 2016).

The use of more complex statistical approaches may reflect the development of more nuanced understandings of the relationships between predictors of academic integrity—including motivations, contexts, and personality traits—and cheating behavior. They are also reflective of continuing approaches that sought to examine academic integrity perspectives from an "at distance relationship" which is facilitated by the collection of survey data that is usually anonymized, thereby encouraging students and staff to be more honest in their responses (e.g. Bretag et al., 2018). The use of survey data has progressed from the work of the first edition in quantifying the extent of the problem across student populations and the range of associated influences on academic misconduct. These studies have assisted the higher education sector in acknowledging that the issue of academic integrity is significant and ongoing.

OTHER CONSIDERATIONS

It is important to note that the Reader was created by practitioners and researchers who work in higher education in some capacity, which likely accounts for the focus on that particular education sector. However that the focus on higher education is also representative of the sector in which the majority of research into academic integrity has occurred to date. The search criteria, and background of the editors suggests that the works that comprise the ICAI Reader are not necessarily representative of all of the work being done in the field of academic integrity or work that influences the field of academic integrity.

The focus on academic integrity research in higher education also misses a large and influential piece of the puzzle—how

practices and behaviors at the primary and secondary education levels influence what we see in college and university. Anderman and colleagues (e.g. Anderman, 2007; Murdock and Anderman, 2006) have conducted much of that influential work, particularly around how students' motivational habits and orientations are formed early on and greatly impact how they engage in their learning and school work, with or without integrity. The absence of works studying primary or secondary education students is unfortunate and readers are encouraged to seek them out.

It is also recognized that educational integrity is a topic of interest across all academic disciplines and that articles on the topic, therefore, appear in a range of disciplinary focused journals. While these pieces may influence researchers and practitioners in their respective disciplines, they tend to have lower citation rates and, therefore, lack broader application across the sector, which accounts for their absence in the Reader. Their absence does not mean they are any less valuable in understanding and addressing educational integrity issues. In particular, readers interested in discipline-specific integrity issues, particularly those that prepare students for licensed professions (e.g. dentistry, law, medicine) through practical examinations, for example, would be well served by searching for articles in those disciplinary-focused journals.

Research innovations that can move the field forward should be celebrated. At the same time, there may be important perspectives on academic integrity that are not well-represented in Reader. For example, the studies based on electronic social media data (for example Neville, 2012; Amigud and Lancaster, 2019, 2020) are not able to offer detailed descriptions of the people who generated those data. When participant

demographics are available, they are generally self-reports of traditional data like age, gender, first/dominant language, and educational background (for example Bretag et al., 2018; Ellis et al., 2020). In this way, students primarily remain the "subjects" of the research rather than as contributors who are involved in constructing and informing the research from design to implementation to analysis. Moving forward, if we want our research to really impact student practices, researchers should consider involving students in data generation and analysis by using a method known within the social sciences as "action research" (Ferrance, 2000).

We can also see a geographic focus in the Reader, with the majority having been conducted in Australia, the US, or the UK. While recognizing these countries as homes to large communities of academic integrity research and practice, it is worth noting that the Reader was restricted to English language scholarly pieces. Despite this limitation, a few studies in the second edition included perspectives from more than one country (for example Glendinning, 2014; Peled et al., 2019), and some addressed countries or situations where English is not the dominant language (for example Ehrich et al., 2016; Hu and Lei, 2012). This perhaps demonstrates a shift between editions that academic integrity is a global rather than local phenomenon. While it is not clear how the results from the three primarily English-speaking countries generalize to other settings, some of the findings do have broader applications that transcend submissions confined to English based assessments (for example Lines, 2016; Rogerson, 2017). We look forward to seeing an increasing amount of research conducted within other countries so we can learn the extent of generalizability.

In addition to the geographic imbalance of studies, the type of misconduct studied did not reflect the prevalence of different types of misconduct. About one-third of the studies in the second edition focused specifically on contract cheating, while another third focused on plagiarism. While a few other works addressed academic integrity more generally (for example Bretag et al., 2018) , very few looked at other specific types of misconduct, such as cheating on exams or cheating on assignments (for example Hylton, Levy and Dringus, 2016). This imbalance may reflect the view that plagiarism and contract cheating seem to continue to be the most confounding behaviors. Yet, largely due to McCabe's research, we have more evidence that the prevalence estimates of traditional cheating behaviors (whether on exams or assignments) and plagiarism are, in general, several times higher than the prevalence estimates for contract cheating. This may also reflect the evolution of how contracting is defined and where it is classified in the spectrum of cheating behaviors.

Despite the apparent growing concern for reducing the prevalence of academic misconduct in educational environments, only three intervention studies are represented in the second edition; though this is an increase from the first, it is still a small fraction of the total number of studies. The underrepresentation of intervention studies is also reflected in the larger academic integrity literature base (Ives and Nehrkorn, 2019). The underrepresentation may also be a consequence of those works not being highly cited or being significantly more difficult to receive ethics approval and carry out than the typical survey research. However, it does limit the ability to make causal inferences about the ways in which we can reduce cheating and plagiarism.

Related to the dearth of intervention and experimental studies is the absence of institutional data in the collection, with the exception of program descriptions (Sefcik, Striepe and Yorke, 2020). Institutional data could include valuable qualitative and quantitative information about academic integrity. For example, institutional data would include the frequency and types of cases that were referred for adjudication or other intervention. This would allow for the comparison of reporting frequency, issues related to assessment type, disciplinary trends, and the key times of the likelihood of misconduct occurring. A key consideration in progressing this type of reporting and analysis is enhancing the appetite for transparency and openness to accountability by educational institutions, as well as playing down the impact of this type of information on institutional reputations. It also requires that academic misconduct behaviors are consistently defined so that data sets can be compared in a meaningful and useful way. Nationally consistent definitions would be a starting point, international consistent definitions are a more difficult objective and will take some time to debate and achieve. While consistent definitions would provide a means of analyzing comparative data moving forward, it will make it challenging to conduct retrospective comparative analysis when the criteria for categorization of cases varies from jurisdiction to jurisdiction.

RESEARCH SUGGESTIONS FOR THE COMING DECADE

In the first edition, the scope of academic misconduct was heavily researched and described but largely focused on analog variations of the behavior. By the second edition, the studies expanded into investigating behaviors facilitated by technology.

The methods used by researchers are still overwhelmingly quantitative with information gathered almost exclusively through self-reported survey data and almost all exclusively collected on undergraduate students in the US, Canada, Australia, and the UK. Based on methods and populations studied over the last 30 years, there is a significant amount of research left to be done.

Thematically, there are opportunities to expand and highlight the application of academic research into disciplinary areas to better understand and address how misconduct appears or is evident in different assessment types preferred in various disciplines or subject areas. Understanding what is normal within a discipline is a key to understanding what is not normal and, therefore, should be examined through a lens of potential misconduct. Business students appear more frequently in the literature and the second edition is no different (Rogerson, 2017; Teixeria and Rocha, 2010), but as the data from studies, such as Bretag et al. (2018) demonstrate, the issue is also prevalent but not necessarily as easily recognized in other disciplines.

As there is little comparative evidence of the broader impact of assessment type on academic integrity in general (Ellis et al., 2020) this is a rich area to explore, particularly after educational shifts required due to responses to the Covid-19 pandemic. While it is acknowledged that there is no cheat proof assessment type, comparisons of assessments within and across jurisdictions would provide information to underpin future assessment and course design. Important to this type of activity is measurement so that the impact of changes can be plotted and evaluated to inform future practice.

With the introduction of formal legislation in some countries designed to combat contract cheating, a unique research situation

presents itself where the impact of legislation on cheating behaviors and academic misconduct can be examined, particularly via technological and social media. The invasive nature of social media and the accompanying data gathering over the Internet and social media platforms also present opportunities to examine academic integrity issues through the evaluation of data analytics. Coupled with this is the analysis of cross-institutional data to assist with the identification of patterns, behaviors, and the success of intervention strategies. It will take a holistic approach by the sector to combat the technological threats.

Future research should extend the application of more complex investigations into academic integrity to better reflect the intrinsically complex nature of the topic. Researchers need to develop innovative and open access data sources and designs to facilitate addressing a wider range of questions related to academic integrity. These points are also reflected in Bretag's (2020) *Research Agenda for Academic Integrity* volume which posits a range of present and emerging threats as potential research opportunities to better understand educational integrity while considering global, language-based, technological, policy, and disciplinary perspectives.

The field should also extend its investigation of academic integrity outside of higher education. It is, perhaps, easier to survey and study undergraduate students than younger students, but academic integrity, or the lack thereof, is a societal concern and should not be constrained to institutions where study takes place over three to four years. Students bring their previous educational norms into higher education, and further research is required to determine how those norms are established while confirming their applicability to student decision-making behavior as it relates to academic misconduct. Academic

integrity, rebranded as educational integrity, moves the field in the right direction because it encompasses scholars and teachers, researchers, publications, and, yes, students.

Broadening the scope of academic integrity to educational integrity, however, is just one step in the right direction. When considering where the studies into academic integrity have taken place to date, the current geographic scope of research into academic integrity to investigate the generalizability of findings in developed and predominantly English-speaking countries is too narrow. Global partnerships and collaborative efforts are needed to further the field of educational integrity. This raises another interesting point. Scholars should also focus attention on equity issues related to academic integrity—who is being researched, why, and what structures and biases are inhibiting or facilitating educational integrity today?

Finally, research must promote sustainable and equitable practice. Scholars are at a unique inflection point. They have the opportunity to build a larger and more rigorous research base to identify evidenced-based practices that improve academic integrity. Individual institutions may feel that by ignoring the problem and not acting with transparency means that they are safe from educational misconduct. They are not. By exploring extant institutional data, researchers can collaborate to build better practices that are in line with their values to teach, learn, and serve those seeking knowledge.

CONCLUSION

The last 30 years of research into academic integrity has taught us a great deal. Academic misconduct is a complex topic facing students and faculty globally. It also reveals the continuing

and expanding interest in the field where new perspectives are explored to provide better understanding of trends and emerging issues identified by scholars across a range of disciplines. The papers in the second edition demonstrate that academic misconduct has broadened beyond plagiarism and exam cheating to contract cheating, a much more insidious behavior that threatens not just student learning but also the integrity of the entire educational enterprise.

The second edition is also released at a pivotal time for academic integrity. In the wake of the Covid-19 pandemic, educational integrity has been in the spotlight. Educational design, curricular requirements, and timely yet fair adjudication processes are catching the eyes of stakeholders everywhere. The opportunity for research, assessment, and intervention experiments is growing, and so is the interest for those outside of student academic misconduct practitioners. The third edition will be released in 2032, and the scope, scale, and growth of educational integrity will surely be reflected by the changes in the field and directions of future research.

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[3]References appearing in the Reader first edition are annotated with a single.* References appearing in the Reader second edition are annotated with a double.**

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