Academic Integrity and Student Mental Well-Being: A Rapid Review

Sarah Elaine Eaton, University of Calgary

Helen Pethrick, University of Calgary

Kristal Louise Turner, University of Calgary

Abstract

Despite concerns arising from academic integrity practitioners, researchers, and stakeholders about the relationship between academic integrity (or violations of academic integrity) and student mental well-being (or distress), there is a lack of literature synthesizing available evidence. Particularly, it is unclear about when student mental well-being may be of concern during procedures that concern breaches of academic integrity. Our rapid review identified and analysed scholarly sources (*n* = 46) to understand the relationship between academic integrity and mental well-being among postsecondary students. Five themes emerged: a) negativity bias; b) inconsistency of definitions; c) paradigmatic tensions; d) focus on external stressors; and e) focus on mental well-being prior to a critical incident. We propose several calls to action and implications for practice. There is a need to better understand the impact of an alleged or actual academic integrity violation on students' mental well-being. Practitioners in Canada and internationally should integrate supports for students' mental well-being in processes and procedures that uphold academic integrity.

Keywords: academic integrity, academic misconduct, mental well-being, mental health, stress, rapid review, higher education, students

Academic Integrity and Student Mental Well-Being: A Rapid Review

Academic integrity violations remain a concern for educators, student affairs professionals, and administrators, as well as other campus stakeholders in higher education. There is a substantive body of research on postsecondary student academic misconduct and the factors that contribute to it (Bertram Gallant, 2008; McCabe, 1992, 2016; McCabe et al., 2012). Although stress and anxiety have been identified as factors contributing to academic misconduct (Adam, 2016; McCabe, 2016), little research appears to have been conducted explicitly exploring the relationship between mental well-being and academic integrity (Eaton & Turner, 2020).
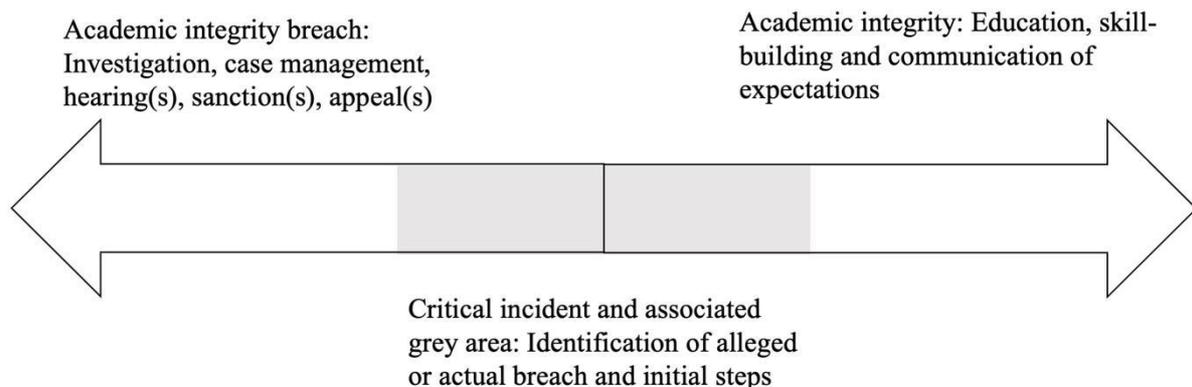
Defining Academic Integrity and Mental Well-Being

Academic integrity has been described as a continuum in which preventative education and skill-building exist at one end and case management for academic misconduct, including hearings, appeals and even legal proceedings exist at the opposite end (Frenken, 2013; Newton & Lang, 2016). In the middle of the continuum there is a critical incident that triggers

a report or investigation of suspected or actual misconduct, at which point the matter is often handed over to an administrator for case management (Frenken, 2013) (see Figure 1). On either side there is a substantial grey area in which instructors may or may not abide by institutional policies with regards to documenting and reporting a case (Eaton, 2021). Instructor reluctance to report academic misconduct has been well documented in the literature for decades, with reasons including the amount of emotional labour, anxiety, and stress that result from the administrative burden of reporting, along with fears of retribution from students or harassment from supervisors who do not wish to engage in an investigation of the misconduct (Crossman, 2019; Eaton, 2021; Singhal, 1982; Thomas, 2017; Wright & Kelly, 1974). Also in the grey area is the process involved in determining whether the alleged transgression constitutes an unintentional breach of integrity (e.g., due to lack of knowledge or skills) or pre-meditated deceit. This determination can impact the severity of the sanction imposed in a case. Research over time has shown that there can often be an assumption of deceit on the part of those who identify an initial alleged breach (e.g., the instructor), but that students may be unaware that they have committed a breach or may underestimate its seriousness, particularly if they lack maturity or are unfamiliar with the expectations of the learning institution. It is within this grey area that concerns for student mental well-being could emerge; for example, possible distress following the identification of alleged academic misconduct. Figure 1 offers a visual representation of the continuum of academic integrity, highlighting the grey area in the middle centered around a critical incident.

Figure 1

Academic Integrity Continuum

Academic integrity breach: Investigation, case management, hearing(s), sanction(s), appeal(s)

Academic integrity: Education, skill-building and communication of expectations

Critical incident and associated grey area: Identification of alleged or actual breach and initial steps

There are inconsistencies in definitions of academic integrity and mental well-being; however, there are guiding principles that informed our work. Definitions of academic misconduct and related concepts such as plagiarism and academic cheating are often defined by individual institutions. However, the International Center for Academic Integrity (ICAI, 2021) identified six fundamental values of integrity: courage, fairness, honesty, respect, responsibility, and trust. Demonstrating these values in a variety of ways is often viewed as acting with integrity, both within and beyond learning institutions. The European Network for Academic Integrity (ENAI), (n.d.) offers the following definition of academic integrity, "Compliance with ethical and professional principles, standards, practices and consistent

system of values, that serves as guidance for making decisions and taking actions in education, research and scholarship" (Tauginienė et al., 2018, p. 7-8). The ICAI framing of academic integrity focuses exclusively on values, whereas the ENAI definition includes the concepts of compliance, professional principles, and standards that are not evident in the ICAI definition. This is not to say that one approach is better than the other, but rather we offer these definitions to highlight that there is no universally accepted definition of academic integrity.

Mental well-being has long been regarded as an absence of psychopathologies, though this notion has been challenged, with scholars and practitioners advocating for a focus on positive mental health (Dodge et al., 2012; Westerhof & Keyes, 2009). Westerhof and Keyes (2009) posit that there are three inter-related components of positive mental health: "feelings of happiness and satisfaction with life (emotional well-being), positive individual functioning in terms of self-realization (psychological well-being), and positive societal functioning in terms of being of social value (social well-being)" (p. 110).

The mental well-being of postsecondary students is a topic that has been addressed extensively in the extant literature (Katz & Davison, 2014; Mitchell et al., 2012; Soet, & Sevig, 2006), including broad systematic reviews (Storrie et al., 2010). However, one aspect not covered in detail is the relationship between student mental health and academic integrity. This review will be of significance for student affairs practitioners working in student conduct, wellness services, academic integrity, and academic advising service areas. These professionals can utilize the evidence provided in this review to enhance their practice, advocate for policy or programmatic changes, and better understand the intersection of academic integrity and mental health among students. It will also be relevant for scholar-practitioners and researchers who are invested in addressing the gap between enhancing academic integrity in their campus environments while caring for the well-being of their student populations.

Arising From Practice: Impact of COVID-19

The impetus for this rapid review was the implications of the COVID-19 pandemic on higher education learning environments. Practitioners in academic integrity, course instructors, students, and the media have expressed concern amidst the COVID-19 pandemic about its impacts on student mental well-being, and, separately, academic misconduct and academic integrity. There has been an ongoing call for an urgent response to better understand the impact of COVID-19 on students' mental health (see Copeland et al., 2021; Grubic et al, 2020; Liu et al., 2020). Simultaneously, there has been increased attention on breaches of academic integrity during the coronavirus pandemic (Eaton, 2021; Gagné, 2020; Kier, 2020; Sopcak, 2020). We wondered whether or how these two trends may be related. In our previous research, we sought to understand the mental health of students, as related to academic integrity, in the context of the COVID-19 pandemic (Eaton & Turner, 2020). We found that students' mental health was negatively affected due to academic integrity-related stressors during COVID-19 (Eaton & Turner, 2020). After completing this initial research in early 2020, we further concluded that, more generally, the intersection between student mental well-

being and academic misconduct was understudied in the existing body of scholarship.

Although our inquiry does not address the impact of COVID-19 specifically, we are aware of the urgency for timely scholarship to provide a foundation for further evidence-informed inquiry. Our primary motivation was to provide practitioners and scholars in academic integrity with an overview of the existing literature on this topic of emerging importance and interest. To attend to this urgent call (see Grubic et al, 2020) we opted for a rapid review to explore the scholarly literature pertaining to academic integrity and its relationship with mental well-being in a postsecondary setting to inform scholarly dialogue, as well as the practice of higher education and health professionals dedicated to student success. We assessed the extent to which the literature addressed mental well-being across the academic integrity continuum (see Figure 1).

Aims and Research Question

The primary aim of our rapid review was to explore the academic literature about the relationship between academic integrity (and related concepts, such as academic misconduct) and mental well-being among postsecondary students. Our research question was: What does the available evidence indicate about the relationship, if any, that exists between academic integrity and mental well-being? Our secondary aim, in writing this paper, was to explore the rapid review method as a novel way to derive implications for practice in the field of academic integrity.

Theoretical foundations

Academic integrity research is interdisciplinary in nature, with no single theoretical framing dominating the discourse. Among the theoretical lenses through which academic integrity research has been conducted include the theory of planned behaviour (Ajzen, 1991; Ajzen & Shikh, 2013) and organizational theory (Bertram Gallant & Drinan, 2006b). Our work aligns with scholars who advocate for a multi-stakeholder approach to academic integrity from interconnected processes of prevention, ethical decision-making, and policy implementation (Adam, 2016; Bertram Gallant & Drinan, 2006a; Bretag, 2019; Kaposi & Dell, 2012). This multi-stakeholder, whole-campus approach to this research aligns with calls to action in student affairs to approach student development and mental well-being from a holistic perspective (Baxter Magolda, 2009; Braxton, 2009).

Materials and Methods

We chose a rapid review method for our study, with the goal of locating, analyzing, and synthesizing a breadth of available evidence on a given topic quickly (Dobbins, 2017; Hartling et al., 2017). A rapid review is considered to be a modified version of systematic review method, which is a rigorous method for searching and analysing the literature in a defined area (Moher et al., 2009). A rapid review is warranted when evidence is scare or unknown and timely information is needed. It uses similar searching methodology as a systematic review, but a rapid review is distinct in its analysis methods which are more exploratory and do not include a systematic critical appraisal phase (Dobbons, 2017). The method has been

used previously in our academic integrity research (Eaton & Turner, 2020). The bodies of literature on student mental well-being and academic integrity are robust and expansive, but the scarcity of evidence at the intersection of these two fields warranted a rapid review methodology. Although our study does not relate to the COVID-19 pandemic specifically, it was during this period that we noted an urgent need to address the gap in the literature regarding the connections between academic integrity and mental health, and we view this work as having some urgency to it, given the lack of available evidence.

Search Strategy

The authors first agreed upon a study protocol that outlined a detailed plan for all phases of the rapid review, as recommended by Dobbins (2017). Following this, we conducted a systematic search of the literature in August 2020. Based on terms pulled from a seed article (Tindall & Curtis, 2020) and a preliminary database search, we identified the following five search terms:

1. academic integrity OR academic misconduct OR plagiar* OR cheat* OR academic dishonesty OR academic fraud OR contract cheat* OR academic honesty OR academic appeal
2. AND mental health OR mental distress OR wellbeing OR wellness OR trauma OR anxiety OR depression OR stress
3. AND postsecondary OR university OR college OR higher education
4. AND student or undergraduate or graduate
5. NOT infidelity

The fifth search term was necessary to filter out a high proportion of results found in the preliminary search that described cheating between intimate partners, rather than cheating as academic misconduct. These search terms (or related subject headings) were entered into six education, psychology, and interdisciplinary databases: (a) Academic Research Complete, (b) Education Research Complete, (c) EMBASE, (d) ERIC, (e) PsycInfo; and (f) SocINDEX. Author 2 ran the searches on the databases, exported the search results to EndNote X8 referencing software and de-duplicated the results.

Using Covidence software, Author 2 and 3 screened the abstracts according to the inclusion and exclusion criteria. The screening was blinded to the primary reviewers and Author 3 resolved screening conflicts. The same screening process was followed for full-text articles.

Inclusion and Exclusion Criteria

Inclusion and exclusion criteria were identified based on the concepts outlined in our research question. Articles were eligible for inclusion if they: a) focused on academic integrity or academic misconduct; b) described mental health/mental distress; c) were located in the post-secondary context; d) focused on postsecondary students; e) were published in an academic source; and f) were English language. Articles were excluded if they: a) did not describe academic integrity/academic misconduct; b) did not describe mental health/mental distress; c) were not located in the post-secondary context; d) focused on faculty members or

staff; d) were grey literature sources (e.g., dissertations, theses, blogs, magazine/newspaper articles, self-published white papers, internal reports, editorials; book reviews, handbooks); e) did not have a full-text article available; or f) were not English-language. No limits were placed on the date of publication or country of origin.

Data Extraction and Analysis

We extracted data from the following categories of the included articles: 1) country of origin; 2) purpose and research question; 3) population and sample; 4) study design and methodology; 5) key findings and results; 6) limitations; 7) whether the purpose of the article was related to the relationship between academic integrity and mental health; and 8) whether the findings described a relationship between academic integrity and mental health. All three authors partook in a norming exercise to ensure consistency across data extraction. After completing data extraction, all three authors contributed toward a narrative synthesis of the included articles (Dobbins, 2017). Common themes across the articles were identified through group consensus (Pluye & Hong, 2014). Two summary tables of the included studies were produced, one which described study characteristics, and another that identified aspects of mental well-being and academic integrity present in the included studies.

Results

The search resulted in 319 records, of which 98 were duplicates. The remaining 221 unique articles were screened, with a further 135 being excluded because they did not meet the inclusion criteria. Eighty-six articles were further assessed for eligibility, with a further 40 excluded. The remaining articles (n = 46) were included in the final synthesis. The following PRIMSA diagram describes the flow of articles through the searching and screening process (Moher et al., 2009) (see Figure 2).

A summary table of the included studies' country of origin, publication dates, and methodologies, and findings is archived in a publicly accessible database (Eaton et al., 2021). Publication dates ranged from 1964 to 2020, with most articles (n = 33) published in 2007 or later. The most common country of origin was the United States of America (n = 23), followed by Australia (n = 4), and the United Kingdom (n = 4). The study designs were varied: 32 used a quantitative study design, seven used mixed methods, and seven used a qualitative study design.

A further analysis of the included studies (Table 1) showed that the most common aspects of mental well-being that the studies described were fear (n = 26), attitudes (n = 26), stress (n = 22), and anxiety (n = 20). Other commonly mentioned aspects of mental well-being were depression, guilt, or test/exam anxiety. The most common aspect of academic integrity was cheating of an unspecified nature (n = 20) or cheating specifically on exams or assignments (n = 18). Plagiarism (n = 12) and unspecified academic misconduct or dishonesty (n = 15) were the other two most common aspects of academic integrity.

Figure 2

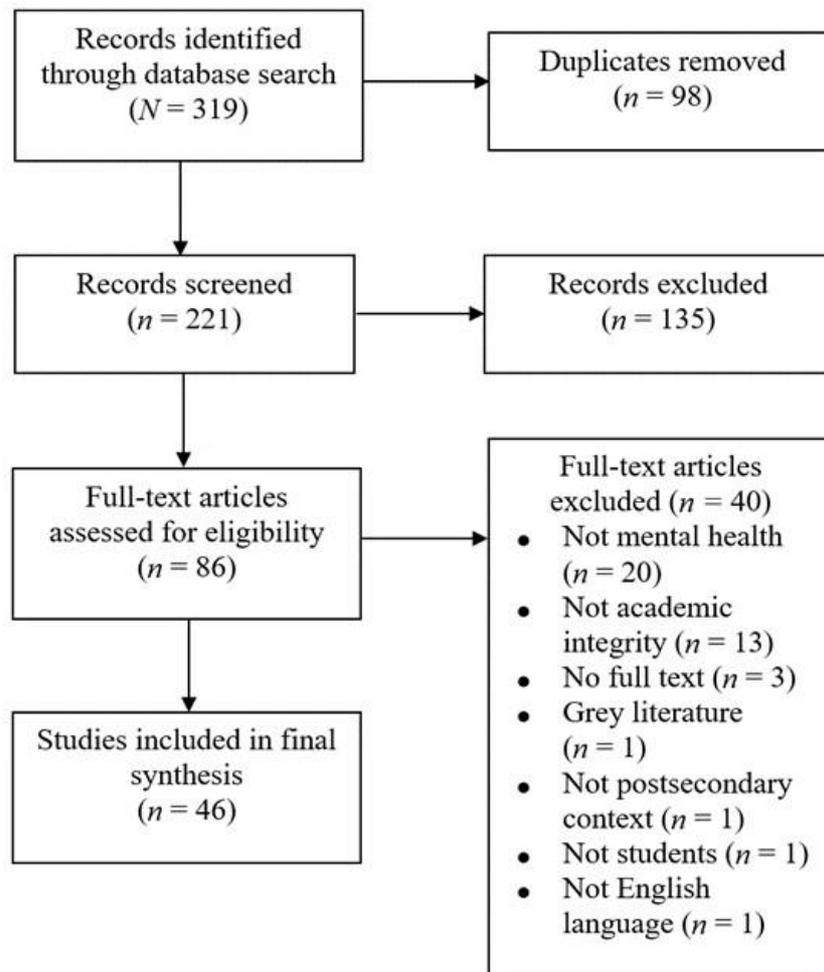*Flow of Studies Through the Search and Screening Process*

Table 1

Aspects of Mental Well-Being/Distress and Academic Integrity/Misconduct in Included Studies

	Aspects of Mental Well-Being/Distress									Aspects of Academic Integrity/Misconduct			
Author, Year	Stress?	Anxiety?	Test/ exam anxiety?	Depression?	Emotions - Fear?	Emotions - Guilt?	Attitudes?	Affect?	Other - If YES, specify	Cheating - Assignments, Exams, Unspecified?	Plagiarism	Unspecified Academic Misconduct/ Dishonesty?	Other - If YES, specify
Amua-Sekyi 2016	NO	NO	YES	NO	YES	NO	YES	NO	NO	YES - Exams	NO	NO	NO
Antion & Michael 1983	YES	YES	YES	NO	NO	NO	YES	NO	NO	YES - Exams	NO	NO	NO
Bailey & Challen 2015	YES	YES	NO	NO	YES	NO	YES	YES	NO	YES - Assignments	YES	NO	NO
Bronzaft et al. 1973	NO	YES	YES	NO	YES	NO	NO	NO	NO	YES - Exams	NO	NO	NO
Brown et al. 2018	YES	YES	NO	NO	YES	NO	YES	NO	NO	YES - Unspecified	NO	YES	NO
Cho & Hwang 2019	NO	NO	NO	NO	YES	NO	YES	NO	NO	YES - Unspecified	NO	YES	YES - ethics
Conrad 1986	YES	YES	NO	NO	YES	NO	YES	NO	NO	YES - Unspecified	NO	YES	NO
Da'asin 2016	YES	YES	NO	NO	NO	NO	YES	NO	NO	YES - Exams	NO	NO	NO
Devlin & Gray 2007	YES	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO
Dickstein et al. 1977	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES - Exams	NO	NO	NO

	Aspects of Mental Well-Being/Distress									*Aspects of Academic Integrity/Misconduct*			
Author, Year	**Stress?**	**Anxiety?**	**Test/ exam anxiety?**	**Depression?**	**Emotions - Fear?**	**Emotions - Guilt?**	**Attitudes?**	**Affect?**	**Other - If YES, specify**	**Cheating - Assignments, Exams, Unspecified?**	**Plagiarism**	**Unspecified Academic Misconduct/ Dishonesty?**	**Other - If YES, specify**
Dyrbye et al. 2010	NO	NO	NO	YES	YES	NO	YES	NO	NO	Unspecified	NO	YES	NO
Edwards 2007	NO	NO	NO	NO	YES	YES	YES		NO	YES - Assignments	NO	NO	NO
Firmin et al. 2009	YES	YES	NO	NO	NO	NO	NO	NO	YES - anger, empathy	YES - Exams	NO	NO	NO
Giraud & Enders 2000	NO	NO	YES	NO	NO	NO	YES	NO	NO	YES - Assignments	NO	NO	NO
Gotlib et al. 2015	NO	NO	YES	NO	YES	NO	YES	NO	NO	YES - Exams	NO	NO	NO
Gravett & Kinchin 2020	YES	NO	NO	NO	YES	NO	NO	NO	YES - emotive responses	NO	YES	NO	NO
Green et al. 2005	NO	NO	NO	NO	YES	NO	YES	NO	NO	NO	YES	NO	NO
Greenberger et al. 2008	NO	YES	NO	NO	NO	NO	YES	NO	NO	YES - Assignments, Exams	YES	NO	YES - collusion
Hawi 2010	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES - Unspecified	NO	NO	NO
Hofmann et al. 2009	NO	YES	NO	NO	YES	NO	YES	YES	YES - psychopathy	YES - Unspecified	NO	YES	NO
Hwang &	YES	NO	NO	YES	NO	NO	NO	NO	NO	YES - Unspecified	NO	NO	NO

	Aspects of Mental Well-Being/Distress									*Aspects of Academic Integrity/Misconduct*			
Author, Year	**Stress?**	**Anxiety?**	**Test/ exam anxiety?**	**Depression?**	**Emotions - Fear?**	**Emotions - Guilt?**	**Attitudes?**	**Affect?**	**Other - If YES, specify**	**Cheating - Assignments, Exams, Unspecified?**	**Plagiarism**	**Unspecified Academic Misconduct/ Dishonesty?**	**Other - If YES, specify**
Goto 2008													
Ip et al. 2016	YES	NO	YES	NO	YES	NO	YES	NO	YES - psychopathy	Unspecified	NO	YES	NO
Kumar et al. 2009	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES - Unspecified	NO	NO	NO
Kurland & Siegel 2013	NO	YES	NO	NO	NO	NO	NO	NO	YES - attachment security	YES - Unspecified	YES	NO	NO
Malinowski & Smith 1985	NO	YES	NO	NO	YES	YES	YES	NO	NO	YES - Unspecified	NO	YES	NO
Minarcik & Bridges 2015	YES	NO	NO	NO	YES	NO	NO	YES	YES - fatigue, doubt	NO	NO	YES	NO
Ng et al. 2003	NO	YES	NO	NO	YES	NO	YES	NO	NO	Unspecified	YES	YES	NO
Okoye et al. 2018	YES	NO	NO	NO	YES	NO	YES	NO	NO	YES - Unspecified	NO	NO	NO
Qualls et al. 2017	NO	YES	NO	NO	NO	NO	NO	NO	YES - attachment	YES - Unspecified	NO	YES	NO
Rafati et al. 2020	YES	NO	NO	NO	YES	NO	YES	NO	NO	YES -Unspecified	NO	YES	NO
Selemani et al.	YES	NO	NO	NO	NO	NO	NO	NO	YES - pressure to	NO	YES	NO	NO

	Aspects of Mental Well-Being/Distress										*Aspects of Academic Integrity/Misconduct*			
Author, Year	**Stress?**	**Anxiety?**	**Test/ exam anxiety?**	**Depression?**	**Emotions - Fear?**	**Emotions - Guilt?**	**Attitudes?**	**Affect?**	**Other - If YES, specify**	**Cheating - Assignments, Exams, Unspecified?**	**Plagiarism**	**Unspecified Academic Misconduct/ Dishonesty?**	**Other - If YES, specify**
2018									succeed				
Seltzer 1983	NO	YES	YES	NO	YES	YES	YES	NO	NO	YES - Exams	NO	NO	NO
Shipley 2009	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES - Unspecified	NO	NO	NO
Smith et al. 2013	YES	YES	NO	NO	YES	NO	YES	NO	NO	YES - Unspecified	YES	YES	NO
Steininger et al. 1964	NO	YES	NO	NO	NO	YES	NO	NO	NO	YES - Exams	NO	NO	NO
Sullivan 2016	YES	NO	YES	NO	NO	NO	NO	NO	NO	YES - Exams	NO	NO	YES - collusion
Szabo & Underwood 2004	NO	NO	NO	NO	YES	NO	YES	NO	NO	YES - Unspecified	YES	YES	NO
Tindall & Curtis 2020	YES	NO	NO	NO	NO	NO	YES	NO	YES - emotionality	NO	YES	NO	NO
Toyin et al. 2009	YES	YES	NO	NO	YES	NO	YES	NO	NO	YES - Unspecified	NO	NO	NO
Vandehey et al. 2007	NO	NO	NO	NO	NO	YES	NO	NO	NO	YES - Assignments, Exams	NO	NO	NO
Weber et al. 1983	NO	YES	NO	NO	NO	NO	NO	NO	NO	YES - Exams	NO	NO	NO

	Aspects of Mental Well-Being/Distress									*Aspects of Academic Integrity/Misconduct*			
Author, Year	**Stress?**	**Anxiety?**	**Test/ exam anxiety?**	**Depression?**	**Emotions - Fear?**	**Emotions - Guilt?**	**Attitudes?**	**Affect?**	**Other - If YES, specify**	**Cheating - Assignments, Exams, Unspecified?**	**Plagiarism**	**Unspecified Academic Misconduct/ Dishonesty?**	**Other - If YES, specify**
Wenzel & Reinhard 2020	YES	YES	YES	NO	YES	NO	YES	YES	NO	YES - Exams	NO	NO	NO
Wowra 2007	YES	YES	YES	NO	YES	YES	YES	YES	NO	Unspecified	NO	YES	NO
Yesilyurt 2014	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO
Zaza & McKenzie 2018	YES	NO	NO	NO	YES	NO	NO	NO	NO	NO	YES	NO	NO
Zimbardo et al. 2003	NO	NO	YES	NO	NO	NO	NO	NO	NO	YES - Exams	NO	NO	NO
TOTAL # YES	**22**	**20**	**14**	**2**	**26**	**6**	**26**	**5**	**9**	**38**	**12**	**15**	**3**

Discussion

Our findings point to five themes that merit deeper consideration. These include 1) negativity bias; 2) inconsistency of definitions and constructs; 3) paradigmatic tensions; 4) focus on external stressors; and 5) focus on mental wellness prior to a critical incident. We address each of these in our discussion.

Theme 1: Negativity Bias

Negativity bias is a predisposition to towards negative events as being "more salient, potent, dominant in combinations, and generally efficacious than positive events" (Rozin & Royzman, 2001, p. 297). We found an overall negativity bias in the literature with a focus on misconduct behaviours (see, for example, Bailey & Challen, 2015; Da'asin, 2016; Firmin et al., 2009, Hofmann et al., 2009; Minarcik & Bridges, 2015; Qualls et al., 2017; Yesilyurt, 2014) rather than on behaviours associated with academic integrity (Kurland & Siegal, 2013; Zimbardo et al., 2003), such as ethical decision-making.

In general, we found the literature addressed mental distress rather than positive constructs such as resilience. Only one study mentioned resilience, and it was positioned in contrast to frailty (Gravett & Kinchin, 2020), so the negative contamination (Rozin & Royzmann, 2001) was still present. There is a need to further study aspects of positive mental well-being such as resilience, positive self-image and related concepts, in relation to academic integrity.

Theme 2: Inconsistency of Definitions and Constructs

It is not uncommon for misconduct to be defined inconsistently in the literature or in academic policies. In this study, we found a diversity of constructs mentioned in the literature and some terms were poorly defined, if they were defined at all. Several articles used the term "cheating" as a blanket term for a wide range of self-reported academic misconduct behaviours (Amua-Sekyi, 2006; Antion & Michael, 1983; Bronzaft et al., 1973; Dickstein et al., 1977; Firmin et al., 2009; Hwang & Goto, 2008; Ip et al., 2016; Shipley, 2009; Smith et al., 2013; Steininger et al.., 1964; Sullivan, 2016; Szabo & Underwood, 2004; Vandehey et al., 2007; Wenzel & Reinhard, 2020; Weber et al., 1983). Authors used terms such as "stress" (Brown et al., 2018; Cho & Hwang, 2019; Da'asin, 2016; Gotlib et al., 2015; Gravett & Kinchin, 2020; Minarcik & Bridges, 2015; Rafati et al., 2020; Toyin & Akporaro, 2009) or "anxiety" (Bronzaft et al., 1973; Brown et al., 2018; Dickstein et al., 1977; Edwards, 2007; Firmin et al., 2009; Giraud & Enders, 2000; Gravett & Kinchin, 2020; Greenberger et al., 2008; Malinowski & Smith, 1985; Ng et al., 2003; Seltzer, 1983; Wowra, 2007) with an apparent assumption that these terms are universally understood in consistent ways.

It is not that such terms cannot be defined, but rather that those who wrote about these concepts made little attempt to define or discuss these terms in their studies, or they relied on self-report data about students' feelings relating to stress and anxiety, but without a deep discussion of what these terms or self-reported feelings might be. There were similar ambiguities in the usage of academic misconduct and academic integrity terminology. In other words, we found no common or consistent language or understandings of what terms such as

"stress" or "anxiety" when they are used in relation to academic integrity.

Theme 3: Paradigmatic Tensions

The existing literature originates from a variety of academic disciplines. We found that studies from psychology relied more on quantitative methods and measured particular criteria with specific tools or scales (see Antion & Michael, 1983; Dickstein et al., 1973; Hawi, 2010; Hofmann et al., 2009; Selemani et al., 2018; Seltzer, 1983; Steininger et al., 1964; Szabo & Underwood, 2004). In contrast, studies from other fields, such as education used more qualitative approaches (see Bailey & Challen, 2015; Cho & Hwang, 2019; Devlin & Gray, 2007; Firmin et al., 2009; Gravett & Kinchin, 2020; Minarcik & Bridges, 2015). This points to the possibility of paradigmatic tensions between positivist and interpretivist approaches in the ways in which mental wellness has been studied with regards to academic integrity.

Although we did not analyze the various sources that authors cited in their papers, an anecdotal observation is that authors who conducted statistical studies did not cite authors in their literature reviews who had conducted qualitative studies and *vice versa*. Such an analysis was beyond the scope of this study, though we note it would be worthy of further study. We found no evidence of a discussion about these paradigmatic tensions in the research, leading us to conclude that the existing research has been conducted within disciplinary silos.

Theme 4: Focus on External Stressors

The literature tended to discuss external stressors such as examinations (Bronzaft et al., 1973; Brown et al., 2018, Da'asin, 2016; Kumar et al., 2009; Zimbardo et al., 2003), competitive academic culture (Conrad, 1986; Dyrbye et al., 2010; Okoye et al., 2018) or the use of technologies used to detect cheating such as text-matching software (Bailey & Challen, 2015; Gravett & Kinchin, 2020; Green et al., 2005; Zaza & McKenzie, 2018). We have discussed elsewhere that the effect of technologies designed to prevent academic misconduct, such as electronic proctoring software (e-proctoring) on students' mental well-being is poorly understood (Eaton & Turner, 2020). This rapid review confirmed the need to further study how technologies that purportedly prevent academic misconduct may also have a negative impact on students' mental well-being, though further study is needed to understand this impact in greater detail.

Only one study (Ng et al., 2003) mentioned how mental health concerns co-exist with other factors such as poor time management skills or inadequate academic support. The lack of empirical studies that consider multiple and compounding factors that may positively or negatively affect students' mental well-being in relation to academic integrity is a cause for concern, as it may point to advocacy efforts for students being based on the experiences of those working in student affairs, rather than (or in addition to) evidence-based studies.

Theme 5: Focus on Mental Well-Being Prior to a Critical Incident

Of particular note was that all of the studies focused on students' mental well-being prior to a

critical incident. If we consider the Continuum of Academic Integrity (see Figure 1), we found no studies that examined the impact of a critical incident (i.e., alleged or actual misconduct) on students' well-being. Using the criteria we established for this rapid review, we found no studies that discussed, for example, mental distress among students caused by academic misconduct cases. We would argue that those who work in student affairs would be aware of such cases of mental distress and behaviours related with distress or trauma such as self-harm, but there is a lack of studies investigating what happens to a student's mental well-being subsequent to an alleged or actual misconduct incident. The lack of such studies is cause for deep concern. We recognize that studying such phenomenon could be ethically complex and may be further complicated by privacy laws that exist in many jurisdictions; however, at the very least we would urge more open discussions and inquiry about the possible impact that an academic misconduct allegation or case may have on a student's mental well-being.

Limitations

One limitation of rapid reviews in general is that although they may be comprehensive, they are unlikely to be exhaustive (Hartling, 2017). Our rapid review was limited to works written in English and those that matched our inclusion criteria precisely, using six specific education, psychology, and interdisciplinary databases. Another limitation common to rapid reviews is that the streamlined analysis approach may result in limited detail in the findings. We acknowledge this as a limitation of our study. A further limitation of our work is that although we subscribe to a multi-stakeholder approach to academic integrity and well-being, in this study we focused exclusively on students' mental well-being. A clear direction for future study includes a subsequent study to examine the impact on faculty and staff with regards to academic integrity, and breaches of it.

We intended this rapid review to be a snapshot of the academic literature pertaining to our research question at the time of the study, in August 2020. The articles included in this rapid review are limited to the period of the database search, which encompassed articles up until August 2020. Since then, further studies have explored the intersection between academic integrity and mental well-being (e.g., Eshet et al., 2021; Sanni-Anibire et al., 2021; Steinberger et al., 2021; Tindall et al., 2021). We intentionally chose to keep our search results limited to this time period to achieve our secondary aim of exhibiting the implications of this rapid review on our scholarship and practice in the field of academic integrity.

Implications and Calls to Action

Since this research began in mid-2020, during the beginnings of the COVID-19 pandemic, we have seen the topic continue to resonate with practitioners and scholars invested in academic integrity in higher education. We have explored this topic in a webinar hosted by our institution, the University of Calgary, with a campus mental health expert. The webinar was offered once in October 2020 and again in October 2021, and we explored how campus mental health approaches can intersect with academic integrity practices for more integrated policies (Taylor Institute for Teaching and Learning, 2021). We were particularly encouraged by the interest in the topic when we presented the results of our rapid review at a national conference, the 2021 Canadian Symposium on Academic Integrity (Pethrick et al., 2021). In

this session, we heard observations arising from colleagues' practice about the relationships between academic integrity and student mental well-being and we collectively identified possible action steps that could be implemented into practice. These implications for practice arose directly from the themes present in the literature and were shaped informally by the conversations with practitioners and scholars in the field of academic integrity.

Practice Implications

Our rapid review has shown that the current literature on academic integrity and mental well-being is lacking in overall terms, but specifically with regards to potential changes to an individual's mental well-being following a critical incident moment. Although there may be a lack of evidence in this area, it is clear that there is an extant relationship, and, until better evidence is available, there are some implications we can suggest for practice. Those who directly work with suspected breaches of academic integrity can develop awareness of the possible impacts of the academic misconduct process on students' mental well-being and develop small strategies to support students in distress and promote well-being. The emerging area of wellness in higher education teaching and learning, which contains a wealth of individual practices that can support student well-being, could here be applicable (DiPlacito-DeRango, 2016; Schroeder & West, 2019). For example, staff and faculty knowing how to make appropriate referrals to campus wellness supports or knowing the signs of mental distress could assist students struggling with their mental well-being during an academic misconduct process.

There are also implications for policies and procedures in higher education institutions that could enable faculty and professionals to enact these individual practices and make lasting, systemic change. This is a part of the approach of campus mental health, which advocates for integrating well-being in all aspects of the institution (Mitchell et al., 2012). To achieve an integrated approach, most importantly, staff and faculty working with academic integrity should work with campus mental health teams and wellness services. Such local collaborations would lead to supports that would be meaningful and impactful within the specific context of each particular institution. Some examples of practices that could be implemented might include the revision of academic misconduct procedures to include consideration of student mental well-being, such as providing wellness resources and well-being check-ins throughout the process. Faculty and staff could be trained on how to adequately support student mental well-being, including the limits of their support and when to refer to wellness services, which could have positive impacts for suspected and actual breaches of academic integrity. These practices should be tailored to fit the needs of each individual institution and the mental health resources available. Additionally, although beyond the scope of this review, the impacts of academic misconduct procedures or managing student distress on staff and faculty well-being cannot be understated. If faculty and staff are to be expected to consider student mental well-being in their practice, there must also be adequate systemic and individual supports available for faculty and staff.

Scholarship Implications

The experiential or anecdotal evidence that practitioners who address academic misconduct

cases may have about the impact of an alleged or actual case of academic misconduct on students' mental well-being have yet to be studied in a systematic manner such that they have resulted in scholarly or professional publications. We call on future scholarship and research to empirically study this relationship. The academic integrity continuum (Figure 1) can serve as a framework for future research to identify a temporal connection. We note that the concept of critical incidence is one that merits deeper inquiry. Furthermore, although it seems to be well-explored that student stress or anxiety may increase the likelihood of academic misconduct, future research should focus on the impact to student mental well-being after a critical incident. This line of research would be able to directly inform the practice of faculty and higher education professionals who create, manage, and execute the processes on their campuses to deal with possible breaches of academic integrity. We call for research with methodological and conceptual rigour, drawing upon understandings of mental well-being from the rich body of literature on campus mental health and nuanced understandings of academic integrity.

Although rapid review methodology (and related methodologies, such as systematic or scoping reviews) is not often used in the field of educational research, scholars have begun to explore its role in scholarship and practice (Bearman et al., 2012; Zawacki-Richter et al., 2020). In this research, rapid review methodology enabled our research team to quickly review the academic literature about mental well-being and academic integrity, draw conclusions, and create an evidence base to communicate with experts in the field. We recommend that future research utilize the rapid review method as a rigorous way to evaluate evidence about emerging topics in academic integrity and make expedited, evidence-based implications for practice. Research teams interested in utilizing this methodology should consult an expert in rapid review methodology, such as an academic librarian, to make informed decisions about whether a rapid review would be appropriate for their research purpose and how to conduct a rapid review with rigour.

Conclusions

Although mental health is a topic of concern on many campuses, academic integrity, as it relates to mental well-being, has yet to be fully considered as an important topic from an evidence-based perspective. Our rapid review method was a way to spark conversations among practitioners and scholars about an area yet to be explored systematically in the field of academic integrity. This rapid review provided evidence that informed implications for practice and scholarship. We conclude with a call to action. There is an urgent need to better understand the impact of an alleged or actual academic integrity violation on students' mental well-being. This is a clear direction, not only for future research, but also for student advocacy and as an essential aspect of discussions about the student experience.

Acknowledgements

References

Adam, L. (2016). Student perspectives on plagiarism. In T. Bretag (Ed.), *Handbook of academic integrity* (pp. 519-535). Springer Singapore.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I., & Sheikh, S. (2013). Action versus inaction: Anticipated affect in the theory of planned behavior. *Journal of Applied Social Psychology, 43*(1), 155-162. https://doi.org/10.1111/j.1559-1816.2012.00989.x

Amua-Sekyi, E. T. (2016). Guilty in whose eyes? Student-teachers' perspectives on cheating on examinations. *Journal of Education and Practice, 7*(21), 55-64.

Antion, D. L., & Michael, W. B. (1983). Short-term predictive validity of demographic, affective, personal, and cognitive variables in relation to two criterion measures of cheating behaviors. *Educational and Psychological Measurement, 43(*2), 467-482. http://dx.doi.org/10.1177/001316448304300216

Bailey, C., & Challen, R. (2015). Student perceptions of the value of Turnitin text-matching software as a learning tool. *Practitioner Research in Higher Education*, *9*(1), 38-51.

Baxter Magolda, M. B. (2009). The activity of meaning making: A holistic perspective on college student development. *Journal of College Student Development, 50*(6), 621-639. https://doi.org/10.1353/csd.0.0106

Bearman, M., Smith, C. D., Carbone, A., Slade, S., Baik, C., Hughes-Warrington, M., & Neumann, D. L. (2012). Systematic review methodology in higher education. *Higher Education Research & Development, 31*(5), 625-640. https://doi.org/10.1080/07294360.2012.702735

Bertram Gallant, T. (2008). *Academic integrity in the twenty-first century: A teaching and learning imperative.* Wiley.

Bertram Gallant, T., & Drinan, P. (2006a). Institutionalizing academic integrity: Administrator perceptions and institutional actions. *NASPA Journal*, *43*(4), 61-81. http://dx.doi.org/10.2202/1949-6605.1723

Bertram Gallant, T., & Drinan, P. (2006b). Organizational theory and student cheating: Explanation, responses, and strategies. *The Journal of Higher Education*, *77*(5), 839-860. http://www.jstor.org/stable/3838789

Braxton, J. M. (2009). Understanding the development of the whole person. *Journal of College Student Development*, *50*(6), 573-575. http://dx.doi.org/10.1353/csd.0.0100

Bretag, T. (2019). From 'perplexities of plagiarism' to 'building cultures of integrity': A

reflection on fifteen years of academic integrity research, 2003-2018. *HERDSA Review of Higher Education,* 6. www.herdsa.org.au/herdsa-review-higher-education-vol-6/5-35

Bronzaft, A. L., Stuart, I. R., & Blum, B. (1973). Test anxiety and cheating on college examinations. *Psychological Reports, 32*(1), 149-150. http://dx.doi.org/10.2466/pr0.1973.32.1.149

Brown, T., Bourke-Taylor, H., Isbel, S., Gustafsson, L., McKinstry, C., Logan, A., & Etherington, J. (2018). Exploring similarities and differences among the self-reported academic integrity of Australian occupational therapy domestic and international students. *Nurse Education Today, 70,* 13-19. http://dx.doi.org/10.1016/j.nedt.2018.08.005

Cho, O.-H., & Hwang, K.-H. (2019). Academic ethical awareness among undergraduate nursing students. *Nursing Ethics, 26*(3), 833-844. http://dx.doi.org/10.1177/0969733017727155

Conrad, P. (1986). The myth of cut-throats among premedical students: On the role of stereotypes in justifying failure and success. *Journal of Health & Social Behavior*, *27*(2), 150-160. http://dx.doi.org/10.2307/2136313

Copeland, W. E., McGinnis, E., Bai, Y., Adams, Z., Nardone, H., Devadanam, V., . . . Hudziak, J. J. (2021). Impact of COVID-19 Pandemic on College Student Mental Health and Wellness. *Journal of the American Academy of Child & Adolescent Psychiatry, 60*(1), 134-141.e132. https://doi.org/10.1016/j.jaac.2020.08.466

Crossman, K. (2019). Is this in my contract?: How part-time contract faculty face barriers to reporting academic integrity breaches. *Canadian Perspectives on Academic Integrity*, *2*(1), 32-39. https://doi.org/10.11575/cpai.v2i1.68934

Da'asin, K. A. (2016). Attitude of Ash-Shobak University College students to e-exam for intermediate university degree in Jordan. *Journal of Education and Practice, 7*(9), 10-17.

Devlin, M., & Gray, K. (2007). In their own words: A qualitative study of the reasons Australian university students plagiarize. *Higher Education Research and Development, 26*(2), 181-198. http://dx.doi.org/10.1080/07294360701310805

Dickstein, L. S., Montoya, R., & Neitlich, A. (1977). Cheating and fear of negative evaluation. *Bulletin of the Psychonomic Society*, *10*(4), 319-320. http://dx.doi.org/10.3758/BF03329348

DiPlacito-DeRango, M. L. (2016). Acknowledge the barriers to better the practices: Support for student mental health in higher education. *Canadian Journal for the Scholarship of Teaching and Learning*, *7*(2), 2. http://dx.doi.org/10.5206/cjsotl-rcacea.2016.2.2

Dobbins, M. (2017). *Rapid Review Guidebook: Steps for Conducting a Rapid Review*. https://www.nccmt.ca/uploads/media/media/0001/01/a816af720e4d587e13da6bb

307df8c907a5dff9a.pdf

Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining well-being. *International Journal of Wellbeing*, *2*(3), 222-235. https://doi.org/10.5502/ijw.v2.i3.4

Dyrbye, L. N., Massie Jr, F. S., Eacker, A., Harper, W., Power, D., Durning, S. J., Thomas, M. R., Moutier, C., Satele, D., Sloan, J., & Shanafelt, T. D. (2010). Relationship between burnout and professional conduct and attitudes among US medical students. *JAMA*, *304*(11), 1173-1180. http://dx.doi.org/10.1001/jama.2010.1318

Eaton, S. E. (2021). *Plagiarism in higher education: Tackling tough topics in academic integrity.* ABC-CLIO.

Eaton, S. E., & Turner, K. L. (2020). Exploring academic integrity and mental health during COVID-19: Rapid review. *Journal of Contemporary Education Theory & Research, 4*(2), 35-41. https://doi.org/10.5281/zenodo.4256825

Eaton, S. E., Pethrick, H., & Turner, K. L. (2021). Academic integrity and mental well-being. https://osf.io/rycsh/

Edwards, N. M. (2007). Student self-grading in social statistics. *College Teaching*, *55*(2), 72-76. http://dx.doi.org/10.3200/CTCH.55.2.72-76

Eshet, Y., Steinberger, P., & Grinautsky, K. (2021). Relationship between statistics anxiety and academic dishonesty: A comparison between learning environments in Social Sciences. *Sustainability*, *13*(3), 1564. https://doi.org/10.3390/su13031564

Frenken, B. (2013). Beating cheating: Teachers and the capital intellectual crime. *Education and Law Journal*, *22*(2), 121-152.

Firmin, M. W., Burger, A., & Blosser, M. (2009). Affective responses of students who witness classroom cheating. *Educational Research Quarterly*, 32(3), 3-15.

Gagné, A. (2020). Reflections on academic integrity and educational development during COVID-19. *Canadian Perspectives on Academic Integrity, 3*(2), 16-17. https://doi.org/10.11575/cpai.v3i2.71642

Giraud, G., & Enders, C. (2000, April 13-17). *The effects of repeated cooperative testing in an introductory statistics course*. Annual Meeting of the American Educational Research Association, San Diego, CA.

Gotlib, J., Panczyk, M., Gębski, P., Zarzeka, A., Iwanow, L., Dąbrowski, F., Dykowska, G., & Malczyk, M. (2015). Comparative analysis of opinions of Warsaw Medical University students on electronic examinations and final tests by their participation in this form of knowledge assessment - Preliminary report. *Polish Journal of Public Health*, *125*(3), 153-158. http://dx.doi.org/10.1515/pjph-2015-0044

Gravett, K., & Kinchin, I. M. (2020). Referencing and empowerment: Exploring barriers to

agency in the higher education student experience. *Teaching in Higher Education*, *25*(1), 84-97. http://dx.doi.org/10.1080/13562517.2018.1541883

Green, D., Lindemann, I., Marshall, K., & Wilkinson, G. (2005). Student Perceptions of a Trial of Electronic Text Matching Software: A Preliminary Investigation. *Journal of University Teaching & Learning Practice*, *2*(3). https://files.eric.ed.gov/fulltext/EJ1059489.pdf

Greenberger, E., Lessard, J., Chen, C., & Farruggia, S. (2008). Self-entitled college students: Contributions of personality, parenting, and motivational factors. *Journal of Youth & Adolescence*, *37*(10), 1193-1204. http://dx.doi.org/10.1007/s10964-008-9284-9

Grubic, N., Badovinac, S., & Johri, A. M. (2020). Student mental health in the midst of the COVID-19 pandemic: A call for further research and immediate solutions. *International Journal of Social Psychiatry, 66*(5), 517-518. https://doi.org/10.1177/0020764020925108

Hartling, L., Guise, J.-M., Hempel, S., Featherstone, R., Mitchell, M. D., Motu'apuaka, M. L., Robinson, K. A., Schoelles, K., Totten, A., Whitlock, E., Wilt, T. J., Anderson, J., Berliner, E., Gozu, A., Kato, E., Paynter, R., & Umscheid, C. A. (2017). Fit for purpose: perspectives on rapid reviews from end-user interviews. *Systematic Reviews*, *6*(1), 32. https://doi.org/10.1186/s13643-017-0425-7

Hawi, N. (2010). Causal attributions of success and failure made by undergraduate students in an introductory-level computer programming course. *Computers & Education*, *54*(4), 1127-1136. http://dx.doi.org/10.1016/j.compedu.2009.10.020

Hofmann, S. G., Korte, K. J., & Suvak, M. K. (2009). The upside of being socially anxious: Psychopathic attributes and social anxiety are negatively Associated. *Journal of Social & Clinical Psychology*, *28*(6), 714-727. http://dx.doi.org/10.1521/jscp.2009.28.6.714

Hwang, W.-C., & Goto, S. (2008). The impact of perceived racial discrimination on the mental health of Asian American and Latino college students. *Cultural Diversity & Ethnic Minority Psychology*, *14*(4), 326-335. http://dx.doi.org/10.1037/1099-9809.14.4.326

International Center for Academic Integrity (ICAI). (2021). *The fundamental values of academic integrity (*3rd ed.). https://www.academicintegrity.org/fundamental-values/

Ip, E. J., Nguyen, K., Shah, B. M., Doroudgar, S., & Bidwal, M. K. (2016). Motivations and predictors of cheating in pharmacy school. *American Journal of Pharmaceutical Education, 80*(8), 1-7. https://doi.org/10.5688/ajpe808133

Kaposi, D., & Dell, P. (2012). Discourses of plagiarism: Moralist, proceduralist, developmental and inter-textual approaches. *British Journal of Sociology of Education*, *33*(6), 813-830. https://doi.org/10.1080/01425692.2012.686897

Katz, D. S., & Davison, K. (2014). Community college student mental health: A comparative analysis. *Community College Review, 42*(4), 307-326. https://doi.org/10.1177/0091552114535466

Kier, C. A. (2020). Reflections on COVID-19 and academic integrity. *Canadian Perspectives on Academic Integrity, 3*(2), 20-22. https://doi.org/10.11575/cpai.v3i2.71643

Kumar, S., Dagli, R. J., Mathur, A., Jain, M., Prabu, D., & Kulkarni, S. (2009). Perceived sources of stress amongst Indian dental students. *European Journal of Dental Education*, *13*(1), 39-45. http://dx.doi.org/10.1111/j.1600-0579.2008.00535.x

Kurland, R. M., & Siegel, H. I. (2013). Attachment and student success during the transition to college. *NACADA Journal*, *33*(2), 16-28. http://dx.doi.org/10.12930/NACADA-12-252

Liu, C. H., Pinder-Amaker, S., Hahm, H. C., & Chen, J. A. (2020). Priorities for addressing the impact of the COVID-19 pandemic on college student mental health. *Journal of American College Health*, 1-3. https://doi.org/10.1080/07448481.2020.1803882

Malinowski, C. I., & Smith, C. P. (1985). Moral reasoning and moral conduct: An investigation prompted by Kohlberg's theory. *Journal of Personality & Social Psychology*, *49*(4), 1016-1027. http://dx.doi.org/10.1037/0022-3514.49.4.1016

McCabe, D. (1992). The influence of situational ethics on cheating among college students. *Sociological Inquiry*, *62*(3), 365-374. https://doi.org/10.1111/j.1475-682X.1992.tb00287.x

McCabe, D. (2016). Cheating and honor: Lessons from a long-term research project. In T. Bretag (Ed.), *Handbook of academic integrity* (pp. 187-198). Springer Singapore.

McCabe, D. L., Butterfield, K. D., & Treviño, L. K. (2012). *Cheating in college: Why students do it and what educators can do about it*. Johns Hopkins University Press.

Minarcik, J., & Bridges, A. J. (2015). Psychology graduate students weigh in: Qualitative analysis of academic dishonesty and suggestion prevention strategies. *Journal of Academic Ethics, 13*(2), 197-216. http://dx.doi.org/10.1007/s10805-015-9230-x

Mitchell, S. L., Darrow, S. A., Haggerty, M., Neill, T., Carvalho, A., & Uschold, C. (2012). Curriculum infusion as college student mental health promotion strategy. *Journal of College Student Psychotherapy, 26*(1), 22-38. https//doi.org/10.1080/87568225.2012.633038

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & The, P. G. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLOS Medicine*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097

Newton, P. M., & Lang, C. (2016). Custom essay writers, freelancers, and other paid third parties. In T. Bretag (Ed.), *Handbook of academic integrity* (pp. 249-271). Springer Singapore.

Ng, H. W. W., Davies, G., Bates, I., & Avellone, M. (2003). Academic dishonesty among pharmacy students. Investigating academic dishonesty behaviours in undergraduates.

Pharmacy Education, *3*(4), 261-269.

Okoye, O. I., Maduka-Okafor, F., Matthias, R. C., Udeaja, A., & Chuku, A. I. (2018). Academic misconduct in Nigerian medical schools--A report from focus group discussions among house officers. *Journal of Academic Ethics*, *16*(3), 275-285. http://dx.doi.org/10.1007/s10805-017-9294-x

Pethrick, H., Eaton, S. E., & Turner, K. L. (2021). Academic integrity and mental well-being: Exploring an unexplored relationship. *Canadian Perspectives on Academic Integrity, 4(*2), 53-53. https://doi.org/10.11575/cpai.v4i2.74182

Pluye, P., & Hong, Q. N. (2014). Combining the power of stories and the power of numbers: mixed methods research and mixed studies reviews. *Annual Review of Public Health*, *35*, 29-45. http://dx.doi.org/10.1146/annurev-publhealth-032013-182440

Qualls, R. C., Figgars, L., & Gibbs, D. (2017). The relationship among childhood discipline, adult attachment, and academic dishonesty in college students. *College Student Journal*, *51*(1), 7-12.

Rafati, F., Bagherian, B., Mangolian shahrbabaki, P., & Imani Goghary, Z. (2020). The relationship between clinical dishonesty and perceived clinical stress among nursing students in southeast of Iran. *BMC Nursing*, *19*(1), 1-8.

Rozin, P., & Royzman, E. B. (2001). Negativity bias, negativity dominance, and contagion. *Personality and Social Psychology Review*, 5(4), 296-320.

Sanni-Anibire, H., Stoesz, B. M., Gervais, L., & Vogt, L. (2021). International students' knowledge and emotions related to academic integrity at Canadian postsecondary institutions. *International Journal for Educational Integrity*, *17*(1), 1-15. https://doi.org/10.1007/s40979-021-00088-4

Schroeder, M., & West, A. (2019). *Student mental health and well-being: Supportive teaching and learning practices*. Taylor Institute for Teaching and Learning Guide Series. Calgary, AB: Taylor Institute for Teaching and Learning, University of Calgary. https://taylorinstitute.ucalgary.ca/resources/guides

Selemani, A., Chawinga, W. D., & Dube, G. (2018). Why do postgraduate students commit plagiarism? An empirical study. *International Journal for Educational Integrity*, *14*(1). http://dx.doi.org/10.1007/s40979-018-0029-6

Seltzer, L. F. (1983). Influencing the "shape" of resistance: An experimental exploration of paradoxical directives and psychological reactance. *Basic & Applied Social Psychology*, *4*(1), 47-71. http://dx.doi.org/10.1207/s15324834basp0401_5

Shipley, L. J. (2009). Academic and professional dishonesty: Student views of cheating in the classroom and on the job. *Journalism & Mass Communication Educator*, 64(1), 39-53. http://dx.doi.org/10.1177/107769580906400104

Singhal, A. C. (1982). Factors in students' dishonesty. *Psychological Reports*, *51*(3), 775-780.

Smith, T. R., Langenbacher, M., Kudlac, C., & Fera, A. G. (2013). Deviant reactions to the college pressure cooker: A test of general strain theory on undergraduate students in the United States. *International Journal of Criminal Justice Sciences*, *8*(2), 88-104.

Soet, J., & Sevig, T. (2006). Mental health issues facing a diverse sample of college students: Results from the college student mental health survey. *NASPA Journal, 43*(3), 410-431. https://doi.org/10.2202/1949-6605.1676

Sopcak, P. (2020). Academic integrity and the pandemic. *Canadian Perspectives on Academic Integrity, 3*(2), 41-42. https://doi.org/10.11575/cpai.v3i2.71649

Steinberger, P., Eshet, Y., & Grinautsky, K. (2021). No anxious student is left behind: Statistics anxiety, personality traits, and academic dishonesty—lessons from COVID-19. *Sustainability*, *13*(9), 4762. https://doi.org/10.3390/su13094762

Steininger, M., Johnson, R. E., Kirts, D. K., & Adams, A. (1964). Cheating on college examinations as a function of situationally aroused anxiety and hostility. *Journal of Educational Psychology*, *55*(6), 317-324. http://dx.doi.org/10.1037/h0042396

Storrie, K., Ahern, K., & Tuckett, A. (2010). A systematic review: Students with mental health problems—A growing problem. *International Journal of Nursing Practice, 16*(1), 1-6. https://doi.org/10.1111/j.1440-172X.2009.01813.x

Sullivan, D. P. (2016). An integrated approach to preempt cheating on asynchronous, objective, online assessments in graduate business classes. *Online Learning*, *20*(3), 195-209. http://dx.doi.org/10.24059/olj.v20i3.650

Szabo, A., & Underwood, J. (2004). Cybercheats: Is information and communication technology fuelling academic dishonesty? *Active Learning in Higher Education the Journal of the Institute for Learning and Teaching*, *5*(2), 180-199. http://dx.doi.org/10.1177/1469787404043815

Tauginienė, L., Gaižauskaitė, I., Glendinning, I., Kravjar, J., Ojsteršek, M., Ribeiro, L., Odiņeca, T., Marino, F., Cosentino, M., Sivasubramaniam, S., Foltýnek, T. (2018). Glossary for Academic Integrity. ENAI Report 3G [online]: revised version, October 2018. https://academicintegrity.eu/wp/wp-content/uploads/2022/07/Glossary_revised_final.pdf

Taylor Institute for Teaching and Learning. (2021). *Integrity week.* https://taylorinstitute.ucalgary.ca/series-and-events/integrity-week

Thomas, A. (2017). Faculty reluctance to report student plagiarism: A case study. *African Journal of Business Ethics, 11*(1), 103–119.

Tindall, I. K., & Curtis, G. J. (2020). Negative emotionality predicts attitudes toward plagiarism.

Journal of Academic Ethics, *18*(1), 89-102. http://dx.doi.org/10.1007/s10805-019-09343-3

Tindall, I. K., Fu, K. W., Tremayne, K., & Curtis, G. J. (2021). Can negative emotions increase students' plagiarism and cheating? *International Journal for Educational Integrity, 17*(1), 25. https://doi.org/10.1007/s40979-021-00093-7

Toyin, F. O., & Akporaro, A. C. (2009). An evaluation of academic stress and coping mechanism among married female students in Nigerian tertiary institutions. *Gender & Behaviour*, *7*(1), 2281-2301. https://doi.org/10.4314/gab.v7i1.45047

Vandehey, M., Diekhoff, G., & LaBeff, E. (2007). College cheating: A twenty-year follow-up and the addition of an honor code. *Journal of College Student Development*, *48*(4), 468-480. http://dx.doi.org/10.1353/csd.2007.0043

Weber, L. J., McBee, J. K., & Krebs, J. E. (1983). Take home tests: An experimental study. *Research in Higher Education*, *18*(4), 473-483. http://dx.doi.org/10.1007/BF00974810

Wenzel, K., & Reinhard, M.-A. (2020). Tests and academic cheating: Do learning tasks influence cheating by way of negative evaluations? *Social Psychology of Education*, *23*(3), 721-753. https://doi.org/10.1007/s11218-020-09556-0

Westerhof, G. J., & Keyes, C. L. (2010). Mental illness and mental health: The two continua model across the lifespan. *Journal of Adult Development*, *17*(2), 110-119.

Wowra, S. (2007). Moral identities, social anxiety, and academic dishonesty among American college students. *Ethics & Behavior*, *17*(3), 303-321. http://dx.doi.org/10.1080/10508420701519312

Wright, J. C., & Kelly, R. (1974). Cheating: Student/faculty views and responsibilities. *Improving College and University Teaching, 22*(1), 31–34.

Yesilyurt, E. (2014). Academic locus of control, tendencies towards academic dishonesty and test anxiety levels as the predictors of academic self-efficacy. *Educational Sciences: Theory and Practice*, *14*(5), 1945-1956.

Zawacki-Richter, O., Kerres, M., Bedenlier, S., Bond, M., & Buntins, K. (2020). *Systematic reviews in educational research: Methodology, perspectives and application.* Springer Nature. https://doi.org/10.1007/978-3-658-27602-7

Zaza, C., & McKenzie, A. (2018). Turnitin® use at a Canadian university. *Canadian Journal for the Scholarship of Teaching and Learning*, *9*(2). http://dx.doi.org/10.5206/cjsotl-rcacea.2018.2.4

Zimbardo, P. G., Butler, L. D., & Wolfe, V. A. (2003). Cooperative college examinations: More gain, less pain when students share information and grades. *Journal of Experimental Education*, *71*(2), 101. http://dx.doi.org/10.1080/00220970309602059