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An empirical analysis of differences in plagiarism among world cultures

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ABSTRACT

Academic integrity issues, e.g. plagiarism, continue to plague higher education across the globe. Research has noted that the identification and tolerance of cheating behaviors varies dependent upon local culture. This quantitative, comparative study investigated the potential differences among actual rates of incidence of plagiarism among predominant countries and regions in which the literature identified as having academic integrity problems. This study gathered doctoral dissertations and master's theses from institutions in the selected locations and analyzed them with Turnitin® originality assessment software. Regions and countries evaluated were based on guidance from exigent literature. A Kruskal-Wallis test was conducted to evaluate any differences in the prevalence of plagiarism among these locations. The results indicated that there was a statistically significant difference among groups, $\chi^2(6, N = 266) = 19.545, p = 0.003, \eta^2 = 0.074$. Further analysis determined a mix of findings that both support and deny conceptions in other literature.

KEYWORDS

Academic integrity; ethics; plagiarism; Turnitin; cheating; higher education; culture

Nelson Mandela once said, 'education is the most powerful weapon which you can use to change the world' (Strauss, 2013, para 1). Of course, for education to be effective, students must themselves be willing to participate in the education process from attending school to synthesizing the materials to which they have been exposed. If students forgo these efforts by seeking only the end goal, such as a suitable grade or completing a program of study, by devious means, their education is incomplete or potentially absent. As such, academic integrity has been an issue of concern since the development of text-based education. The higher the stakes, it seems, the more pressure that is placed on students to excel. Unfortunately, this has led to a wide variety of cheating methods being adopted in efforts to pass courses and complete degree programs. When students fraudulently complete their education, they are not only negatively impacting themselves, but potentially society as well. Regrettably, the copying of other persons' ideas and writing, without attributing its source (i.e., plagiarism) has been a constant within institutions of education (Fusch, Ness, Booker, & Fusch, 2017). With increasing importance placed upon education across the globe, especially regarding attainment of advanced degrees, the pressure to do whatever is necessary to complete one's studies can often be overwhelming. As a result, students are resorting

to shortcuts such as plagiarism or other misconduct to complete their degrees (Amos, 2014; Bretag et al., 2014).

Before written text, the ability to recall the exact words of teachers was considered critical to the dissemination of knowledge (Gray, 2008). Take for example the teachings of Buddha – which were passed along orally from one generation to another – until an outside threat, disease threatened such a method of transmission and brought forth the written versions of his discourses (Lama & Chodron, 2017). As written communication became the norm, the appreciation for original work grew, though not as quickly in certain cultures versus others. Western civilizations have notably led the movement towards protecting the work of authors, with references to the issue of plagiarism being raised in ancient Rome (60 B.C.) (McGill, 2012). With the advent of the printing press and the rise of publishing, owners of work had another incentive to protect original works: money. With the rapid growth in published work, the concept of copyright was born in British society and was adopted by many other Western nations soon thereafter, including the American colonies (Association of Research Libraries, n.d.). It is important to note, however, that not all cultures view the borrowing of the works of others to be unethical, at least not at the level that is typical of modern Western and select other developed countries (Frost & Hamlin, 2015).

Solely based on societal norms in various countries and regions, the sentiments about what constitutes cheating or plagiarism vary. As Hu and Lei (2015) stated, the tolerance of plagiarism is a function of social, political, and cultural influences. Amos (2014) noted that, due to the increasing internationalization of education, differences in opinions on academic misconduct among various cultures should be of interest to higher education stakeholders. Currently, it is very commonplace for students to study abroad bringing with them different perceptions of academic integrity which prove to sometimes be in contrast with those of their host institution. Moreover, higher education faculty and administration have expectations of such international students to conform to academic integrity standards which may be unfamiliar to visiting students (Zhu, 2016). Further complicating things is the issue of language. Because international students often are expected to write in a non-native language, they may be tempted to borrow works that are available in the local language (Hu & Lei, 2015). One significant reason for further inquiry in cultural dissimilarities is that ‘understanding how students think about, and their attitudes toward, academic dishonesty could help to reduce the incidence of academic dishonesty’ and that these differences ‘have serious implications for educators and administrators in today’s globalized world’ (Yukhymenko-Lescroart, 2014, p. 30).

Although a plethora of studies indicate significant differences in attitudes towards plagiarism and other forms of academic dishonesty, the overwhelming majority used surveys to characterize student perceptions rather than directly gauging the incidence of misconduct (Ehrich, Howard, Mu, & Bokosmaty, 2016; Henning et al., 2015; Hu & Lei, 2015; Ison, 2015). The current body of literature indicated that there was inadequate available research on global differences in plagiarism. Moreover, the existing research perpetuates stereotypes of persons from certain countries which, again, is not yet supported by evidence of actual incidence rather than perceived incidence. As Ehrich et al. (2016) stated ‘to date; there is little empirical evidence to establish the credibility of this stereotype of Chinese students having “softer” attitudes or a greater propensity to plagiarise [*sic*] than Western students’ (p. 232). Complicating things further, several

forementioned studies queried students while they were studying abroad, which several authors noted may have influenced students to respond differently than perhaps they would have if they had been surveyed in their home country (Zhu, 2016). Because of the importance of the preservation of academic integrity and understanding how foreign students view academic dishonesty coupled with the flaws and limitations of existing research, this study sought to compare the actual rates of plagiarism among theses and dissertations by authors studying at institutions within their native country (Forbes-Mewett, McCulloch, & Nyland, 2015; Pecorari, 2015).

Review of literature

While there are differences between the various published studies on academic integrity and plagiarism in terms of how many students cheat, why they cheat, how they cheat, and in which countries seem to have a higher prevalence of dishonest conduct, one common thread is that plagiarism is a serious and pervasive issue in global higher education (Bretag et al., 2014; Frost & Hamlin, 2015; Heckler & Forde, 2015; Ison, 2016; Martin, Rao, & Sloan, 2009; McCabe, Treviño, & Butterfield, 2001). As highlighted by Heckler and Forde (2015),

one reason plagiarism can become rampant on college campuses is that it is rarely detected or punished. With great temptation and little fear of getting caught, students may opt for the ‘easy way out’ and then are reinforced for this behavior when they receive no consequences for their actions. (p. 62)

Even with improved technologies to detect plagiarism, such effort requires time and energy on the part of faculty and the institution not to mention the cost of its adoption. Complicating the upholding of academic integrity is the ease of access to information made available by the Internet. Students are presented with almost endless amounts of text from which to cut-and-paste through a simple online search. Further, the Internet presents easy access to other services such as paper writing services or databases of prewritten works (Eret & Ok, 2014; Heckler & Forde, 2015; Ison, 2016). Though it is widely recognized that plagiarism is a problem for institutions across the globe, individual locations reportedly have higher rates or even tolerance of such misbehavior which has been traced back to indigenous cultural norms.

Unique cultural contexts

The United States and Western Europe

Problems of plagiarism in the United States appear to stem, at least partially, from what Heckler and Forde (2015) describe as ‘a highly competitive environment [...] against a backdrop of economic inequality [that] has created a society without a moral compass’ (p. 63). Pressure to succeed in education is extreme in Western cultures as one’s livelihood and career prospects often depend upon acceptance into college, particularly well-renowned institutions, as well as the ability to be accepted into competitive, lucrative academic programs. Although the United States and other developed Western countries have their share of plagiarizing students, this activity is – at least at face value – considered to be unethical. Further, institutions in these

countries have honor codes or other processes that formally prohibit a range of academically dishonest activities, with plagiarism being a primary consideration (Ison, 2016; Rawwas, Al-Khatib, & Vitell, 2004). This is due to the individualistic and achievement-oriented cultures prominent in the West. Moreover, in such cultures, ‘individual brilliance is admired, and the successful achiever is idolized’ (Rawwas et al., 2004, p. 91). In such environments, concepts of copyright, patents, and protection of intellectual property are well defined and enforced by law. An individual’s novel idea or work is recognized as an asset of its creator and worth protecting from copying or theft (Rawwas et al., 2004). Even in light of these cultural commonalities, research has indicated that countries such as the United States and United Kingdom are still threatened by pervasive plagiarism (Glendinning, 2014; Heyneman, 2017).

Eastern Europe and Russia

The post-Soviet world of Eastern Europe and Russia has become increasingly competitive for students to secure better jobs and economic security. Not surprisingly, plagiarism is a tempting option for students wishing to excel. Mwamwenda (2012) found that Russian students were more likely to cheat than their U.S. counterparts and that a wide range of academically dishonest behaviors was commonplace in Russian universities. Frost and Hamlin (2015) noted that Russian schools focus on group work during early schooling which therefore is hard to ‘undo’ as students move on to higher levels of study. These authors also noted that ‘Eastern European students tended to feel that plagiarism was a relatively normal thing and often exhibited an attitude of “shoot the whistleblower”’ (Frost & Hamlin, 2015, Review of Literature para. 9). This was further confirmed by Baždarić, Bilić-Zulle, Brumini, and Petrovečki (2012) stating that ‘Eastern and post-communist countries are more tolerant towards cheating and plagiarism than their Western counterparts’ (p. 224). Further evidence, provided by Yukhymenko-Lescroart (2014), showed significant differences between student perceptions of academic dishonesty in the United States versus Eastern European and former Soviet nations with 85.4% of U.S. students and 3.5% of Ukrainian students agreeing that cheating was unethical. A study by Foltyniek and Glendinning (2015) indicated notable differences between students in the United Kingdom and Eastern Europe (e.g., Bulgaria, Lithuania) in training on plagiarism avoidance, with over 80% of U.K. students reporting they had received such instruction while only 33% of students in Bulgaria reporting the same. Lastly, the low pay of teachers in some Eastern European nations coupled with the varied stage of plagiarism prevention measures that have been adopted (e.g., detection software) may make deterrence a low priority or more challenging to implement (Glendinning, 2014).

Asian cultures

While it is difficult to generalize across the spectrum of nations and peoples on the continent of Asia, several studies indicate that many Asian cultures, including those in the Middle East, contrast those of the West in that they are collectivistic. In collectivist cultures, cooperation is encouraged, and success is measured in the group rather than individual level (Rawwas et al., 2004). Frost and Hamlin (2015) observed,

that students in some cultures often operate under a different ‘moral code’ than American and western European universities, and thus they may not view certain types of restricted behavior to be dishonest. This often occurs in collectivist countries where the culture embeds in its citizens an attitude that ‘one cannot let one’s countryman fail’. (Why this problem is important, para. 3)

Available literature regularly compared Middle Eastern nations to China regarding the social stance on academic integrity. Baždarić et al. (2012) noted that in Turkey, ‘copying from others is not perceived negatively’ (p. 235). In Amos (2014), some of the highest levels of article retractions due to plagiarism occurred for submissions from Turkey and Iran. Yukhymenko-Lescroart (2014) found that Central Asian countries in their study had higher disregard for academic integrity than the United States. Moten (2014) described that despite it going against Islamic principles ‘the incidence of plagiarism has grown significantly among Muslim students and faculty members in the Muslim world’ (p. 167). The problem of plagiarism was also described to be an issue across the region with ‘many universities in countries like Bangladesh, Pakistan, and Iran hav[ing] no specific policy on academic integrity and honesty and are lenient toward plagiarism’ (Moten, 2014, p. 185).

As the third largest country for higher education in the world, India makes a significant contribution to the scholarly body of knowledge. Unfortunately, plagiarism has been a continuing problem within theses, dissertations, and research articles written in India (Singh, 2016). According to Singh and Guram (2014), 90% of study participants stated that self-plagiarism was not an ethical issue and 93% believed that plagiarism should be permissible in some instances. Singh (2016) also found that publication in poor quality or fake ‘predatory journals’ by Indian scholars was far too common. Because of concerns about rampant plagiarism, the Government of India has, since 2014, implemented an initiative to supply some local universities with plagiarism detection software. Although this was recognized as a step in the right direction, because of the ties among publication, promotion, and pay coupled with the lack of training on ethical writing and limited oversight, misconduct continues to be a noteworthy concern (Singh & Guram, 2014). Even in light of edicts set forth by the government ‘many have ignored the directives. Hence there is no control over their functioning’ (Juyal, Thawani, & Thaledi, 2015, p. 542). Satyanarayana (as cited by Juyal et al., 2015) argued that ‘if India wishes to emerge as a global power in science and technology, it is important to achieve international credibility and integrity of the scientific research being reported, which currently is much below par’ (p. 543).

China has been singled out as having some of the highest reported levels of academic dishonesty in the world (Amos, 2014; Baždarić et al., 2012; Frost & Hamlin, 2015; Heckler & Forde, 2015; Mwamwenda, 2012). Some studies have shown that Chinese scholars engage in plagiarism more than those from other countries or cultures (Amos, 2014; Baždarić et al., 2012; Henning et al., 2015). Recent high-profile media stories seem to support the fact that China has an academic integrity problem. The *Wall Street Journal* reported that in 2015, over 8000 students were expelled from American universities due to poor grades or cheating (Qi, 2015). Tyre (2016) reported that Chinese students are actively cheating on SAT, GRE, and other standardized tests, in some cases hiring imposters to take the tests for them. Upon acting against students who were known to be cheating, student riots broke out in response to the crackdown (Moore, 2013). According to findings by Ehrlich et al. (2016), 20% of Chinese students compared to 6% of Australian students

viewed plagiarism as an acceptable practice. Chinese students thought that plagiarism was justified when in high workload environments.

Perhaps one reason why so much research has focused on China is that scholarly work has become more important to Chinese institutions and increasingly prevalent within international publications. An additional source of negative images portrayed in studies stems from questions about the ethics of Chinese researchers. In a study focused on Chinese doctoral students, it was found 'language reuse to be a commonly used composing strategy among the novices when they attempted to write' (Li, 2013, pp. 571–572). Li (2013) also found that Chinese scholars do not view attribution for others' work to be standard practice. Moreover, significant differences were found to exist between Chinese and Western scholars in their perceived requirement to acknowledge authorship of source documents. This could be a result of what Hu and Lei (2015) described as a lack of 'training in Chinese academic writing at the undergraduate level, not to mention instruction in source attribution' (p. 236).

Some studies indicated that despite the negative image of Chinese research, that the Chinese government, higher education institutions, and scholars are becoming increasingly intolerant of plagiarism (Hu & Lei, 2015; Rawwas et al., 2004). There is also significant disincentive to plagiarize as Chinese research has come under closer scrutiny by editors and publishers. Two examples being the retraction of 70 Chinese articles from a prominent British journal and 21% of articles by Chinese authors in a Croatian medical publication (Baždarić et al., 2012; Qiu, 2010). Lastly, Rawwas et al. (2004) argued that collectivist culture may provide some deterrence as losing face as a group would not be viewed as a favourable outcome.

African cultures

The exigent literature on African cultures states that plagiarism is a common problem within local higher education institutions due to the lack of policies and enforcement. One study found that 'plagiarism in Kenyan Universities had increased in students' work, essays, term papers, and dissertations mainly because of the lack of anti-plagiarism mechanisms' (Moten, 2014, p. 179). According to Mwamwenda (2012), academic dishonesty is common in East African universities, though such findings were not significantly different than in South Africa and Western nations. Other studies paint a less favourable light on the performance of South African, Ethiopian, and Nigerian students (Ellery, 2008; Okonta & Rossouw, 2013; Teferra, 2001). Motivations to conduct plagiarism and other types of dishonest practices are due to the need to exceed in secondary school to qualify for post-secondary work or to stand out in a sea of post-secondary graduates. In either case, the prospect of attaining a well-paying job is slim without peak performance, especially 'where there is economic insecurity, competition, and a prevalence of unemployment' (Mwamwenda, 2012, p. 461). Amos (2014) noted a large number of article retractions due to plagiarism among other African countries such as Egypt and Tunisia. A common thread among African student infringements on academic integrity is that 'most students are not aware of plagiarism and most do not think that it is a big offense. The issue is confounded by the fact that academic staff is not doing anything to curb it' (Moten, 2014, p. 179).

A common thread: English as a non-native language

Throughout the aforementioned literature, a common element that is mentioned as an influence on the propensity to plagiarize is the lack of English language proficiency. Thus, the temptation to the cut-and-paste material, especially with the ease with which it is now available online, tends to be irresistible for many (Heckler & Forde, 2015). Ehrich et al. (2016) found that ‘poor language and academic skills’ (p. 232) are common, particularly among Chinese students studying abroad, potentially leading their disposition to copy text. Similar concerns were noted by Singh (2016), Moten (2014), and Yukhymenko-Lescroart (2014) for scholars from a range of different countries. Thus, when combining cultural and language issues, there may be a higher propensity for plagiarism to take place (Pecorari & Petrić, 2014).

Method

This quantitative, comparative study investigated the potential differences among actual rates of incidence of plagiarism among countries and regions in which the literature identified as having prominent academic integrity problems. This study gathered doctoral dissertations and master’s theses from institutions in the selected locations and analyzed them with Turnitin® content matching assessment software.

Sample

Rationale for sample sizes

Because the distributions of Turnitin® similarity indices were assumed likely not to be normal due to findings of previous studies, it was determined that it would be necessary to use a Kruskal–Wallis test in place of ANOVA (Ison, 2015; 2016; Lehmann, 1998). Sample size calculations for Kruskal–Wallis tests are not well described in the literature. Therefore, G*Power was used to calculate the recommended sample size for ANOVA assuming $\alpha = 0.05$, $1 - \beta = 0.80$, a medium effect size ($f = 0.25$), and seven groups yielding $n = 231$. According to Lehmann (1998), researchers should add 15% to sample sizes estimates for parametric tests to ensure ample sample size for non-parametric equivalents. Thus an a priori sample of $n = 266$ was deemed necessary for the current analysis. The ProQuest Dissertations and Theses database was then used to harvest 38 documents per group for analysis.

Rationale for sample groups

Within the available literature, there were frequent comparisons between countries and regions that were deemed to have noteworthy difficulties with academic integrity and plagiarism. These studies were used to guide decisions on how to group cases within the current study with attention to commonalities in culture within such locales (Frost & Hamlin, 2015; Heckler & Forde, 2015; Martin, Rao, & Sloan, 2011). This resulted in the following groupings:

- United States
- Western Europe (included the United Kingdom, France, Germany, Italy, Switzerland, and Austria)
- Eastern Europe and Russia (included Bulgaria, Romania, Ukraine, and Estonia)

- Africa (included South Africa, Nigeria, Kenya, and Ethiopia)
- China
- India
- Middle East (included Turkey, Iran, Jordan, United Arab Emirates, and Saudi Arabia)

Searches for documents used the institution location and student affiliation to ensure the document, and the student originated in the particular country or region (Frost & Hamlin, 2015; Heckler & Forde, 2015). For consistency, only papers that were available in English were used. Moreover, the competency of Turnitin® for works in English is much better established than in other languages (Bailey, 2011). All assessed works were published during or after 2012 to ensure comprehensive coverage of contemporary database materials.

Measures

Turnitin® originality assessment software was used to determine the similarity index for each document. The similarity index is a percentage of text overlap with sources within the sources available to the software. This tool is commonly used by institutions and researchers across the globe and has been deemed particularly effective due to its broad access to materials online and within its database. Turnitin® has also been used in some studies to investigate the prevalence of plagiarism (Garner, 2011; Ma, Wang, & Lu, 2008; Martin et al., 2009). While technically not a plagiarism detection tool, it provides researchers and other education stakeholders with clues as to if plagiarism may exist within a document. After assessing the similarity index and reviewing text overlaps, textual reuse can be determined to have a high likelihood of being plagiarism (Hill & Page, 2009).

Procedure

Documents were randomly selected from the online database and uploaded to Turnitin® for analysis. The author of this study utilized best practices in existing and previously conducted studies as the procedure to evaluate documents and to attempt to eliminate false-positive results (Garner, 2011; Hill & Page, 2009; Ison, 2016). Only the author served as evaluator was used during this process. Each document was examined for common publication or academic language as well as database identification information which was removed from the analysis. Also, references and quoted material were removed. If overlaps were clearly a result of a student submitting drafts or papers in the process of producing their dissertation or thesis, similarity indices were adjusted. This step was particularly critical as many institutions, especially those in Western nations utilize Turnitin® or other tools as a mandatory step in the thesis or dissertation draft and final submission processes. In contrast, apparent cases of self-plagiarism (e.g., multiple publications or text recycling in scholarly publications) were not corrected. This assessment of self-plagiarism was limited to cases where an author used the same text in multiple locations, such as in journal publications, without attribution to the author's original work (Garner, 2011; Ison, 2016; Ma et al., 2008; Martin et al., 2009).

Results

Turnitin® similarity indices were evaluated for statistical assumptions using SPSS. Kolmogorov–Smirnov and Shapiro–Wilk tests indicated that most of the data did not meet the assumption of normal distribution. Thus the use of parametric analysis was precluded (Razali & Wah, 2011). Basic descriptive statistics for each group are shown in Table 1. Western Europe had the lowest mean and tied the United States with lowest median similarity indices. India had the largest mean and median indices across all groups.

A Kruskal–Wallis test was conducted to evaluate any differences in the prevalence of plagiarism among groups. The results indicated that there was a statistically significant difference among groups, χ^2 (6, $N = 266$) = 19.545, $p = 0.003$, $\eta^2 = 0.074$ (Medians for each group can be found in Table 1). Figure 1 shows box plots for the results for the various locations. To avoid excessive restrictions on p values, Mann–Whitney U tests (with Bonferroni correction) were conducted on key groups which were identified by examining mean ranks (see Table 2) rather than using the Dunn–Bonferonni method (Field, 2009; Pallant, 2013). Four pairs of groups were selected for comparison: USA–China, USA–India, Western Europe–China, and Western Europe–India. The results can be found in Table 3 (Field, 2009).

Table 1. Descriptive statistics of country/region groups.

Group	Mean	Median	SD	Variance
W Eur	20.6	14.5	16.3	267.3
USA	22.7	14.5	17.5	307.8
E Eur/Russia	23.0	15.5	18.3	335.7
Africa	23.7	17.5	16.3	265.4
China	25.9	25.5	10.9	118.4
Mid East	27.5	23.5	16.8	281.4
India	32.5	26.5	18.1	327.9
All groups	25.1	20.0	16.7	279.2

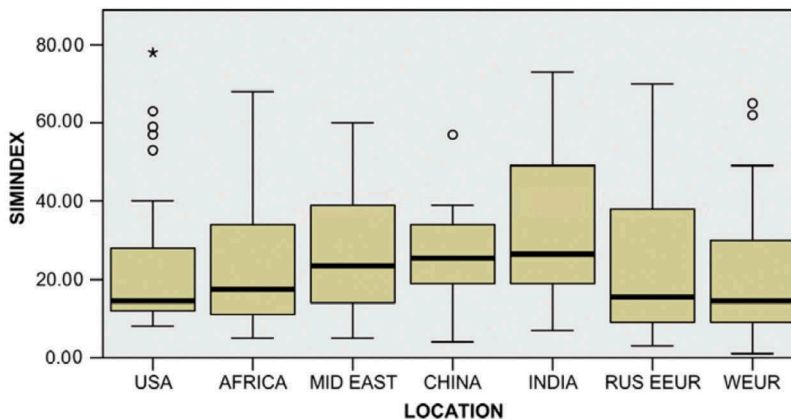


Figure 1. Box plots of similarity indices for group locations.

Note: Extreme scores are indicated with 'o' and outliers are marked with '*'.

Table 2. Mean ranks of similarity indices for each group.

	Location	<i>N</i>	Mean Rank
SIMINDEX	USA	38	118.41
	Africa	38	124.95
	Mid East	38	145.78
	China	38	152.24
	India	38	169.04
	Rus E Eur	38	117.29
	W Eur	38	106.80
	Total	266	

Table 3. Post hoc analysis of key pairs using Mann–Whitney *U* tests.

Pairs	Mann–Whitney <i>U</i>	<i>Z</i>	<i>P</i>
USA–China	488.0	–2.433	0.015
USA–India	414.5	–3.197	0.001*
W Eur–China	478.0	–2.54	0.011*
W Eur–India	396.0	–3.39	0.001*

*Significant results with Bonferonni correction (adjusted significance of $p = 0.0125$).

Discussion

The findings of this study provide a mix of support for and dispute of assumptions about cultural aspects of plagiarism described in the literature. Considering the mean similarity index across all groups was 25.1%, it is apparent that plagiarism is still a significant concern across the globe. Aligning with Rawwas et al. (2004) as well as Heckler and Forde (2015), the level of plagiarism in the United States and Western Europe was the lowest among groups, albeit the differences were not statistically significant in all cases. Interestingly, while the ranges of indices were more extensive for the Middle East, Africa, and Eastern Europe/Russia than for Western countries, the means and medians of groups were not significantly different. This is contrary to what was expected from previous studies (Baždarić et al., 2012; Frost & Hamlin, 2015; Yukhymenko-Lescroart, 2014).

Both China and India appeared to fit the expectations laid forth in the literature as having the largest problem with plagiarism, with significant differences between both countries and Western Europe, as well as between India and the United States. However, the difference between the United States and China was not significant which is contrary to assumptions that the United States holds the ‘gold standard’ for academic integrity (Ehrich et al., 2016; Heckler & Forde, 2015; Ison, 2015; 2016).

Limitations and delimitations

This study was limited by the availability of sample data. Not all countries or institutions submit theses and dissertations to ProQuest. This limited to available works to those submitted to the database. Institutions in the United States and United Kingdom are more likely to submit student papers to monitoring software such as Turnitin® which may bias the similarity indices for submissions from these locations. While every attempt was made to remove unrelated or false-positive results, the aforementioned could still have the potential to inflate overlap percentages. The use of only one evaluator may also increase the chance of missing false-positives. Another potential limitation was that

institutions that submit to large research databases may have higher writing expectations for students and may prescreen student work through plagiarism detection prior to database inclusion. These factors could result in lower originality indices. Lastly, Turnitin® and other software currently cannot identify all types of plagiarism.

There also were delimitations for this study, primarily to limit the scope of the study and to provide consistency among the sampled documents. The researcher used ProQuest to collect theses and dissertations. This database, albeit not comprehensive, does provide access to a wide range of full-text documents allowing for complete analysis. Only theses and dissertations published in English were used to avoid problems with translation or language capabilities of Turnitin®. No specific subject areas were selected to be evaluated which may overlook a lot of inconsistencies among research topic areas. Finally, theses and dissertations were selected as they represent significant student works and are the culmination of prestigious degrees.

Conclusion

Although the current study is limited in scope, the summative findings of this study should, at the very least, call into question potential bias in the literature on the assumption of rampant plagiarism and other forms of academic misconduct in specific countries and regions. Because there has been a lack empirical evidence to ascertain the actual incidence and levels of plagiarism to this point, this study sheds lights on the potential weaknesses of self-report data found in the existing literature. Further, it calls for further research on the topic so that improved data can be analyzed to better understand the academic integrity landscape across the globe. As research continues to become more globalized, it is necessary to build more trust among international scholars as well as to improve communication about potential weaknesses so that all may improve their scholarship. Lastly, by abating, inherent biases can improve fairness in perceived quality of research and the ethics of its authors.

Suggestions for future research

Based on the findings of this study, the following future research is recommended to be implemented:

- (1) Replication of this study using single and multiple author peer-reviewed works native to specific countries.
- (2) A more extensive study of scholarship from a range of countries to create a broader dataset to analyze.
- (3) A study of researcher perceptions on the scholarship of persons from different countries to better quantify if bias exists because of the literature or culture.

Disclosure statement

No potential conflict of interest was reported by the author.

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