Academic Dishonesty in Kazakhstani Higher Education: The Current Situation and Antecedents

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October 2020

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You may proceed with contacting your preferred research site and commencing your participant recruitment strategy.

Yours sincerely,

Mehmet Karakus

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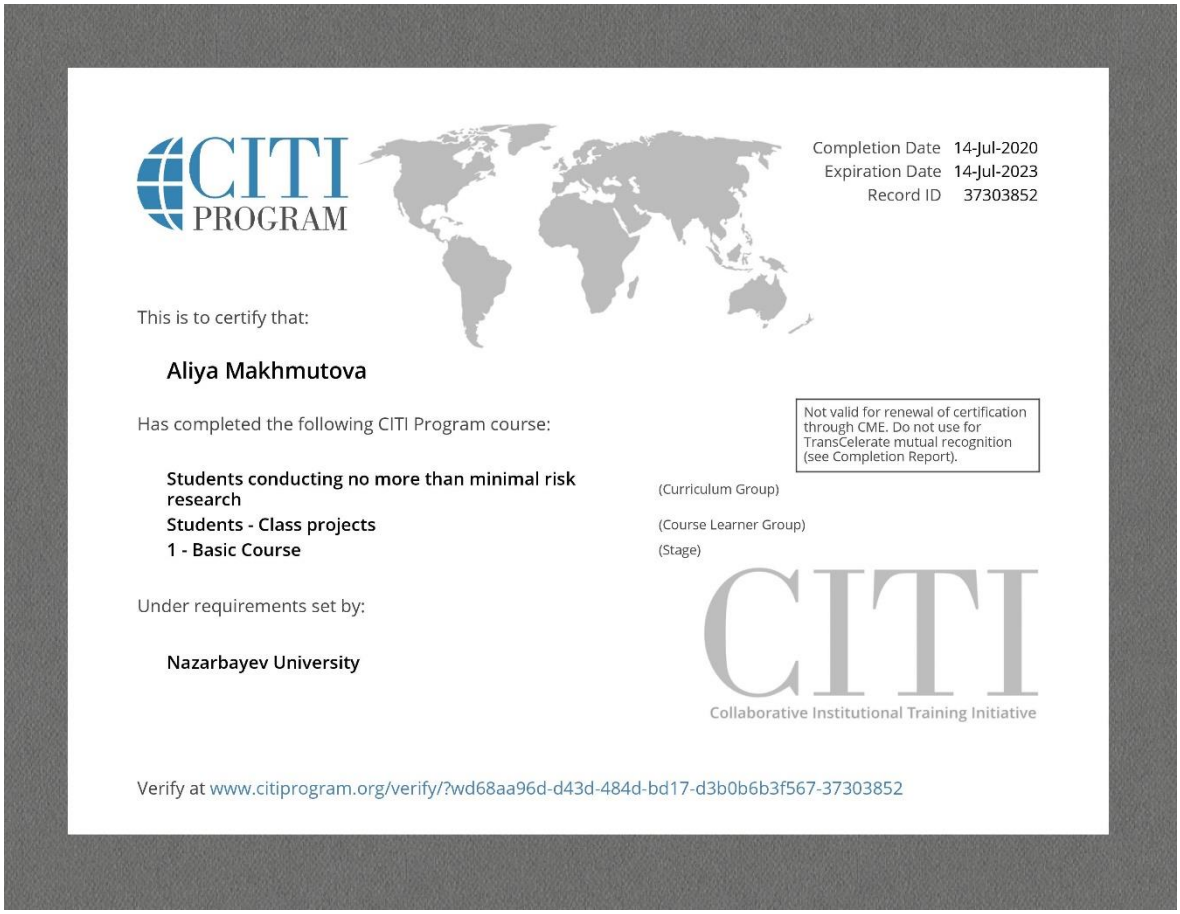

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Aliya Makhmutova

Academic Dishonesty in Kazakhstani Higher Education: The Current Situation and Antecedents

Abstract

Academic dishonesty is a widespread phenomenon that can be detrimental to the country's intellectual progress. Students who cheat and plagiarize lose the learning opportunities. Thus, it is of great importance to try to understand the reasons for this behavior and to prevent unfavorable outcomes. However, the research on the topic of academic dishonesty in the Kazakhstani context is very limited. The current study aimed to contribute to the knowledge about academic misconduct in Kazakhstani higher educational context by analyzing the causes of the problem. The quantitative anonymous questionnaire adopted from Comas-Forgas and Sureda-Negre (2010) was answered by 180 students and teachers from two universities in Kazakhstan. The data analysis showed that while demographic factors like gender and GPA are important predictors of academic misconduct frequency, contextual factors should also be considered significant. Namely, lack of language skills, an overwhelming number of assignments, and the belief that the faculty cannot find out about the misconduct are the main causes of academic plagiarism and cheating. Moreover, the unique context provided by the pandemic showed that recently introduced distance learning is the third most important factor of academic dishonesty behavior. The study suggests that promotion of academic integrity and moral responsibility along with adjustments of the assignments are the main measures that should be taken in order to decrease academic dishonesty rates.

Академическая Нечестность в Казахстанском Высшем Образовании: Текущая Ситуация и Причины

Аннотация

Академическая нечестность - широко распространенное явление, которое может нанести ущерб интеллектуальному развитию государства. Студенты, которые списывают и занимаются плагиатом, упускают возможности для обучения. Таким образом, очень важно попытаться понять причины такого поведения и предотвратить неблагоприятные последствия. Однако в Казахстане было проведено ограниченное количество исследований на эту тему. Настоящее исследование направлено на расширение знаний об академических проступках в казахстанском высшем образовании путем анализа причин проблемы. На количественный анонимный опрос, позаимствованный из работы Комас-Форгас и Суреда-Негре (2010), ответили 180 студентов и преподавателей из двух университетов Казахстана. Анализ данных показал, что, хотя демографические факторы, такие как пол и средний балл, являются важными причинами повышенной частоты академических проступков, контекстуальные факторы также следует рассматривать как значимые. А именно, отсутствие языковых навыков, большое количество заданий и вера в то, что преподаватели не смогут узнать об обмане, являются основными причинами академического плагиата и списывания. Более того, уникальный контекст, созданный пандемией, показал, что недавно введенное дистанционное обучение является третьим по важности фактором академической нечестности. Исследование предполагает, что продвижение культуры академической честности и моральной ответственности наряду с корректировкой заданий являются основными мерами, которые следует предпринять для снижения уровня академической нечестности.

Аңдатпа

Академиялық адалсыздық – мемлекеттің зияткерлік үдерісіне орасан зор зиян тигізе алатын кең таралған құбылыс. Көшіретін және плагиатпен айналысатын студенттер оқу мүмкіндіктерін жоғалтады. Осылайша, бұл мінез-құлықтың себептерін түсінуге және жағымсыз нәтижелердің алдын алуға тырысудың маңызы зор. Алайда, академиялық адалдық тақырыбы Қазақстанда аз зерттелген. Бұл зерттеу мәселенің себептерін талдау арқылы қазақстандық жоғары білім саласындағы академиялық бұзушылықтар туралы білімге үлес қосуға бағытталған. Комас-Форгас пен Суреда-Негренің (2010) зерттеуінен алынып бейімделген сандық анонимді сауалнамаға Қазақстанның екі университетінің 180 студенті мен оқытушылары жауап берді. Талдау көрсеткендей, студенттердің жынысы және орташа баллы сияқты демографиялық көрсеткіштер академиялық тәртіп бұзушылықтың маңызды болжаушылары болса, контексттік себептер де қатты ықпал етеді. Атап айтқанда, академиялық плагиат пен көшірудің негізгі себептері – тілдік деңгейінің төмендігі, тапсырмалардың көптігі және оқытушылардың жұмыстың көшірілгенін немесе плагиатталғанын анықтай алмайтынына деген сенімі. Сонымен қатар, пандемия барысында енгізілген қашықтықтан оқыту академиялық адалсыздықтың үшінші ең маңызды себебі болып табылды. Зерттеу барысында академиялық адалдық пен моральдық жауапкершілікті жоғарылату және тапсырмаларды бейімдеу академиялық адалдықтың деңгейін төмендетуге бағытталған негізгі шаралар болып анықталды.

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Introduction

Academic integrity is a valuable aspect of the ethical academic world that has an impact on the country's educational development and reputation. Academic dishonesty behavior deprives students of the opportunity to get a quality education (Ogilvie & Stewart, 2010). It is claimed that graduates who cheated and plagiarized during their studies are likely to also violate ethical rules at their future workplaces (Carpenter et al., 2004). In case the behavior of academic dishonesty persists in the person's career, the lack of skills and corruption derived from cheating habits can result in life-threatening consequences, especially from those whose work is to ensure health and safety (Nonis & Swift, 2001; Wowra, 2007).

Dishonest behavior in higher education has been one of the main topics of discussion in recent decades due to various factors. The "massification" or globalization of higher education led to the increased impact of academic misconduct cases on the reputation of universities (Altbach, 2004). Hence, identification of the reasons for cheating and prevention of future cases became important in the educational world. Another reason for plagiarism becoming an urgent issue in the academe is the availability of information online. The research states that the increased use of online technologies led to "moral behavior going offline" (Wowra, 2007, p. 211).

Background Information

The problem of plagiarism and academic dishonesty in Kazakhstan is a concern that has been highly prioritized on the political agenda and widely reported in local media. A search of academic dishonesty in the media shows that the last vivid example of this issue in Kazakhstan was the detection of plagiarism in 80% of students' research papers submitted for the second stage of the state science competition organized by

M. Narikbayev KazGUU (Informburo.kz, 2020). The press office of the university states that despite the explanations of academic integrity rules beforehand, students did not take them seriously. Moreover, the plagiarized projects were firstly checked by the home universities of the contestants. This situation offers a first glance at the academic misconduct issue in Kazakhstan.

State and educational organizations took several measures to combat this issue. In August 2018, the Academic Honesty League was first introduced to the Kazakhstani academe. Currently, 11 universities in the country that are league members uphold ten principles of academic honesty. These principles primarily denote the necessity to promote academic integrity; ensure the detection of plagiarism in all assignments regardless of their academic or research purposes; establish higher requirements and objective evaluation for learners, and others (Adaldyq.kz, 2020). Moreover, in 2019, media sources highlighted that higher education was determined as the most corrupted sphere in Kazakhstan (Zakon.kz, 2019). The head of the anti-corruption project “Adaldyq alany” (Honesty Area), Zhanar Taizhanova, mentioned that to improve the situation, Kazakhstani universities should enter the Academic Honesty League and adhere to its principles.

In December 2019, the Minister of Education and Science of the Republic of Kazakhstan (MES RK) informed about the implementation of the plagiarism detection system “Turnitin” in all local higher educational institutions for checking the originality of bachelors, masters, and Ph.D. theses, course work, and scholarly papers (Sputnik Kazakhstan, 2019). The outcomes of the policy are not yet available to the public.

Problem Statement

The actions oriented towards solving the issue of academic plagiarism in Kazakhstan are currently focused on the introduction of the “Turnitin” system to all

universities (Sputnik Kazakhstan, 2019). The consequent results and realization process of this initiative, however, are still unknown, and the official information on changing the plagiarism detection terms cannot be found on the official website of the MES RK. The updated document with the open access describes the process of Ph.D. theses plagiarism checking using the services of the National Center of Science and Technology Evaluation (NCSTE) that had already been in the realization process since 2011 (MES RK, 2020). Although for the creation of a Ph.D. thesis council, universities are now obliged to provide a license for plagiarism detectors, changes for the rules of other degrees are not specified. Therefore, the state of the academic dishonesty problem among undergraduate and graduate students in the country remains uncertain and demands clarification.

Despite admitting the existence of the academic plagiarism issue within the halls of Kazakhstani universities, this concept has not yet been studied extensively. Comparing to the plethora of literature on the academic misconduct problem in the worldwide community, only three Kazakhstani papers on this topic were found. These few works provide recommendations on improving the mechanism of plagiarism detection in local universities and general information about the concept (Begaliyev, 2017; Sabitova & Bairkenova, 2019; Tasmambetov & Kuzhabekova, 2011). However, the topic of students' perceptions and factors influencing academic dishonesty behavior is being neglected in the local research community.

Identifying the driving force of students' cheating and the frequency of students' academic misconduct conditions can help to minimize the issue and its negative consequences. Moreover, since the scale of academic plagiarism in Kazakhstan is not covered in the existing research, there is a need to investigate the phenomenon in depth.

Purpose of the Study

The purpose of the study is to examine the factors affecting academic dishonesty behavior and attitudes of Kazakhstani students towards academic integrity. Moreover, the study aims to determine how often students engage in academic misconduct. The objectives of the study are as follows:

1. To identify the frequency of academic misconduct among Kazakhstani students;
2. To determine the influence of factors that facilitate academic dishonesty behavior.

Research Questions

The study will answer the following research questions:

1. What demographic characteristics (gender, GPA, study year, and the language of instruction) influence academic misconduct?

2. What contextual characteristics (Internet technologies, faculty methodology, language mastery, and individual perceptions) facilitate academic cheating and plagiarism?

3. How frequently do students commit academic misconduct?

Significance of the Study

As a comparatively young country undergoing profound changes in governance and particularly in education, Kazakhstan can significantly benefit from conducting more research that is aimed to evaluate the education system. Considering that academic integrity serves as a core of the country's intelligence level and the place in the global educational competition, it is important to examine the scale of the academic dishonesty issue in order to combat it. The fact that there is a relatively small body of literature concerned with academic dishonesty in Kazakhstan shows that the issue has been

somewhat neglected (Begaliyev, 2017; Sabitova & Bairkenova, 2019; Tasmambetov & Kuzhabekova, 2011). Hence, this study will contribute to the knowledge about students' plagiarizing and cheating behaviors in Kazakhstani universities to gain a full picture of the local problem and facilitate future research. Besides, the research will also be beneficial for faculty members that could apply this information to adjust their teaching techniques. Heads of universities may also find this research useful for formulating or improving strategies against academic dishonesty.

Moreover, as underlying importance of this study, understanding specific details of students' academic misconduct can help to raise the efficiency of existing policies aimed at solving this issue and, consequently, improve the country's reputation level in the worldwide educational arena. The quantitative nature of the research will be a tool to obtain concrete numbers and reasons for the problem to allocate the necessary resources. Increasing transparency and academic integrity in the higher education sphere in Kazakhstan can help to raise the potential of the government and its future policies.

Definitions of Key Terms and/or Variables

The Center of Academic Integrity (1999) states that *academic integrity* is about being honest towards one's academic work and "a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect and responsibility" (p. 4).

Academic misconduct is defined as unauthorized assisting or receiving assistance to complete an assignment, an essay, a thesis, or any other academic work that will be evaluated; it includes any form of cheating (e.g., examinations) and plagiarism (Hard et al., 2006).

Plagiarism is described as presenting an assignment in which someone's work is copied or using sources in any part of a paper without acknowledging them through proper quotation and referencing (Underwood & Szabo, 2003).

Cheating is an intentional violation of academic integrity rules that helps to acquire an "illegal advantage" in order to get a higher grade on a task or examination (Hosny & Fatima, 2014).

Outline of the Research

The paper consists of six chapters. The first chapter is an introduction, which provides the rationale for choosing the topic, background information about academic dishonesty behavior in Kazakhstan, problem statement, research questions, the significance of the study, and definitions of the key themes. The next part is the literature review, which will help to determine the most prominent types of and reasons for academic dishonesty according to scholarly works, and, consequently, formulate the conceptual framework of the research. Moreover, the existing data about academic integrity in the Kazakhstani context will also be reviewed in this section. The justification for choosing the quantitative method, sampling technique, data collection tools, and hypotheses will be described in the third part. The fourth part will demonstrate the findings obtained through a questionnaire and analyzed with the use of descriptive statistics, T-tests, One-Way ANOVA, and multiple regression analyses. The discussion part will discuss and compare the findings with previous studies on similar topics, provide explanations, and make suggestions. Finally, in the conclusion part, the main results, limitations of the research, and recommendations for stakeholders and future researchers will be stated.

Literature Review

Introduction

The chapter will explore the relevant literature on the topic of academic dishonesty. Firstly, the concept of misconduct and its types will be examined to provide a general idea about the phenomenon. Secondly, the review will provide the literature regarding the factors influencing academic dishonesty frequency. In both parts, the context of Kazakhstani academic integrity will be analyzed as well. The remaining part of the chapter will present the conceptual framework of the study, as well as examine the peculiarities of previous research about academic honesty and the theoretical basis used to investigate the subject.

Types of Academic Dishonesty

Academic dishonesty behavior, according to multiple research sources, cannot be defined as a "unified construct" (Hensley et al., 2013). The phenomenon has several dimensions, and each of these dimensions is perceived by students and faculty with different moral severity (Kisamore et al., 2007). Academic misconduct has been referred to as plagiarism, collusion, and contract cheating, with the latter one to be the most prominent in recent times (Bretag et al., 2019; de Maio et al., 2020). Hosny and Fatima (2014) suggest that plagiarism and cheating are mostly encountered around students of younger age.

Wilhoit (1994), Brandt (2002), and Howard (2002) identified 4 main types of academic plagiarism among students:

1. If the material is stolen from another source (includes buying assignments or papers from special websites and services; copying from the source without acknowledging the authors; presenting other students' work as their own);

2. Ask someone to write the paper and submit it as their own;
3. Omitting quotation marks when directly quoting, but giving references;
4. Paraphrasing without the acknowledgment.

Howard (2000) mentions “smart” ways of plagiarizing making it hard to combat that denote changing the wording, sentence structure, and the usage of synonyms. Nevertheless, compared to other types of academic dishonesty, plagiarism is not always intentional, and cannot always be considered as cheating (Hosny & Fatima, 2014).

While original understanding of cheating involves such actions as asking a peer to give test answers or unethical usage of electronic or paper-based tools to complete the exam in an unfair way, contract cheating is a comparatively new concept that has been developed with the growth of technology. The term contract cheating was firstly introduced in 2006 (Clarke & Lancaster, 2006). Bretag et al. (2019) in their study defined contract cheating as the instances when students ask a friend, family member, faculty, or people from special services (assignment “mill”) to complete an assignment or thesis for them as a favor or for money. This type of academic misconduct is one of the main concerns of the academic community since it is hard to detect whether students committed contract cheating or not, and measures used to fight cheating and plagiarism do not work to combat contract cheating (Bretag et al., 2019; Walker & Townley, 2012). In the local context, the search for “diploma works in Kazakhstan” in Google gave 325,000 results with services offering to order thesis papers. Therefore, it can be claimed that the problem of contract cheating has been spread in Kazakhstani academia too.

Although cheating and plagiarism are usually obvious terms that cannot be confused, collusion is a form of academic misconduct that demonstrates ambiguity. Collusion is referred to instances such as students working together to write an individual paper or supervisors writing the theses for their students to improve the quality (Sikes,

2009). However, collusion is not always interpreted as a type of academic fraud by students or faculty because they see it as a gesture of loyalty or altruism (Park, 2003). Hence, it is also difficult to cope with this type of academic misconduct since the attitudes toward it are mostly positive. Collusion is considered to be a difficult type of cheating behavior due to several reasons: 1) it is hard to find out if the works are results of collusion or a simple misunderstanding of the concepts; 2) the student who wrote the original work might not be guilty since he did not know that his or her work was used to commit academic misconduct; 3) it is difficult to detect whether it is collusion or a result of "too much peer help" (Barret & Cox, 2005, p. 111). Apart from the difficulties associated with detection, the attitude towards collusion makes this type of academic misconduct very "threatening". Some evidence lines suggest that students might believe that collusion is not serious misconduct since they are learning something, even if collaboration is not accepted for the assignment (Barret & Cox, 2005).

Factors Influencing Academic Misconduct

The literature worldwide has researched factors influencing students' academic misconduct extensively. In general, Park (2003) identifies nine factors facilitating academic dishonesty among students:

1. Lack of knowledge about what constitutes plagiarism and how to give acknowledgment to the authors whose sources have been used;
2. The intention to get a higher grade in a short amount of time;
3. Poor time management skills;
4. Attitude toward cheating of students who see it as acceptable, smart, or as not as serious matter;
5. Some students demonstrate their rebellious behavior through cheating to show that assignments are too easy or they have no respect for the lecturers;

6. The students' beliefs that the professor will not check their works on plagiarism can facilitate academic misconduct;
7. It is also claimed that some students do not admit that they cheat or plagiarize, and blame others;
8. Easy access to the Internet or any other sources can cause temptation to plagiarize;
9. The students cheat when the punishment for cheating is not significant.

Additionally, Devlin & Gray (2007) conducted qualitative research with 56 Australian students and highlighted eight predominant reasons for academic misconduct such as inadequate university entry requirements, issues with understanding what constitutes plagiarism, insufficient academic skills, learning issues, cost of education, laziness, being proud to plagiarize, and family, society, or time pressure.

Another relevant factor is the correlation between the corruption rates of the country with the academic plagiarism frequency (Magnus et al., 2002). Thus, one way to eliminate the academic dishonesty problem can be enhancing policies coping with corruption. Taking into account that higher education in Kazakhstan was previously mentioned as the most corrupted sphere, this aspect should not be neglected (Zakon.kz, 2019).

Demographic and Individual Variables as Factors Influencing Academic Misconduct Behavior

Studies aimed to identify any patterns of academic dishonesty in relation to gender, course, and GPA showed various results. Traditionally, it has been argued that males are more inclined to cheat than females (Bowers, 1964; Hetherington & Feldman, 1964; Roskens & Dizney, 1966). Williams et al. (2010) found out the prevalence of male

cheaters over females in their quantitative self-report survey, rejecting the null hypothesis. In contrast, Leming (1980) provides contradictory results, stating that female students cheat more frequently in low-risk circumstances. Although Hensley, et al. (2013) describe numerous studies about the correlation between gender and plagiarism frequency, they state that the unified trend has not been determined yet, and the frequency of misconduct can only be attributed to one of the genders when each dishonesty type is checked separately. The reason for fluctuation in numerous studies might occur due to the intervention of other factors and conditions in cheating behavior (McCabe & Trevino, 1997). Additionally, it has been suggested that there is no gender difference in academic misconduct behavior, and all explanations for these findings are unreliable and invalid (Cizek, 1999; Williams et al. 2010).

Previous research findings into the university's major influence on academic misconduct have been inconsistent as gender impact too. Science, engineering, and business were identified as the courses where students cheat and plagiarize most (Williams et al. 2010). However, the authors doubt the reliability of these results and argue that high cheating rates might be accountable for the large number of male students studying these majors. Several lines of evidence suggest that business students are the ones who most often collaborate with their peers to cheat, while visual arts students often resort to lies in order to submit a paper later (Roberts et al., 1997).

Students with low performance were inclined to cheat more in several studies conducted in public universities (Graham et al. 1994; McCabe & Trevino 1997; Yardley et al. 2009). Bisping et al. (2008) found a similar trend, stating that students with lower GPA “have more to gain”, and cheat with greater frequency. Hrabak et al. (2004), in contrast, report no difference in academic misconduct behavior among students with various Grade Point Average (GPA); however, there is a difference in attitudes, stating that students with

higher GPA express a negative attitude toward cheating more frequently than students with lower GPA.

Another factor is participation in extracurricular activities. McCabe and Trevino (1997) found a significant correlation between academic dishonesty and activities outside the classroom. Their findings were in alignment with the research of Bowers (1964) that argued that students who participate in fraternity, sorority, and athletics cheat more frequently due to being busy with other activities than studying. The study conducted among 244 undergraduate students also suggests that members of the social clubs have more access to illegal materials and more ways to obtain answers for tests; however, authors point out that this statement needs to be investigated in separate research (Storch & Storch, 2002).

Moreover, the language level of the course was also determined to influence the rise of academic misconduct motives (Eccles et al., 2006). Students with higher proficiency in the language of instruction do not experience the same problems with understanding and completing the assignment, and thus, plagiarize and cheat less often. Rigby et al. (2015) confirms the statement and adds that students with English as a second language tend to seek services selling prepared assignments, which is considered contract cheating. Chang (2018) explored the difficulties of multilingual students in Canada through the qualitative method, identifying that participants often had to hire a person for writing an essay or a paper due to language difficulties in English-medium higher educational institutions. The phenomenon of multilingual learners' academic dishonesty is a vital theme that will be investigated in this study; it is particularly important considering a large number of nations living in Kazakhstan.

Cultural factor is another individual indicator that can be crucial in analyzing academic dishonesty behavior pattern. The literature describes that students from Asian culture to be more prone to unconscious plagiarism because, for example, they might think that altering or paraphrasing the existing piece of text is disrespectful or that information available on the websites or books is factual and does not require referencing (Introna et al., 2003; Kuntz & Butler, 2014; Sowden, 2005). However, research highlight that it is important to differentiate between ethnicity and cultural groups since the study findings demonstrate the same perceptions of academic misconduct among Asian students in Australia and their peers studying in Europe (Kuntz & Butler, 2014; Maxwell et al., 2006). Another research conducted in eight countries of Eastern Europe and Central Asia (Albania, Belarus, Croatia, Kyrgyzstan, Latvia, Lithuania, Russia, and Ukraine) and the US showed that although academic behavior is equally widespread, the American students are comparatively more aware of academic integrity norms and follow the standards (Grimes, 2004). The author suggests that high rates of academic misconduct can be accountable for increased corruption in countries transitioning to the market economy.

Contextual Factors Affecting Academic Dishonesty

Apart from individual and demographic characteristics affecting cheating behavior, contextual predictors are also significant since academic misconduct is a problematic social phenomenon that should be investigated through multiple lenses. Previous research states that peers, faculty, and the severity of punishment for academic misconduct significantly influence the rate of academic dishonesty among students.

The study conducted among business students demonstrated that social pressure is another important factor that makes students cheat (Chapman et al., 2004). By drawing on the concept of social pressure, Hard et al. (2006) mention that if students overestimate the actual rate of plagiarism among their peers, they are more inclined to commit academic

misconduct. Moreover, seeing the act of successful academic cheating or plagiarism increases the chance that the "witness" will commit academic misconduct in the future (McCabe & Trevino, 1997). Some evidence also suggests that peer disapproval is the most influential factor that can change students' behavior drastically (Bower, 1964). If classmates generally do not approve of this unethical behavior and are likely to report it in case of witnessing one, the actual rate of academic misconduct can be decreased (McCabe & Trevino, 1993). Overall, the aforementioned unfavorable impact might be avoided if students will be more aware of peer influence on academic dishonesty.

The role of the faculty in academic integrity promotion should not be underestimated. The study has found that faculty might be reluctant to initiate the academic hearing process feared by legal actions, thus, trying to handle cheaters independently (Jendrek, 1989). This behavior does not positively affect academic integrity procedures at universities, decreasing the importance of academic integrity breach penalties for students. Additionally, data from several studies suggest that faculty members are often unfamiliar with academic integrity rules or not willing to follow them (McCabe & Trevino, 1997). The consequences of such an attitude can be detrimental since a similar study has found that students' academic dishonesty behavior appears to be closely linked to the faculty's understanding and support of academic integrity rules.

The students' perception of academic dishonesty behavior is an important factor that can either facilitate or deter misconduct. Traditionally, it has been conveyed that if punishments are severe, the students are less likely to engage in any form of academic dishonesty behavior (Paternoster, 1987). In contrast, some opposite opinions explain that manipulating students through constantly mentioning the severity of punishments is not as effective as increasing their moral responsibility and ethical understanding (Eriksson &

McGee, 2015; Roberts-Cady, 2008). The former way of coping with academic misconduct only implies short-term efficiency.

Researchers also attempted to evaluate the impact of the Internet on academic dishonesty. In general, students from different countries stated that copying the information from web sources is not misconduct that deserves a severe punishment (McCabe, as cited in Stephens et al., 2007). Moreover, it has conclusively been shown that plagiarism became a more widespread matter in the last decade due to the development of Internet technologies (Eret & Ok, 2014). The same study found out that approximately 80% of faculty encountered students plagiarizing from the Internet during their work, including the instances such as copying others' work without acknowledgment, using the same work for several assignments, and others. More experienced computer users (from six to ten years) demonstrated higher rates of plagiarism than those who do not have considerable expertise. Stephens et al. (2007), who made a comparative analysis of digital and traditional cheating, identified that "cutting and pasting" has become a prevalent cheating behavior. The digital cheating rates increase being only 10% in 1990 and almost 40% in the survey conducted from 2002 to 2004, with 77% of students believing that it is not a serious matter (McCabe, as cited in Stephens et al., 2007). Although the rapid development of Internet technologies facilitates a better learning experience and easier access to information, it can also contribute to increased rates of cheating and plagiarism.

Covid-19 as a Facilitator of Academic Misconduct

The coronavirus outbreak implemented a number of changes to the educational settings. The distance learning implemented to prevent the spread of the disease is concerning for educational professionals since findings of the previous study show that more than 70% of students who study online commit academic misconduct (Srikanth & Asmatulu, 2014), while another study also supports these concerns outlining that students

were four times more inclined to cheat during online classes than in face-to-face settings with 42% and 10% respective percentages (Watson & Sottile, 2010). The study among Canadian students examining the difference between attitudes toward cheating during traditional and online studies showed that students' cheating perception and concern increased during the new learning conditions (Daniels et al., 2021).

The research community is currently working on the solution to the online cheating issue during the pandemic. Lee et al. (2020) who conducted an experiment using face-detecting technologies, Zoom application, and random question sequencing to identify cheating during the test, propose that voluntary assessment is a more secure way to create a cheating-free environment than trying to catch students with the use of technologies. Moreover, the authors suggest lecturers prepare assessments that will evaluate not memory skills but critical thinking and practical capabilities. In turn, Bilen and Matros (2020) suggest that other than watching the exam process through the camera, educators might find it effective to provide simpler questions with less time to answer. However, the students' stress level increase for this method is not discussed and if not arranged carefully, it might serve as an accelerator for cheating rather than a solution.

Combatting Academic Dishonesty in Higher Education

It has already been mentioned how the severity of punishments and moral obligations affect students' intentions to cheat. Undoubtedly, these are not the only methods to institutionalize academic integrity and promote integrity values. As previous research has established, honesty in university halls can be sustained with the help of three elements: structures, procedures, and symbols (Gallant & Drinan, 2006).

The academic integrity committee, offices investigating academic dishonesty cases, and other structural units are key figures in academic honesty promotion. Gallant and

Drinan (2006) suggest structural indicators as academic integrity budget, promotion staff, and offices. Apart from investigating plagiarism and cheating cases, the functions of structural units include educating faculty through training and seminars, conduct hearings, and improve institutional policy.

The procedural methods include implementing or modifying honor codes and introducing academic integrity policies. The implementation of policies and honor codes on the governmental and institutional level are of great importance in preventing academic dishonesty cases. Honor Code has been used as one of the tools to foster academic integrity among university students. The honor code rules for faculty and students implies the obligation to never cheat, plagiarize, and tolerate those who commit academic misconduct (McCabe & Pavela, 2004). In addition to the honor code, honesty declarations and honor pledges are used to combat cheating by asking students to sign the documents before exams or tests (Scanlan, 2006). The study shows that the effectiveness of implementing the honor code is high since colleges with honor codes show a 25-50% lower rate of academic dishonesty behavior compared to the institutions without honor codes (McCabe & Trevino, 2002). However, the honor code cannot be considered a cure-all for academic dishonesty cases and should be supplemented by other measures. Some evidence suggests that introduction of an honor code is a “mild deterrent” in combatting the issue (Hall & Kuh, 1998). Solely procedural measures are also considered ineffective due to the possible underestimation of policy importance, difficulties in educating students and faculty on the policy, and others (Gallant & Drinan, 2006).

Detailed examination of academic integrity policies in Australia supplemented by recommendations from Higher Education Academy (HEA) in the United Kingdom and a cycle of elements fostering Artificial Intelligence (AI) culture by East (2009) showed 5 core aspects of the academic integrity policy that can make a difference in academically

unethical behavior rate (Bretag et al., 2011). The first element is access which was associated with one of the HEA recommendations to create an accessible area about AI on the university website. The approach, which is the next aspect, denotes the promotion of academic integrity values and their importance among staff and students. Next, attention to details should be considered as well. Namely, previous research suggests carefully explain the order of actions in case of an academic integrity breach, provide detailed terminology of all concepts, explicitly depict the AI procedures and others. The last two aspects, support, and responsibility serve as tools to educate the stakeholders on the topic and divide responsibilities among them accordingly.

The approach of East (2009) mentioned above, in turn, denotes the importance of including multiple approaches and using multiple lenses while formulating academic integrity policy. The research highlights that academic integrity is not only about students' actions but also other stakeholders' behavior and intentions. The perfect policy cares about informing all stakeholders about the rules and tries to align "teaching practices, texts, advice, assessments, and penalty process" to increase the effectiveness (East, 2009, p. 2). The awareness level of students can be improved through various workshops; for instance, the "Quick Fix" workshop was included in the strategy of Swinburne University in Australia, explaining the core aspects of academic integrity policy and rules to students (Devlin, 2006). Moreover, some evidence suggests that faculty also demands training about the methods, approaches, and technologies related to academic integrity (Crisp, 2007).

Cultural aspects in supporting academic integrity in university halls are considered important supplements for academic integrity institutionalization. Academic honesty culture can be embedded in library services, writing workshops, and faculty methodology (Stoesz & Los, 2019). The special role in promoting academic integrity culture is

performed by the faculty to adjust their teaching techniques and classroom communication accordingly. For example, some studies argue that students are more inclined to cheat if assignments demand memorization and learning by heart without understanding; hence, the tasks can be adjusted to encourage more critical thinking such as in case studies (Gallant & Drinan, 2006; Strom & Strom, 2007). Giving students the freedom to develop their own presentations, lectures, and workshops also an effective way to decrease the academic misconduct rate in the classroom (Musanti & Pence, 2010). Moreover, to date, previous studies have begun to examine the impact of trust and communication on the cheating rates in the classroom (Hulsart & McCarty, 2011). Authors encourage faculty to develop a trustworthy environment in which academic misconduct is difficult to conduct. Some methods suggested to create such a classroom include "collaborative assessments, open-book tests, and in-class writing and research assignments uniquely related to individual students" (Hulsart & McCarty, 2011, p. 95). Giving feedback on academic integrity performance is also a working strategy since students tend to pay attention to feedbacks (Biggs & Tang, 2007).

Another recommendation that has been made in previous studies is to start educating students on academic integrity as early as possible since a young age has been associated with a higher cheating frequency rate (Kisamore et al., 2007; Stoesz & Los, 2019). Additionally, young people often have ideological flexibility, and it is comparatively easier to influence their views on academic dishonesty while older students' opinions can be difficult to change (Damon & Hart, 1992).

Overall, research suggests implementing the holistic approach in dealing with academic misconduct since the issue is multifaceted as well. Structural, procedural, and cultural aspects of academic integrity institutionalization should align to achieve positive outcomes and deter academic dishonesty behavior.

Conceptual Framework

The current study employs the conceptual framework based on the classification of academic dishonesty predictors researched by Comas-Forgas and Sureda-Negre (2010), supplied by the language mastery factor investigated in the work of Eccles et al. (2006).

The conceptual model provided by Comas-Forgas and Sureda-Negre (2010) was chosen due to the versatile nature and consideration of modern technologies as an important factor. Moreover, using a mixed method in this study provides an expanded and valid framework compared to the studies implementing a single approach. The researchers point out three areas of factors facilitating academic dishonesty: causes related to the faculty and methodology; causes related to students' individual and demographic characteristics; causes related to the Information and Communication Technologies (ICT). It has conclusively been shown that poor time management and an overwhelming number of assignments are the most commonly highlighted causes of plagiarism and cheating. Nevertheless, additional circumstances appear to be closely linked to academic misconduct as well. Comas-Forgas and Sureda-Negre (2010) outlined a perfect scenario for academic dishonesty as following:

> *…a lecturer who is perceived by the student as not paying much attention to the assignments (and is not excessively interested in the development of the subject he/she is teaching) sets for a student (who is not very motivated by the task and who has other assignments to do) an eminently theoretical assignment that (in the student's opinion) is not interesting, and so leaves it to the last minute to complete. (p. 229).*

This statement was in alignment with previous research on this topic by Ashworth et al. (1997), Philips and Horton (2000), and Sterngold (2004). The current study tests these

findings in the local environment and presents the scenario that facilitates academic misconduct in Kazakhstani higher education context.

Additionally, since the Republic of Kazakhstan is a culturally diverse country with more than 140 nations and two official languages, the factor of language mastery should not be left behind. Moreover, a trilingual policy, or the law "Trinity of Languages" (Nazarbayev, 2007) was introduced in the local education, posing more challenges to learners. To test the correlation of the language mastery factor (Kazakh, Russian, and English) with the frequency of academic cheating and plagiarism, the hypotheses of Eccles et al. (2006) are adopted in this conceptual framework. The authors found a statistically significant correlation between the freshmen and sophomores who only started to learn the language of instruction and a large frequency of academic dishonesty behavior that decreases in later years of their studies. In other words, the less proficient the learners were in a particular language, the more often they would commit academic misconduct.

Another unique adjustment that is done to this framework is the addition of the quarantine factor. Since the world is now experiencing a new mode of teaching and learning, it is important to measure the effect of this aspect too.

Hence, the study is guided by the conceptual framework concentrated on four types of academic misconduct predictors: faculty and methodology influence, individual and demographic factors, ICT impact, and contextual factors that also include language mastery factor and quarantine impact.

Methodology

This chapter provides a detailed description of the methodology used to collect and analyze the data. As it was demonstrated in the literature review, most scholars investigating academic integrity employ questionnaires or surveys to further conduct multivariate analysis (Macfarlane et al., 2014). Thus, in the current chapter, the selection of a quantitative methodology for this study is justified. Firstly, the aspects of the research design will be explained. Secondly, the sampling strategies and research site selection will be described. The hypotheses, data collection tools, procedures, and analysis will then be reviewed. Finally, ethical considerations and confidentiality details will be presented in the last section.

Research Design

After the analysis of the relevant literature, the non-experimental explanatory quantitative research design has been selected as the most suitable option to answer the research questions of this study. A non-experimental research design is the most optimal since variables such as experience and opinions regarding academic integrity cannot be manipulated (Johnson & Christensen, 2019). In this type of research design, according to Kerlinger (1986) “inferences about relations among variables are made, without direct intervention, from a concomitant variation of independent and dependent variables” (p. 348). In other words, the correlation between the observed variables is calculated regarding opinions and behaviors that already exist. Non-experimental research is highly prioritized in educational settings since it is not possible to manipulate most of the variables researched in education (Johnson & Christensen, 2019).

Explanatory research is defined as “testing hypotheses and theories that explain how and why a phenomenon operates as it does” (Johnson & Christensen, 2019, p. 550.). It

suits the study since the background of academic integrity in Kazakhstan is largely unknown and should be explained.

The quantitative nature of the study can also be justified by the frequent usage of this method in other related studies. To be specific, this study will be based on the quantitative approach of Comas-Forgas and Sureda-Negre (2010) who conducted a study about the explanatory factors of academic misconduct. Additionally, to avoid the possible ethical issues that could arise due to the sensitivity of the topic, a quantitative anonymous survey that will not ask for any personal information is recommended (Johnson & Christensen, 2019).

In terms of the time of the data collection and research objectives, the research design is cross-sectional explanatory. Hence, data on multiple variables were acquired at one point in time. The method included a survey of students and faculty to obtain tangible answers for the research questions of the study.

Sample

In this study, non-probability sampling was employed to ensure the anonymity of the participants. Moreover, it is one of the most effective sampling methods for online surveys that can provide higher response rates than probability sampling techniques (Brick, 2014). The non-probability sampling method implies that units in the sample are included with a probability that cannot be calculated (Vehovar et al., 2016). Initially, the sample was selected from the population of 4th-year undergraduate students, 2nd-year graduate students, and faculty from one large public university in Nur-Sultan. While the 4th-year undergraduate students were chosen due to their wealth of experience in the university and the process of final thesis writing that requires referencing skills, the graduate students were selected to be sampled because the master's programs denote more scientific work,

and hence, more opportunities to plagiarize. However, since the response rate was low, it was decided to expand the sample adding the 2nd and the 3rd year undergraduate students. The opinion of faculty members, in turn, provided the opportunity to evaluate the issue from different angles. The demographic characteristics that were considered during the analysis were gender (male; female), degree (undergraduate; graduate), GPA, and the medium of instruction (Kazakh, Russian, or English). The total number of participants was 180 with 133 of them being students and 47 being faculty members.

Two universities with at least 1000 students in Nur-Sultan were chosen as research sites since institutions with large numbers of students are more likely to provide a representative sample. McCabe and Trevino (1997) also found that cheating tends to be more prevalent on larger campuses. The survey will take place online due to both the importance of anonymity of the participants and the COVID-19 pandemic.

Hypotheses

To answer the first two research questions "What demographic characteristics (gender, GPA, study year, and the language of instruction) influence academic misconduct?" and "What contextual characteristics (Internet technologies, faculty methodology, language mastery, and individual perceptions) facilitate academic cheating and plagiarism?", the following two null hypotheses were tested during the quantitative stage:

1. There is no correlation between gender, degree, GPA, major, medium of instruction, and the frequency of students' academic misconduct.

$$H_0: \mu_{\text{demographical factors}} = \mu_{\text{academic misconduct frequency}}$$

2. There is no correlation between contextual antecedents of academic dishonesty and the frequency of students' academic misconduct.

$$H_0: \mu_{\text{contextual factors}} = \mu_{\text{academic misconduct frequency}}$$

In these hypotheses, the dependent variable was academic misconduct frequency, while the independent variables were demographical and contextual factors.

The second research question "How frequently students commit academic misconduct?" was answered through the comparison of both faculty's and students' perspectives by testing the following null hypothesis:

3. There is no difference between the faculty's opinions and students' reports on academic misconduct frequency.

$$H_0: \mu_{\text{faculty's opinions}} = \mu_{\text{academic misconduct frequency report}}$$

In this hypothesis, academic misconduct frequency, once again, was the dependent variable, whereas the faculty's and students' perspectives on the frequency were the other two independent variables.

Data Collection Tools

This study employed a questionnaire as a tool since "researchers use questionnaires so that they can obtain information about the thoughts, feelings, attitudes, beliefs, values, perceptions, personality, and behavioral intentions of research participants" (Johnson & Christensen, 2019, p. 274).

The anonymous survey consisted of three parts:

1. Demographic information asking about gender, the cycle of study, the language of instruction, and GPA (three questions in total);

2. Predictors of academic dishonesty based on the survey of Comas-Forgas and Sureda-Negre (2010). This part focuses on three areas: Internet technologies, faculty methodology, and individual perceptions. Considering the trilingual education policy in

Kazakhstan, these predictors were also supported by the language mastery factor (Eccles et al., 2006) (17 factors in total);

3. Two general questions on the frequency of academic misconduct were extracted from the study of Eccles et al. (2006) about academic dishonesty.

Since this study was going to test specific hypotheses, the majority of questions were closed-ended (Johnson & Christensen, 2019). However, the predetermined answers in closed-ended questions could limit the research results and serve as an obstacle to receiving valuable answers. Additionally, it has been argued that the "hidden nature of the motivations and opportunities to cheat are difficult to research with accuracy" (Guthrie, 2009, p. 23). Therefore, some open-ended questions were added to the questionnaire to obtain any additional information that participants would want to provide. The "Qualtrics" online tool was used to build the survey and distribute it anonymously.

The questionnaire employs a fully-anchored five-point rating scale: 1 for "not relevant at all", 2 for "not very important", 3 for "neutral", 4 for "quite relevant", and 5 for "very relevant" to choose which of the academic misconduct factors are the most relevant from participants' perspectives. The last two questions about the frequency of academic misconduct use the same scale with changed content which is 1 for "never", 2 for "a few times a year", 3 for "approximately once a month", 4 for "approximately once a week", and 5 for "more than once a week", and own variant.

The questionnaire was pilot tested by a group of university students who suit the sampling characteristics. Thus, for the pilot study, convenience sampling was employed. The literature mentions that "Researchers use convenience sampling when they include in their sample people who are available or volunteer or can be easily recruited and are willing to participate in the research study" (Johnson & Christensen, 2019, p. 362). The

link for the survey was sent to them on social media or directly through messengers. The validity of the questionnaire was tested by factor analysis and the reliability was tested by Cronbach's Alpha value calculated in the Statistical Package for the Social Sciences (SPSS).

Data Collection Procedures

October 31, 2020, the results of the review from the Ethics Committee were received. After completing the required adjustments, November 1, 2020, the approval to conduct the study was granted. Before contacting representatives of universities via email and phone, the letters for participants explaining the purpose of the study, its potential risks and benefits, participants' rights, the approximate time required to complete the survey, and the methods used to ensure anonymity and confidentiality were prepared. The email to the first university was sent two days after receiving the ethical approval; however, repeating emails and phone calls did not facilitate their response. After waiting for two weeks, it was decided to try to recruit other universities. The options were limited due to the absence of corporate emails in some institutions. Ten universities were invited to participate in the study; however, only one of the potential research sites agreed. Students and faculty of that university received an email with the link to participate in the survey. Since the responses collected from them were not enough to have a representative sample with approximately 60 responses in total, it was decided to recruit another higher education institution. Eventually, data collection was closed on January 2021 with 251 responses collected.

Data Analysis

Data analysis started with cleaning the data. All missing values were replaced, no outliers were identified, and reverse coded items were recoded.

The descriptive and inferential statistics, such as T-test, one-way analysis of variance (one-way ANOVA), post hoc tests in analysis of variance, and multiple regression were employed in this study. First, after obtaining the numerical data, a descriptive analysis was carried out to summarize the results, detect tendencies, and outliers. For these purposes, several types of analysis, such as frequency distribution, measures of central tendency, and the percentage were performed and calculated. With the help of descriptive statistics, the demographic information (gender, study cycle, language of instruction) about the sample and general tendencies in academic misconduct factors were presented.

Inferential statistics helped to go beyond the existing data and make a significant conclusion for the research. The significance level (*p-value*) was set to .05 since it is the most common p-value in educational research (Johnson & Christensen, 2019). The sample size was increased to 180 to decrease the margin of error from 12% to 6.62% with a confidence level of 95%.

One-way ANOVA is the type of analysis used to make a comparison between two or more group means (Johnson & Christensen, 2019). This approach suits the study's research questions and variables since one-way ANOVA is usually employed when there are one categorical and one quantitative variable (Johnson & Christensen, 2019). In this study, the demographical and contextual factors served as categorical and independent variables, whereas the frequency of academic misconduct was the quantitative and dependent variable. This analysis, firstly, showed if GPA (3.67-4.0; 2.67-3.33; 1.67-2.33; 1.0-1.33; 0) or medium of instruction (Kazakh, Russian or English) influence how often students cheat. Then, for dichotomous variables, or in other words, the variables that contain only two levels such as gender (male or female) and academic title (faculty or student), Independent Two-Sample T-test was conducted. This test was also conducted for GPA since due to the insufficient number of participants with points ranging from 1.67 to

2.66, two groups were merged. Afterward, the group means of contextual factors related to Internet technologies, teachers' methodology, and personal reasons were tested as well.

Post hoc were carried out to identify which means among those determined after one-way ANOVA are statistically significant for the study. The test is needed for variables with more than two levels, such as medium of instruction with three levels and study cycle with four levels.

The last step in the data analysis was multiple linear hierarchical regression. The hierarchical linear model helps to "analyze variance in the outcome variables when the predictor variables are at varying hierarchical levels" (Woltman et al., 2012, p. 52); in other words, predictor variables for this analysis are located in separate blocks. In this case, the first block or model 1 consisted of gender and GPA, while the second block added all contextual factors that were investigated in this study.

Ethical Issues

The data collection started after the approval of the NUGSE Research Ethics Committee. The Ethics Review form was sent to the Committee on September 17, 2020, with the attached CITI training certificate, informed consent form, and questionnaire. The permission was received on November 1, 2020.

Since academic misconduct is a sensitive topic in educational settings, the anonymity of the participants was ensured. Johnson and Christensen (2019) suggest that anonymity in studies about academic dishonesty can be achieved through anonymous surveys that do not ask for any information that could help to determine participants' identities. Therefore, the names of the participants were not asked and could not be known by the researcher, and no other personal information was required. To ensure the

impossibility of identification even further, the participants' programs of study were not asked in the survey.

The data obtained from the questionnaire is kept confidential on the researcher's laptop which is secured with a password. The names of the research sites are kept confidential, and any characteristics that might reveal the university of the participants are hidden.

This study implies minimal risks since the survey was anonymous. Hence, "the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests" (Department of Health and Human Services, 2009, p. 4). Any personal information related to the participants is not known to anyone, including the researcher. Besides, the online survey is a better tool to ensure anonymity compared to a paper-based survey since participants cannot purposefully or accidentally see anyone's papers. Moreover, the confidentiality of the obtained information and the research site was provided by the researcher. The data collected from the survey is only available to the researcher and supervisor.

The researcher minimized the possibility of any psychological harm caused by the nature of the questions. The questions of the survey were reviewed by the supervisor, and the pilot study helped to determine any other questions that might cause discomfort for participants.

Findings

Introduction

This chapter presents the findings of the data that was collected through an online survey conducted among students (2nd, 3rd, 4th-year undergraduate students and 2nd-year graduate students) and faculty in two Kazakhstani universities. The data analysis has been conducted to answer the research questions of the study regarding the factors of academic misconduct and its frequency from the perspectives of both students and faculty. To be specific, three research questions were answered:

1. What demographic characteristics (gender, GPA, study year, and the language of instruction) influence academic misconduct?

2. What contextual characteristics (Internet technologies, faculty methodology, language mastery, and individual perceptions) facilitate academic cheating and plagiarism?

3. How frequently do students engage in academic misconduct?

The chapter, first, presents the demographic characteristics of the participants, descriptive statistics of contextual factors influencing academic misconduct, and descriptive statistics of the frequency of academic misconduct. Next, the results of Independent Two-Sample T-tests comparing faculty and students' opinions on academic misconduct, male and female academic dishonesty patterns, and academic dishonesty patterns of students with different GPAs are shown. Furthermore, the chapter reports the results of One-Way ANOVA to identify whether the language of instruction and the study cycle affects factors related to academic misconduct or its frequency. Finally, the results of hierarchical multiple linear regression analysis are reported to examine if gender and GPA in combination with contextual factors affect academic dishonesty factors and predict

academic misconduct frequency. Thematic analysis of the additional comments in the text boxes is also provided.

Demographic Characteristics of the Participants

The survey was conducted through the "Qualtrics" platform with students and teachers of two universities. Overall, 251 responses were gathered. In the process of data cleaning, 71 responses were deleted due to blank or incomplete submissions. Overall, 180 responses were analyzed in SPSS for this study. Among this total number, 133 of them were students and 44 were faculty members. Three respondents did not indicate their background information. Therefore, their answers were only used to perform the T-test to determine the difference between faculty and students' opinions, while indicating them as students; these respondents were excluded from the sample for the rest of the data analysis. The results of the descriptive analysis of the sample are presented in Table 1.

The gender proportion among students was 43 (32.3%) males, 88 (66.2%) female, and 2 (1.5%) who did not identify their gender. Among faculty members, the gender proportion was almost equal, with 21 (47.7%) being males and 23 (52.3%) being females.

Other demographic questions that students answered were regarding the study year, GPA, and language of instruction. The total number of 131 students consisted of 47 (35.3%) 2nd-year undergraduate students, 37 (27.8%) 3rd-year undergraduate students, 22 (16.5%) 4th-year undergraduate students, and 27 (20.3%) 2nd-year graduate students. Regarding GPA, most students (74 with 41.1%) identified that their grades vary from 2.67 to 3.66, 48 students (26.7%) showed that their GPA is approximately 3.67 to 4.0, and only 11 students (6.1%) mentioned that their GPA varies from 1.67 to 2.66. Due to the small number and for further analysis, the latter group was merged with the majority. Finally,

more than 8% of students identified that they study in the Kazakh language; approximately 20% in Russian and 45% in English.

Table 1

Demographic characteristics of the participants

Variable	Category	M	SD	N	%
Work title	Faculty member			44	100
Study cycle	2nd-year undergraduate student	3.74	1.04	47	35.3
	3rd-year undergraduate student				
	4th-year undergraduate student			37	27.8
	2nd-year graduate student				
				22	16.5
				27	20.3
Faculty gender	Male			21	47.7
	Female			23	52.3
Student gender	Male			43	32.3
	Female			88	66.2
GPA	3.67-4.0	4.28	.60	48	26.7
	2.67-3.66			74	41.1
	1.67-2.66			11	6.1
Language of instruction	Kazakh			15	8.3
	Russian			37	20.6
	English			81	45.0

Source: compiled by the author from SPSS data

Descriptive Statistics of Contextual Factors Affecting Plagiarism and/or Cheating Behavior

In response to the first research question of the study, “What are the reasons that make students plagiarize and cheat?”, a descriptive analysis was conducted. The influence of contextual factors, namely 18 causes related to three areas: the faculty and methodology; demographic characteristics of students; Information and Communication Technologies (ICT), has been examined. Descriptive statistics in Table 2 represent the mean, standard

deviation, and ranking of the causes in descending order. Three factors that participants outlined as the most likely to cause academic misconduct at university halls have been marked in bold in Table 2 below.

The data collection process showed that among all contextual factors presented in the survey, "a lack of knowledge as to how to do the assignments" (M = 4.04; *SD* = 1.04) is most likely to cause academic misconduct. Secondly, students and faculty pointed out that "completing assignments at the last minute" (*M* = 3.98; *SD* = 1.12) is a very important factor in causing academic dishonesty. Finally, the quarantine and the consequent implementation of distance learning due to the COVID-19 outbreak (*M* = 3.88; *SD* = 1. 11) has been selected as the third most important cause of academic plagiarism and cheating among students. "Setting too many assignments" (*M* = 3.87; *SD* = 1.08) and "setting very complicated assignments (*M* = 3.85; *SD* = 1.10) have also been found as important factors with high mean and less standard deviation than the previous two factors.

The least common factor with a mean of less than three was "being awarded a reduced weight of the assignment in the final grade" (*M* = 2.69; *SD* = 1.28).

Table 2

Contextual factors affecting academic misconduct

	Mean	SD	Rank
A lack of knowledge as to how to do the assignments facilitates academic plagiarism and/or cheating	**4.04**	**1.04**	**1**
Completing assignments at the last minute facilitates academic plagiarism and/or cheating	**3.98**	**1.12**	**2**
The quarantine associated with COVID-19 the outbreak and consequent distance learning increased plagiarism and/or cheating frequency	**3.88**	**1.11**	**3**
Setting too many assignments over a short period of time facilitates academic plagiarism and/or cheating	3.87	1.08	4
Setting very complicated assignments facilitates academic plagiarism and/or cheating	3.85	1.10	5
Lack of time facilitates academic plagiarism and/or cheating	3.83	1.06	6

	Mean	SD	Rank
The belief that it is possible to obtain a better grade by copying than by producing original work (lack of confidence in their abilities) facilitates academic plagiarism and/or cheating	3.69	1.28	7
For comfort and ease	3.65	1.13	8
The ease of access offered by the Internet and ICT to find, process, and edit information facilitates academic plagiarism and/or cheating	3.50	1.27	9
The belief that the lecturer does not read the assignments carefully facilitates academic plagiarism and/or cheating	3.49	1.27	10
Because other students copy	3.34	1.28	11
Setting assignments of an eminently theoretical nature facilitates academic plagiarism and/or cheating	3.31	1.19	12
Students who commit academic plagiarism and/or cheat think that copying and downloading things from the Internet is not wrong	3.29	1.26	13
The belief that the lecturers will find it difficult to detect that the work has been copied facilitates academic plagiarism and/or cheating	3.29	1.24	14
Setting assignments students feel they are learning nothing from facilitates academic plagiarism and/or cheating	3.27	1.32	15
Lack of language skill facilitates academic plagiarism and/or cheating	3.11	1.28	16
The belief that the lecturer is not very skilled at using the Internet facilitates academic plagiarism and/or cheating	3.09	1.30	17
Being awarded a reduced weight of the assignment in the final grade facilitates academic plagiarism and/or cheating	2.69	1.28	18

Source: compiled by the author from SPSS data

Descriptive Statistics of the Academic Misconduct Frequency

In response to the second research question about the frequency of academic misconduct in Kazakhstani universities, the participants were given the chance to answer with either one of the five Likert-type scale options or their own answer in the text box. Referring to the results of descriptive statistics, students showed that they plagiarize and cheat less often than faculty members perceive. Faculty, on the other hand, reported that students cheat more frequently. The exact values of mean and standard deviation can be found in Table 3 below (only participants who answered using the Likert Scale are included).

Table 3

Mean and standard deviation of the academic misconduct frequency question

	N	Mean	SD
How often do you commit plagiarism?	123	1.92	1.15
How often do you think students commit plagiarism? (Question for faculty)	33	3.24	1.20
How often do you cheat?	121	2.13	1.19
How often do you think students cheat? (Question for faculty)	33	3.36	1.16

Source: compiled by the author from SPSS data

Frequency analysis demonstrated that slightly more than 45% (*n*=60) of students claim to never plagiarize and almost 36% (*n*=47) to never cheat (Table 4). However, 2.3% of faculty members (*n*=1) believe that students never cheat or plagiarize. On average, 24 percent of students and faculty believe that students cheat a few times a year. About 12% of students and 20% of faculty selected the answer “once a month” for plagiarism; almost 18% of students and 14% of faculty members opted for the option “once a month” for the cheating frequency. While the “approximately once a week” option was not as common among students with 6.1% and 7.6% for plagiarism and cheating, respectively, faculty members agreed with that option more frequently with 13.6% and 25%. The option “more than once a week” was the least popular among students with about 5% for both plagiarism and cheating, while for the faculty members, it was the third most popular option (18.2% and 15.9% for plagiarism and cheating, respectively). The remaining participants (about ten students and faculty) left their own answers in the text box.

Table 4

Descriptive statistics of the academic misconduct frequency

	Never		A few times a year		Approximately once a month		Approximately once a week		More than once a week		Own answer	
	N	%	N	%	N	%	N	%	N	%	N	%
Plagiarism frequency *(students' opinions)*	60	45,5	33	25	16	12.1	8	6,1	6	4.5	9	6,8
Plagiarism frequency *(faculty's opinions)*	1	2.3	10	22.7	9	20,5	6	13.6	8	18,2	10	22.7
Cheating frequency *(students' opinions)*	47	35,9	35	26,7	23	17,6	10	7,6	7	5,3	9	6,9
Cheating frequency *(faculty's opinions)*	1	2.3	9	20,5	6	13.6	11	25	7	15,9	10	22.7

Source: compiled by the author from SPSS data

Some participants opted to write their own answers to these questions. The answers were divided into categories after performing a thematic analysis. Questions about plagiarism and cheating frequency both received nine students' and ten faculty's answers.

The plagiarism frequency answers of students have been divided into six categories: 1) those who cheat rarely or depending on the situation (3 participants); 2) those who used to plagiarize, but do not anymore (2 participants); 3) those who have plagiarized once in their lives (1 participant); 4) those who have started to plagiarize because of the hardships of distance learning (1 participant); 5) those who plagiarize once in six months (1 participant); 6) those whose study programs allow them to search for references on the Internet (1 participant). The participant who started to plagiarize more

often after the implementation of distance learning stated that before education went offline, she “maybe did it once a month when reporting a lab or something like that”; however, now they feel that it is too easy to plagiarize studying at home.

The answers of the faculty members about plagiarism behavior have been divided into 4 categories: 1) those who did not understand the question (3 participants); 2) those who think students always cheat (2 participants); 3) those who think that it depends on whether they are caught or not (1 participant); 4) those who think that it happens occasionally and only a few times per semester (4 participants).

Cheating frequency answers, after the analysis, were divided into 6 thematic categories: 1) those who rarely cheat, only if there are too many assignments or if assignments are too difficult (4 participants); 2) those who never cheat (1 participant); 3) those who have cheated once in their lives and failed (1 participant); 4) those who cheat twice a month (1 participant); 5) those who have started to cheat because of the hardships of distance learning (1 participant); 6) those who cheat because it is psychologically tempting (1 participant). In category 5, participants mentioned that they cheated on the test because it was too easy since there were no online meetings to control the process. The participants in category 5 stated that they did not cheat before, but now they cheat very frequently because “the brain says: “cheat, no one is watching you”.

Concerning faculty’s answers about cheating frequency, the same thematic categories from their plagiarism answers can be applied. The only exception is the answer from the faculty member saying that the students from their program rarely cheat because they are taught not to do so at the school level.

T-Test Comparing Faculty and Students' Opinions on Academic Misconduct

According to the Independent Two-Sample T-test results comparing faculty and students' opinions on the contextual factors affecting academic misconduct behavior (Table 5), seven items have been found statistically significant. Firstly, faculty members (M = 3.93; SD = 1.12) consider the ease of access to information provided by the Internet as a more important predictor of academic dishonesty compared to students (M = 3.36; SD = 1.28), who do not consider it as significant, $t(82) = 2.81$, $p = .006$. Secondly, the faculty (M = 3.74; SD = 1.22) are more positive about the importance of the belief that the professor will never determine that the work has been plagiarized in predicting academic plagiarism and/or cheating compared to students (M = 3.14; SD = 1.21), $t(178) = 2.86$, p=.005. Finally, there is strong evidence that faculty are more inclined to think that poor time management (M = 4.30; SD = .90) and copying other students' behavior (M = 3.93; SD = 1.04) are important predictors of academic misconduct compared to students (M = 3.88; SD = 1.17 and M = 3.15; SD = 1.30 respectively), $t(178) = 2.18$, $p = .03$ for the former and $t(90) = 4.04$, $p < .001$ for the latter.

Moreover, the T-test has shown that factors associated with the nature and complexity of assignments were considered as more significant predictors of academic dishonesty by students compared to what faculty members think. Namely, students are more positive than theoretical nature of assignments (M = 3.41; SD = 1.16), $t(178) = -2.11$, $p = .04$; high complexity of the assignments (M = 3.99; SD = 1.09), $t(178) = -2.94$, $p = .004$; and assignments from which students feel they will not learn much (M = 3.39; SD = 1.33), $t(178) = -2.12$, $p = .03$ can facilitate academic misconduct. These findings might mean that faculty should place more attention on the assignments they give to students since it can play a more important role in academic dishonesty prevention than they realize.

Table 5

Items having significant differences between faculty and students (T-test results)

	Faculty		Students		t	p
	M	SD	M	SD		
The ease of access offered by the Internet and ICT to find, process, and edit information	3.93	1.12	3.36	1.28	2.81	.006*
The belief that the lecturers will find it difficult to detect the work has been copied	3.74	1.22	3.14	1.21	2.86	.005*
Completing assignments on the last minute	4.30	.90	3.88	1.17	2.18	.03*
Because other students copy	3.93	1.04	3.15	1.30	4.04	.000*
Setting assignments of an eminently theoretical nature	2.98	1.24	3.41	1.16	-2.11	.04*
Setting very complicated assignments	3.43	1.04	3.99	1.09	-2.94	.004*
Setting assignments students feel they are learning nothing from	2.91	1.21	3.39	1.33	-2.12	.03*

*$p<0.05$

Source: compiled by the author from SPSS data

T-Test Comparing Male and Female Academic Dishonesty Patterns

The Independent Two-Sample T-test results comparing male and female students' opinions on the influence of various contextual factors on academic misconduct have shown that there are seven items with statistically significant differences. The frequency of cheating and plagiarism, however, did not significantly vary between genders ($p_{\text{plagiarism}} = .17$; $p_{\text{cheating}} = 1.00$).

In all items, males were more positive about the impact of some factors than females (Table 6). Namely, male students (M = 3.63; SD = .95) supported that the belief that the lecturers could not identify academic misconduct, $t(108) = 3.40$, $p = .001$; copying other students' behavior (M = 3.63; SD = 1.11), $t(98) = 3.11$, $p = .002$; belief that the lecturer does not read the assignments carefully (M = 3.77; SD = 1.02), $t(109) = 2.19$, $p = .03$; a reduced impact of the assignments on the final grade (M = 3.02; SD = 1.10), $t(101) = 2.35$, $p = .02$; the complexity of the assignments (M = 4.23; SD = .81), $t(115) = 2.01$, $p = .04$; opportunity to get a better grade (M = 4.02; SD = .91), $t(119) = 2.65$, $p = .009$; and the quarantine induced distance learning (M = 4.26; SD = .90), $t(129) = 2.55$, $p = .01$ affect academic misconduct behavior more than female students think. These findings show that male students may be more vulnerable to factors associated with faculty methodology, and they may be more likely to commit academic misconduct due to the assignment's complexity, grades, and lecturers' teaching style. Moreover, seeing other students' cheating behavior provokes male students to cheat more compared to females.

Table 6

Items having significant differences between male and female students (T-test results)

	Male		Female		t	p
	M	SD	M	SD		
The belief that the lecturers will find it difficult to detect that the work has been copied	3.63	.95	2.95	1.27	3.40	.001*
Because other students copy	3.63	1.11	2.94	1.33	3.11	.002*
The belief that the lecturer does not read the assignments carefully	3.77	1.02	3.30	1.39	2.19	.03*
Being awarded a reduced weight of the assignment in the final grade	3.02	1.10	2.50	1.36	2.35	.02*

	Male		Female		t	p
	M	SD	M	SD		
Setting very complicated assignments facilitates academic plagiarism and/or cheating	4.23	.81	3.88	1.19	2.01	.04*
The belief that it is possible to obtain a better grade by copying than by producing original work (lack of confidence in their abilities)	4.02	.91	3.48	1.42	2.65	.009*
The quarantine associated with the Covid-19 outbreak and consequent distance learning	4.26	.90	3.73	1.20	2.55	.01*

*$p<0.05$

Source: compiled by the author from SPSS data

T-Test Comparing Academic Dishonesty Patterns of Students with Different GPAs

Due to the lack of participants with GPA scores of 1.67-2.66 (n=11), they were merged with the closest group of participants who have GPAs of 2.67-3.66 (n=74). The T-test was conducted to check if there is any statistical difference between the two groups of students with GPAs of 1) 3.67-4.0 (n=48) and 2) 1.67-3.66 (n=85).

Four items with statistical significance were identified. Three of them are related to contextual factors, and one is about the frequency of academic misconduct (Table 7). An excessive number of assignments, as the T-test has shown, is a more important factor in facilitating academic misconduct among students with grades from C- to B+ (M = 4.11; SD = .93) than for high achievers (M = 3.63; SD = 1.21), $t(79) = -2.37$, $p = .02$.

Table 7

Items having significant differences between students with different GPAs (T-test results)

	3.67-4.0		1.67-3.66		t	p
	M	SD	M	SD		
Setting too many assignments over a short period of time	3.63	1.21	4.11	.93	-2.37	.02*
Lack of language skill	3.38	1.36	2.87	1.25	2.16	.03*
The quarantine associated with the Covid-19 outbreak and consequent distance learning	3.48	1.27	4.13	.97	-3.07	.003*
How often do you cheat?	1.88	1.37	2.71	1.50	-3.16	.002*

*$p<0.05$

Source: compiled by the author from SPSS data

In turn, results show that the lack of language skills is more likely to cause high achievers (M = 3.38; SD = 1.36) to cheat or plagiarize than students with a GPA of 1.67-3.66 (M = 2.87; SD = 1.25), $t(131) = 2.16$, p = .03. The next question about which language is more likely to cause academic misconduct among students has been answered by 54 participants (those who identified that the lack of language skill is extremely likely or rather likely to cause academic dishonesty) (Table 8). 15 people (27,8%) identified that problems with the Kazakh language are most likely to cause academic misconduct, 7 participants (13%) outlined that the lack of Russian language knowledge can facilitate academic dishonesty, 28 participants (51.9%) answered that lack of knowledge in the English language is more likely to cause students to cheat or plagiarize, and four people (7,4%) opted for other languages. Hence, the respondents who had issues with English language acquisition were more inclined to plagiarize or cheat.

Table 8

Frequency table of the languages that can cause academic misconduct

	N	%
Kazakh	15	27.8
Russian	7	13.0
English	28	51.9
Other	4	7.4

Source: compiled by the author from SPSS data

Finally, students with grades from C- to B+ (M = 4.13; SD = .97) are in more agreement with the statement that the quarantine and the consequent distance learning has a significant impact on academic misconduct frequency, $t(78) = 3.07$, $p = .003$.

While there was no significant difference in the plagiarism rate, the T-test has demonstrated that students with lower GPAs (M = 2.71; SD = 1.50) tend to cheat more often than students with GPAs of 3.67-4.0 (M = 1.88; SD = 1.37), $t(129) = -3.16$, $p = .002$.

One-Way ANOVA: The Influence of The Language of Instruction on Factors Related to Academic Misconduct and its Frequency

One-Way ANOVA and the consequent Post Hoc Test using Tukey HSD have been conducted to determine if the language of instruction affects the factors or frequency of plagiarism and/or cheating (Table 9). Contextual factors and academic misconduct frequency were set as dependent variables, and students' languages of instruction were selected as independent variables. While the frequency of misconduct was not affected by the language, the influence of six contextual factors in the survey varied significantly between groups.

According to the analysis, there is a significant difference between students with the Kazakh language of instruction (M = 4.40; SD = .50) and the Russian language of instruction (M = 3.59; SD = 1.06) in relation to the factor of excessive numbers of

assignments ($F(2, 130) = 3.59$; $p = .03$; $\eta^2 = .05$). This finding shows that students who study in Kazakh feel that assignment overload significantly facilitates their academic misconduct behavior compared to students who study in Russian.

Students with the Kazakh language of instruction and the Russian language of instruction not only differ in the influence of a great number of assignments on their academic dishonesty intentions but also in the way in which they perceive ease of access to information on the Internet. The analysis has demonstrated that students studying in Kazakh ($M = 3.87$; $SD = 1.30$) find the Internet to be more tempting source that can facilitate academic cheating and/or plagiarism compared to the participants studying in Russian ($M = 2.86$; $SD = 1.25$), $F(2, 130) = 4.49$, $p = .01$, $\eta^2 = .06$. Moreover, students who study in English ($M = 3.48$; $SD = 1.24$) also consider Internet access as an important factor compared to students who study in Russian ($M = 2.86$; $SD = 1.25$).

Other significant differences with large effect sizes are demonstrated between groups with Russian ($M = 2.76$; $SD = 1.21$) and English language of instruction ($M = 3.37$; $SD = 1.18$) and include the belief that lecturers will not find out that they have cheated ($F(2, 130)=3.37$, $p=.04$, $\eta^2=.05$), peer influence with $F(2, 130) = 5.11$, $p = .01$, $\eta^2 = .07$ ($M_{Russian} = 2.61$; $SD_{Russian} = 1.33$; $M_{English} = 3.41$; $SD_{English}=1.20$), and distance learning that was implemented due to the COVID-19 outbreak ($M_{Russian} = 3.49$; $SD_{Russian} = 1.21$; $M_{English} = 4.07$; $SD_{English} = 1.08$) with $F(2, 130) = 3.57$, $p = .03$, $\eta^2 = .05$. In all cases, the group with the English language of instruction considered these factors to be more likely to cause academic misconduct than their peers who study in Russian.

During the analysis, two additional items were identified as statistically significant; however, the Tukey Post Hoc test did not show a significant difference. Due to this issue, another Post Hoc test using LSD (Least Significant Difference) was conducted. The test

showed that procrastination is not an equally important factor for the Russian language of instruction group (M = 3.49; SD=1.42) and the English language of instruction group (M = 4.01; SD = 1.05); in fact, the latter group demonstrates more support for this factor compared to the former ($F(2, 130) = 3.06$, $p = .05$, $\eta^2 = .04$). Moreover, the factor of insufficient language skills was more important for students who study in Kazakh (M = 3.67; SD = 1.34) than for those who study in English (M = 2.83; SD = 1.20) with $F(2, 130) = 3.63$, $p = .03$, $\eta^2 = .05$. It can be assumed that those who study in English are more proficient in this language, and hence, do not struggle with the assignments, while their peers who study in Kazakh spend less time in an English-speaking environment and have difficulties in independently completing assignments for English-related subjects.

Table 9

Items having significant differences among students with a different language of instruction (One-Way ANOVA results)

	Kazakh (a)		Russian (b)		English (c)		F	p	Groups having differences (Tukey HSD)
	M	SD	M	SD	M	SD			
Setting too many assignments over a short period of time	4.40	.50	3.59	1.06	4.00	1.10	3.59	.03*	a-b
The ease of access offered by the Internet and ICT to find, process, and edit information	3.87	1.30	2.86	1.25	3.48	1.24	4.49	.01*	a-b, b-c
The belief that the lecturers will find it difficult to detect	3.07	1.16	2.76	1.21	3.37	1.18	3.37	.04*	b-c

	Kazakh (a)		Russian (b)		English (c)		F	p	Groups having differences (Tukey HSD)
	M	SD	M	SD	M	SD			
Completing assignments on the last minute	4.13	.83	3.49	1.42	4.01	1.05	3.06	.05*	b-c**
Because other students copy	3.20	1.32	2.61	1.33	3.41	1.20	5.11	.01*	b-c
The belief that it is possible to obtain a better grade by copying than by producing original work (lack of confidence in abilities)	3.00	1.30	3.32	1.37	3.90	1.20	4.81	.01*	a-c
Lack of language skill	3.67	1.34	3.30	1.43	2.83	1.20	3.63	.03*	a-c**
The quarantine associated with Covid-19 the outbreak and consequent distance learning	3.93	.96	3.49	1.21	4.07	1.08	3.57	.03*	b-c

*$p<0.05$

**for these two items LSD (Least Significant Difference) Post Hoc Test was conducted because Tukey HSD did not show a significant difference

Source: compiled by the author from SPSS data

One-Way ANOVA: The Influence of the Study Cycle on Factors Related to Academic Misconduct and its Frequency

Since the survey was conducted among students studying in four different study years, the effect of the study cycle has been tested through One-Way ANOVA and Post Hoc test by Tukey (Table 10).

The results have shown that the complexity of assignments has a more significant impact on 2nd-year undergraduate students (M = 4.21; SD = .88) than on those who are studying for master's degrees (M = 3.48; SD = 1.39) with $F(3, 129) = 2.83$, $p = .04$, $\eta^2 = .06$. This finding can be explained by the fact that master's students face fewer challenges with learning and finding information, due to their age and longer study experience.

Another factor that demonstrates a significant difference between groups is lack of language skills. The analysis has shown that 2nd-year undergraduate students (M = 3.13; SD = 1.91) consider lack of language to be a more influential factor than 3rd-year undergraduate students (M = 2.41; SD = 1.25) do with a strong evidence of $F(3, 129) = 6.04$, $p = .001$, $\eta^2 = .12$. Similarly, 4th-year undergraduate students (M = 3.77; SD = 1.30) believe that insufficient language knowledge is a more important factor that affects academic misconduct in comparison with 3rd-year undergraduates (M = 2.41; SD = 1.25).

Finally, the distance learning that was implemented due to the quarantine affects the academic misconduct behavior of 2nd-year undergraduate students (M = 4.21; SD = .85) significantly more than students who study on master's program (M = 3.30; SD = 1.32), $F(3, 129) = 4.25$, $p = .01$, $\eta^2 = .09$, which is a medium effect size. It can be argued that 2nd-year undergraduates find it difficult to adapt to the new conditions because their current study year started out of campus during the pandemic. Hence, they have only

studied at university halls for one year. The difficulties associated with adaptation to these circumstances can be a cause facilitating academic dishonesty.

Table 10

Items having significant differences among students with different study cycles (One-Way ANOVA results)

	2nd-year undergraduate (a)		3rd-year undergraduate (b)		4th-year undergraduate (c)		2nd-year graduate (d)		F	p	Groups having differences (Tukey HSD)
	M	SD	M	SD	M	SD	M	SD			
Setting very complicated assignments	4.21	.88	4.08	1.06	3.95	.95	3.48	1.39	2.83	.04*	a-d
Lack of language skills	3.13	1.19	2.41	1.25	3.77	1.30	3.22	1.25	6.04	.001*	a-b, b-c
The quarantine associated with the Covid-19 outbreak and consequent distance learning	4.21	.85	4.00	1.15	3.77	1.11	3.30	1.32	4.25	.01*	a-d

*$p<0.05$

Source: compiled by the author from SPSS data

Hierarchical Multiple Linear Regression Analysis: The Effect of Demographic and Contextual Factors on Academic Dishonesty Factors and Frequency

Two hierarchical multiple linear regression analyses were performed to examine the effect of demographic and contextual factors on academic misconduct frequency. Gender (dichotomous variable) and GPA (ordinal variable) were dummy coded and added as control variables for these analyses in the first step, while all contextual factors were added as independent variables in the second step. The detailed analysis can be found in Table 11 below.

Model 1, which consisted of gender and GPA, has been identified as a significant predictor of both plagiarism and cheating frequency. According to the model fit for the question about plagiarism ($F(2, 127) = 11.7$, $p < .001$, $R^2 = .156$), 15.6% of the variance in the plagiarism frequency rate accounts for gender and GPA, while ($F(2, 126) = 9.62$, $p < .001$, $R^2 = .133$) for cheating frequency the number is 13.3%. In this model, gender ($\beta = -.36$; $p = .000$) was a prominent independent predictor of plagiarism frequency, demonstrating that males plagiarize more frequently than females, whereas GPA alone has been found not to be significant. In turn, for cheating frequency, both gender ($\beta = .28$; $p = .002$) and GPA ($\beta = .33$; $p < .001$) were significant predictors, demonstrating, firstly, that females cheat more frequently than males, and secondly, that students with lower academic performance tend to cheat more frequently than their peers with high grades. Hence, if female students have low GPAs, there might be a significant positive effect on their cheating frequency.

In both analyses, adding contextual factors to demographic characteristics showed that Model 2 ($F(20, 109) = 5.66$, $p < .001$, $R^2 = .510$, R^2 *change* = .354) is significant for plagiarism and ($F(20, 108) = 7.68$, $p < .001$, $R^2 = .587$, R^2 *change* = .454) for cheating frequency. This means that combining demographic characteristics with contextual factors

increases the fit of the model, showing that these factors account for plagiarism and cheating frequency variance of 51.0% and 58.7% respectively.

While Model 2 demonstrated a significant difference in plagiarism frequency, no unique predictors demonstrating significance were found. On the other hand, four factors were found as significant prominent predictors of cheating frequency. The first factor that was identified as significant was setting too many assignments (β = .50; p = .04), showing that students positively felt about the impact of this factor, the more frequently they reported having cheated. The second factor was the belief that the lecturer cannot find out about cheating (β = .40; p = .04). The third factor that demonstrated a significant but negative effect is awarding a reduced weight for the assignment (β = -.47; p = .001), meaning that the more positive students were about the impact of this predictor, the less frequently they reported having cheated. Finally, the lack of language skills was found as a significant individual predictor (β = .32; p = .02), demonstrating that problems with language mastery might be the cause for increased cheating frequency.

Table 11

Results of hierarchical regression analyses of plagiarism and cheating frequency on demographic and contextual factors

Independent variables	Dependent variables							
	Plagiarism frequency				Cheating frequency			
	Step 1		Step 2		Step 1		Step 2	
	β	P	β	p	β	p	β	P
Gender (dummy)	-.36	.000*	-.12	.15	.28	.002*	.16	.20
GPA (dummy)	-.14	.08	.10	.23	-.33	.000*	.25	.06
Setting too many assignments over a short period of time	-	-	.24	.63	-	-	.50	.04
A lack of time facilitates academic plagiarism and/or cheating	-	-	.50	.33	-	-	-.02	.92

Independent variables	Dependent variables							
	Plagiarism frequency				Cheating frequency			
	Step 1		Step 2		Step 1		Step 2	
	β	P	β	p	β	p	β	P
The ease of access offered by the Internet and ICT to find, process and edit information	-	-	-.64	.12	-	-	-.09	.56
The belief that the lecturers will find it difficult to detect that the work has been copied	-	-	-.18	.53	-	-	.40	.04
Completing assignments at the last minute	-	-	.46	.16	-	-	-.09	.56
The belief that the lecturer is not very skilled at using the Internet	-	-	.12	.46	-	-	.11	.38
Because other students copy	-	-	-.29	.36	-	-	-.09	.61
The belief that the lecturer does not read the assignments carefully	-	-	-.24	.45	-	-	.003	.99
Students who commit academic plagiarism and/or cheat think that copying and downloading things from the Internet is not wrong	-	-	-.13	.52	-	-	-.01	.93
Setting assignments of an eminently theoretical nature	-	-	.21	.23	-	-	.07	.42
For comfort and ease	-	-	.21	.41	-	-	.12	.27
Being awarded a reduced weight of the assignment in the final grade	-	-	-.02	.88	-	-	-.47	.001
Lack of knowledge as to how to do the assignments	-	-	.28	.38	-	-	-.05	.74
Setting very complicated assignments	-	-	-.07	.74	-	-	.23	.21

Independent variables	Dependent variables							
	Plagiarism frequency				Cheating frequency			
	Step 1		Step 2		Step 1		Step 2	
	β	P	β	p	β	p	β	P
The belief that it is possible to obtain a better grade by copying than by producing original work (lack of confidence in their abilities)	-	-	.312	.09	-	-	-.227	.29
Setting assignments students feel they are learning nothing from	-	-	-.515	.06	-	-	.118	.53
Lack of language skill	-	-	.350	.05	-	-	.323	.02
The quarantine associated with the Covid-19 outbreak and consequent distance learning	-	-	-.070	.81	-	-	.257	.14
F model	11.7		5.66		9.62		7.68	
R^2 model	.156		.510		.133		.587	
R^2 change	.156		.354		.133		.454	

*p<0.05

Source: compiled by the author from SPSS data

Four assumptions of linear regression (Osborne & Waters, 2002) were tested before running the regression analysis. The normality assumption was met after examining a predicted probability plot. Next, the independence assumption was met since the type of study is cross-sectional. Multicollinearity was checked using VIF values during the regression analysis; none of the values exceeded 10. Finally, homoscedasticity was checked to meet all the assumptions of the linear regression; however, the assumption was violated. In order to correct this, the Weighted Least Squares (WLS) regression was performed.

Thematic Analysis of the Additional Comments

At the end of the survey, participants were allowed to leave their thoughts on the academic misconduct topic in the text box. Nine faculty members and 16 students decided to leave additional comments.

Faculty members left thoughtful and diverse comments about students' academic dishonesty. Three faculty members offered some recommendations on preventing plagiarism. Namely, they believe that enforcing a stronger academic integrity policy and informing students that they can consult with lecturers and teaching assistants about complicated assignments can decrease the academic misconduct rate.

Moreover, one of the participants mentioned that "A number of academic staff, especially local staff, have a forgiving attitude that strongly encourages cheating and plagiarism". This statement was supported by another faculty member mentioning that students are rarely penalized for academic misconduct in secondary school, and thus, they consider cheating behavior to be acceptable.

The other three faculty members (one of whom is also mentioned in the previous statement) also agreed that students are often forced to choose the wrong major and, consequently, due to lack of interest, start to commit academic misconduct.

Some additional comments state that they think that there was less cheating during Covid-19, but the reasons are unknown. Also, one faculty member mentioned that sometimes students plagiarize unintentionally because they are not educated about what constitutes plagiarism.

Students also had diverse opinions. Some common comments mention that poor time management because of work or laziness encourages academic misconduct (three

participants). One participant even mentions that students more frequently opt for paying a third party to complete the academic work than to plagiarize themselves.

Two participants think that Internet access and the inability to process information are the main factors, while one of the participants thinks that academic misconduct can improve analytical skills since students have to search for appropriate information.

The other three participants state that the theoretical nature of the assignments, boring assignments, assignments that are too easy, or online tests facilitate academic dishonesty. Another participant, in contrast, mentions that lecturers usually teach easy examples, while on exams, they receive difficult ones, and thus, they resort to cheating.

One participant mentioned that academic writing skills should be taught better to decrease the academic misconduct rate, while another participant notes that it is caused by the fact that students learned how to accept responsibility. Similarly, one student mentioned that in their previous university, there were no penalties for cheating and plagiarism.

The last response that needs to be mentioned is about students' ignorance of academic integrity rules. An anonymous student explained his experience, stating that although they do not plagiarize now, they used to accidentally plagiarize because they did not know the citation rules: "…since I did not know that it is so important and no rules were explained, I just came up with random surnames for my reference list in my bachelor's degree diploma work. No one even noticed".

Conclusion

This study has found that generally, gender and GPA together in one model are important factors that can have a significant effect on academic misconduct behavior and frequency. The effect of the contextual factors such as a number of the assignments, the

lack of language skills, and the belief that lecturers cannot identify plagiarized or cheated academic work were also found as significant in the regression analysis influencing the frequency rate of cheating. In the next chapter, the findings will be discussed in more detail, explaining all the results acquired from descriptive statistics, T-tests, and regression analysis.

Discussion

This chapter discusses the findings of this study in accordance with the relevant literature sources. Since the initial objective of the study was to examine the factors that had an impact on Kazakhstani students' academic misconduct, the discussion chapter will shed light on possible explanations that can be applied to the demographic and contextual characteristics that were significant in this study. It is important to reiterate that the results of the study revealed that while, separately, gender and GPA do not directly influence the academic misconduct frequency, when one of these variables is controlled, either the other one or both demonstrate a significant effect. In addition, the number of contextual factors associated with the nature of assignments, individual habits, and recently implemented distance learning caused by the global pandemic were found as important figures in the descriptive statistics. Moreover, contextual factors associated with the assignments and individual characteristics affect academic cheating frequency significantly. The comments left by the participants in the text boxes are also taken into account in this discussion. Existing research is presented to justify and explain the findings of the current research.

The Effect of Demographic Characteristics on Academic Dishonesty

This section of the chapter discusses the impact of demographic characteristics such as gender, GPA, study year, and the language of instruction on academic dishonesty behavior in Kazakhstani students. The analyses suggest that gender and GPA in combination show a significant effect on the frequency of academic misconduct. In addition, each demographic characteristic varied in terms of the circumstances that have a significant effect on plagiarism or cheating intentions.

Gender

To examine the significance of gender on academic misconduct, an Independent Two-Sample T-test and hierarchical multiple linear regression were conducted. In the first analysis, gender was not found to be a significant factor predicting academic misconduct frequency. However, the T-test showed that cheating and plagiarism patterns among males and females vary significantly. In the regression analysis, gender was identified as a significant predictor of academic plagiarism and cheating frequency in combination with GPA. Namely, the results showed that male students plagiarize more frequently, while female students cheat more frequently if their GPA is comparatively low.

As it was discussed in the literature review, gender was identified as an ambiguous concept, which several older studies suggested to be an important factor and asserted that females cheat less frequently than males (Bowers, 1964; Hetherington & Feldman, 1964; Roskens & Dizney, 1966), while more recent works dismiss these findings by emphasizing that gender does not significantly affect academic dishonesty behavior (Cizek, 1999; Williams et al., 2010). Leming (1980) also mentions that females cheat more than males when the risks are low. While the findings showed that plagiarism rates can be predicted the same as it was mentioned in the traditional studies, the study also produced mixed results that corroborate with the findings of McCabe and Trevino (1997), who indicated that additional factors affect the gender predictor. The study reveals that males plagiarize more frequently, while females cheat more often only if the condition of low GPA is met. The claims provided in the study of Bisping et al. (2008) can be used to explain these findings. The authors argued that students with lower GPAs have more to gain from cheating, while students who are already high achievers risk lowering their reputation and grades if caught. In the current study, it can be suggested that while males are generally

more inclined to academic dishonesty behavior, females cheat more frequently when the benefits of cheating outweigh the cost of being caught because their GPA is already low.

In addition, the T-test demonstrates that males and females significantly differ in their perception of contextual factors affecting academic misconduct. These findings will be discussed in the second section of the chapter.

Grade Point Average (GPA)

GPA was identified as a significant factor that affects some academic dishonesty patterns and frequency. While the T-test demonstrated no significant difference in plagiarism frequency rate, both the T-test and hierarchical multiple linear regression showed that students with lower GPAs (in this study 1.67-3.66) tend to cheat more often than students with GPAs of no less than 3.67. The same results were described in similar studies, such as those by McCabe and Trevino (1997), Graham et al. (1994), and Yardley et al. (2009). Moreover, the regression analysis showed that in combination with gender, GPA also has a significant impact on plagiarism frequency. To explain the tendency in more detail, the results can be referred to the same study that was illustrated above to explain the gender and GPA combination factor – Bisping et al. (2008) stressed that the cost and benefit of cheating is a deciding circumstance for students with different GPAs. If a student risks losing an already high grade, he or she is less likely to commit academic misconduct.

Additionally, the impact of contextual factors can be used to explain the findings. The T-test conducted to determine if there are differences in contextual factors' impact on the students with different GPAs showed two patterns for students with lower grades. Firstly, a large number of assignments make students with lower GPAs cheat more frequently. Secondly, distance learning that was implemented due to the COVID-19 also

may cause students with GPAs ranging from 1.67 to 3.66 to cheat more frequently. It can be argued that these students are often overwhelmed with tasks and unusual learning environments and, thus, may be more likely to start cheating. The significant effect of distance learning will be discussed in more detail in other sections.

However, this does not mean that students with high academic performance never cheat. The analyses have shown that the lack of language skills is the key factor that might make high achievers cheat. The follow-up question about which languages cause cheating showed that more than half of the respondents are more inclined to cheat if they face challenges with the English language. Similarly, the study on the connection of academic achievement and cheating conducted by Finn and Frone (2004) showed that students with high GPAs are not exempt from cheating, they just have different circumstances that facilitate the intention. In their opinion, most factors that make students cheat are related to either one or both of two characteristics: fear of failure and vague perception of school norms.

In further analyses, GPA once again was identified as an incremental factor that predicts cheating. Hierarchical multiple linear regression analysis demonstrated the significance of Model 1, which consisted of gender and GPA as variables. After a more detailed examination, it was found that GPA is the unique predictor of academic cheating in Model 1. In turn, gender alone did not predict academic cheating frequency; however, it showed a significant effect in combination with GPA.

The literature explains the effect of GPA on cheating in various ways. Hadjar (2019) argues that for most students, cheating is “a shortcut to attain achievement in the study” (p. 2). Students’ desire to compete with peers has also been highlighted as a primary motive for cheating in one nationwide study (McCabe, 2001). Additionally, Cizek (1999)

explains that fear of failure might occur from being overwhelmed with the number of assignments which aligns with the findings of this study. The belief that it is not possible to complete all the assignments and get a high grade on their own can be called a common starting mechanism for further cheating behavior.

Study Year

In this study, the frequency of academic misconduct did not vary significantly between study cycles; instead, the circumstances and impact of some factors on the intentions to commit academic misconduct were significantly different. In contrast, the literature on the topic of the relationship between the study cycle and academic dishonesty (Hosny & Fatima, 2014; Kisamore et al., 2007; Stoesz & Los, 2019) emphasizes that young age is often associated with higher frequencies of plagiarism or cheating. Several studies also show that the intention to plagiarize declines with age (Cochran et al., 1998; Diekhoff et al., 1996; Genereux & McLeod; 1995).

According to the data analysis, 2nd-year undergraduate students, which are the youngest participants of the study, were comparatively the most vulnerable in terms of the effects of several contextual factors on their academic misconduct intentions compared to students in different study cycles. In particular, 2nd-year undergraduate students pointed out that complex assignments, insufficient language skills, and distance learning introduced because of the quarantine significantly increase their intention to commit academic misconduct. Wilson and Herrnstein (1985) explain that ageing usually influences any deviant behavior to decrease, which can justify why some contextual predictors have a greater effect on younger participants in the current study. Similarly, Vowell and Chen (2004) explain that maturity prevents students from cheating.

Moreover, a significant difference between the influence of distance learning on the 2nd-year undergraduate students and master's students may have an alternative explanation. Since the former group spent the second half of their first university online, it can be argued that difficulties with adaptation to higher education and consequent insufficient knowledge in the subjects can make sophomore students cheat more often.

Language of Instruction

The last demographic factor considered in this study was the language of instruction. It is important to mention that while there was no statistical difference in academic misconduct frequency between different language groups, the regression analysis showed that lack of language skills is the prominent predictor of academic cheating. Moreover, there is a difference between the perceptions of various contextual factors of students with different languages of instruction.

The findings of this study demonstrated that students studying in the Kazakh language find it comparatively difficult to avoid academic misconduct when there is a large number of assignments, unlimited Internet access, and challenges with the language of the subject. While the first two factors can be interpreted from both individual and cultural perspectives, the last aspect raises questions for further investigation. It is also important to obtain a more detailed report on cheating and plagiarism of students to identify which subject students cheat the most. Without this information, this finding can be interpreted in various ways. For instance, it can be argued that students with Kazakh as the language of instruction face challenges while completing assignments for foreign language subjects such as English, Russian, or other languages, and hence, cheat more. Considering that students with Kazakh as the language of instruction find lack of language skills to be a more tempting factor compared to students studying in English, who in turn do not find this factor as important because, presumably, they spend more time in an

English-speaking environment, shows that this interpretation is correct. Eccles et al. (2006) confirm these findings by pointing out that insufficient knowledge in the English language for ESL (English as a Second Language) students increased academic misconduct frequency. Moreover, the lack of materials and dictionaries available in the Kazakh language to study English cause even more difficulties for Kazakh-speaking students (Zhetpisbayeva & Shelestova, 2015). It is easier for them to plagiarize the prepared material from Internet resources since learning conditions are not always sufficient.

An alternative interpretation of these findings could be that students studying in the Kazakh groups cheat because of lack of skills in this language. It is well-known that Kazakhstan is a young country that was separated from the Soviet Union in 1991, and hence, has strong bilingual tendencies in society. A study conducted by Arenov and Kalmykov (1997) demonstrated that, while slightly over 32% of the public spoke in Kazakh at home, another 50% preferred to use the Russian language. Therefore, Kazakhstani children born in the 1990s, despite being bilingual, might be more inclined to speak or think in Russian and, therefore, experience difficulties studying in Kazakh. These difficulties can result in higher cheating intentions. Undoubtedly, to prove this interpretation right or wrong, it is necessary to conduct a more detailed study focusing on the multilingual aspect of university students. However, it is evident from the current study that the language factor is an important driving force for students who commit academic misconduct. As a bilingual country with plans to fully implement a trilingual education policy, the academic misconduct issue risks becoming even more prominent if measures are not taken.

The Effect of the Contextual Factors on Academic Dishonesty

After conducting the descriptive analysis, three aspects which are assignment difficulty, procrastination, and distance learning, were identified as influential predictors of

academic misconduct. Prior studies present strong evidence that supports these findings. Additional individual characteristics that the participants provided in the text boxes for open comments are also discussed. Recommendations that could help to eliminate the negative effect of these predictors are provided in the paragraphs below.

Factors Associated with Faculty Methodology and the Nature of the Assignments

According to the descriptive statistics, a lack of knowledge on how to complete particular assignments facilitates academic misconduct, with the mean score ranking the first place. Too many assignments and assignments that are too complicated were also identified as very important factors with their mean score ranking in the fourth and the fifth places, with the former also being a significant prominent predictor in regression analysis. Moreover, four out of nine text responses from students mention that the number and difficulty of assignments may cause cheating. These findings show how important methodology adjustments are in preventing the academic misconduct of students. Considering that the T-test showed that faculty do not consider this aspect as equally important demonstrates the need to raise awareness about the impact of the nature of assignments on academic dishonesty.

Additionally, an anonymous comment reported that not only the assignment difficulty but also insufficient knowledge on how to cite properly facilitated the cheating in that participant's diploma work by fabricating surnames in their bibliography. There are similarities between this statement and the findings of Franklyn-Stokes and Newstead (1995), who found that fabricating references is perceived by students as the least frequent serious academic misconduct behavior that they conduct. Therefore, the issue of low awareness of academic integrity rules is another aspect that deserves attention. Although the Kazakhstani research has not yet covered this problem, one Australian study with a sample of approximately 15 thousand students from six different universities illustrated

that students feel insufficiently informed on what constitutes academic integrity and have a vague picture of ways in which to avoid academic integrity breach (Bretag et al., 2014). Burrus et al. (2007) found that students self-report more on cheating and plagiarism if they are given clear definitions of the terms; otherwise, they do not always understand what academic misconduct means.

It is, therefore, likely that the necessity to spread awareness among faculty and students exists. Faculty might try to consider adjusting their assignments' content to decrease the issue of academic misconduct; in turn, university administration could provide more conditions for both faculty and students to understand more about academic integrity nuances and avoid a further increase in academic dishonesty behavior. However, it is important to consider alternative views. Beasley (2014), who conducted a survey with open-ended questions for students, stressed that 36% of them did not take responsibility for their academic misconduct, preferring to blame faculty and administration for not being able to provide conditions for academic integrity. Although this point of view should be taken into account, and it is important to encourage students' self-discipline, the vast majority of the students in that study took responsibility for committing academic misconduct. Hence, all parties can attempt to contribute to solving this issue.

Individual Factors Affecting Academic Misconduct Intentions

Procrastination ranked in the second place among all contextual factors presented in the questionnaire. This finding can be reasonably explained since, as it was found in the study of Clariana et al. (2012), procrastination is highly associated with low academic performance and cheating. Therefore, the positive correlation between low GPA and high cheating frequency that was demonstrated in the above sections can have a more detailed and explanatory step-by-step scenario: students with poor time management, who complete tasks at the last minute, often have low academic performance, which in turn, due to a

perceived need to compete with peers and obtain higher grades, can result in a higher frequency of academic cheating.

One of the students indicated that secondary school is where academic dishonesty behavior usually starts to develop. The authors also argue that procrastination and cheating are two habits that are mostly acquired by students in secondary schools (Clariana et al., 2012). This also accords with earlier observations in the faculty's additional comments, where two such participants stressed that the forgiving attitude of lecturers encourages students to continue cheating from the early stages of their studies. Moreover, another factor that was found significant in the regression model is the belief that lecturers cannot detect the cheated work. Insufficient attention of lecturers to academic misconduct, therefore, can also be perceived as a deciding factor. Although these results should be interpreted with caution due to the small number of participants who used the text box to leave their comments, it is important to note that academic integrity education might be more effective if emphasized more, especially from the school years.

The Distance Learning Associated with the Covid-19 Outbreak

2020 was an uncertain year for many aspects of people's lives, including education, due to the outbreak of Covid-19. The descriptive statistics showed that the emergency move to online education significantly increased the intention of students to plagiarize and cheat, with the mean score ranking in the third place. According to Bilen and Matros (2021), a number of universities worldwide reported an increased rate of cheating in Spring 2020. Moreover, the pandemic made it difficult to control academic dishonesty behavior: online tests present various possibilities to cheat. According to Bilen and Matros (2021), "Students have much to gain while the probability of being caught with definitive evidence is close to zero" (p. 199). This statement was supported by additional comments from two anonymous students, stating that online tests were the most tempting environment for

cheating. One student reported that they started to cheat more frequently with the implementation of distance learning.

Other analyses that were conducted to examine the effect of remote learning on students' academic dishonesty behavior showed that male students, 2nd-year undergraduate students, and students with GPAs from C- to B+ are the demographic groups that consider distance learning as a more important factor compared to the participants from other demographic groups.

Bilen and Matros (2021) suggest that students should be requested to record themselves during all exams to be able to monitor their actions. Undoubtedly, the issue with this method is the unwillingness of students to do this because of the issue of privacy violation. Another method suggested is conducting exams in proctoring centers. One of the comments left by an anonymous student emphasizes that conducting online tests is a risky option that should not be used in times of forced remote learning.

General Findings on the Frequency of Academic Misconduct

The descriptive statistics demonstrated that students cheat 10% more frequently than they plagiarize. In particular, approximately 54% of students plagiarize, and 64% of them cheat at one point in their university studies. These results differ from Franklyn-Stokes and Newstead's (1995) findings, which indicate that plagiarism is perceived as a less serious behavior and occurs more frequently. These differences in findings can be explained in part by the students' insufficient knowledge of what constitutes plagiarism. As it was mentioned above, if the terms were clearly defined, students might have reported a higher rate of plagiarism or cheating (Burrus et al., 2007). Another possible explanation is the raised awareness and more serious perception of plagiarism behavior due to the news about introducing the "Turnitin" platform to Kazakhstani higher education institutions

(Sputnik Kazakhstan, 2019). Either way, the frequency rates of both misconduct behaviors are concerning, and further implications might be needed to solve this educational problem.

The questions about the frequency of academic misconduct were limited due to the ethical implications associated with the sensitivity of the topic. Therefore, the absence of details presents a limitation to this research. However, an anonymous comment by one student revealed that contract cheating, or in other words buying the work instead of plagiarizing it, is a more common type of misconduct among students today. These results reflect those of de Maio et al. (2020) and Bretag et al. (2019), who found that contract cheating is one of the cheating methods that is becoming widespread. The findings raise important questions, since Singh and Remenyi (2016) claim that this type of academic misconduct is especially hard to detect and only possible "if the evaluator is personally acquainted with the student's level of subject knowledge and his or her natural writing style" (p. 3).

Contract cheating presents different possibilities for dishonest students, such as paying third parties to provide assistance with exams, complete assignments, and sit exams. (Bretag et al., 2019). It is worth mentioning that the last option was identified as the least common among students; however, it is now significantly easier to commit this type of misconduct with the implementation of distance learning. As one of the anonymous comments mentioned, online exams and tests provide the most convenient settings in which to cheat. This is a concerning finding that presents new challenges to academic integrity policymakers.

Conclusion

Overall, this chapter aimed to explain the causality behind the results obtained during the data analysis. Apart from gender and GPA being the most significant predictors of academic misconduct, other contextual factors such as procrastination, assignments' content, and distance learning were connected and explained in detail. In general, it can be assumed that assignment difficulty influences stress and procrastination rates, which in turn leads to higher cheating frequency. It is worth mentioning that the distance learning associated with the global pandemic might now serve as a catalyst that increases the effect of all the factors raising intentions to cheat or plagiarize. Moreover, contract cheating was indicated as an increasing problem that can demand more detailed research in the field. Further studies should be conducted to obtain a clear image of academic misconduct behavior in Kazakhstan.

Several suggestions can be made to decrease the academic misconduct rate. Firstly, it is important to balance the number and difficulty of assignments and provide the necessary support for students who fail to complete them on time. If learners receive effective support with tasks and experience less stress, it is less likely that they will have the urge to cheat. Secondly, it was outlined in this study that procrastination is a widespread problem that requires attention. Thus, time management courses might be an effective measure for the university administration to implement. More implications and recommendations will be suggested in the next chapter.

Conclusion

In conclusion, the study investigated the impact of demographic and contextual factors on the frequency of academic integrity in Kazakhstan. The purpose of this research has been achieved through the data analysis of the students and lecturers' responses to the questionnaire. The findings reflect that, in general, gender and GPA mutually affect each other, serving as the main demographic factors that have an impact on academic misconduct behavior. While it has been found that males plagiarize more frequently, it has also been identified that females with low GPA engage in cheating very often.

The unique context of the study was provided by the COVID-19 outbreak that forced education worldwide to go online. As it was found through descriptive and thematic analyses, these new conditions indeed affect students' academic misconduct behavior, making cheating and plagiarism easier to commit.

Apart from highlighting a large number of assignments and the belief that it is possible that academic misconduct will remain unnoticed as important factors, the challenges with language skills was another unique aspect that facilitated academic misconduct. As a bilingual country with a strong inclination toward trilingual education, this factor cannot be neglected by education professionals in Kazakhstan.

Based on the findings of the current study, it would be beneficial to suggest implications for stakeholders. Firstly, one of the contextual factors such as a large number of the assignments should be taken into account by faculty members, university administration, and welfare support staff. The stress caused by an inability to complete multiple tasks is an important factor that faculty members can control, and they could adjust their syllabuses accordingly. Higher education administration might be encouraged to provide time management and multitasking training to ease the burden of struggling

students. These recommendations can also be supported by university psychologists who can provide students with psychological support that is aimed to relieve stress and anxiety levels. Secondly, the challenges faced by students with language skills should be taken into account when completing assignments. Administration can benefit from taking responsibility for controlling the dissemination of students with different language skills in respective study groups. In addition, policymakers can ensure that language policies are implemented gradually with no negative effects on students' performance and stress levels. Thirdly, the global pandemic that educational institutions had to deal with by implementing distance learning is shown to have had consequences in relation to academic misconduct frequency rates and academic integrity values. Although more research should be conducted to make definite conclusions, it might be suggested that students find it easier to cheat while learning online. This matter is not unique to the Kazakhstani context; hence, policymakers and educational professionals worldwide can research possible methods to decrease the chances for students to commit academic misconduct together. As online tests are "dangerous" tools that can cause more cheating, it might be beneficial to substitute some of these with written assignments. Providing universities with plagiarism detection tools such as "Turnitin" is also important.

Nevertheless, the implications above do not undermine the fact that students are the main stakeholders that should be interested in decreasing academic misconduct rates and taking responsibility for their actions. While the moral maturity of learners is a significant factor in preventing academic misconduct, faculty and university administration can facilitate improvement by implementing more introductory courses and workshops about the importance of academic integrity.

The study has several limitations that should be taken into account. Firstly, it is important to note that the findings cannot be generalized due to the fact that only two

research sites were included in the sampling. Secondly, while marginal error is within the acceptable range for social studies (6.62%), the students were not categorized in relation to study programs in order to ensure anonymity. Thirdly, since the topic of the study is sensitive, it cannot be guaranteed that the answers were completely honest. It is argued that research culture is comparatively underdeveloped in the majority of the society in Central Asia (Jonbekova, 2020); hence, participants might not trust the researcher enough to provide honest feedback even in anonymous questionnaires. Finally, it is also likely that responses were highly subjective due to the different experiences of faculty and students.

Recommendations for further research can be proposed based on the findings and challenges of the current study. One of the main suggestions might be the need to conduct qualitative or mixed research on the matter of academic integrity. Interviews, although potentially difficult to conduct due to ethical considerations, might yield more detailed findings with issues that are unique to Kazakhstan. Moreover, since academic misconduct has not yet been extensively researched in the local context, it might be beneficial to gather detailed qualitative feedback before attempting to perform statistical analysis. The concepts of other countries might not be appropriate in this case. Another recommendation would be to expand the study on the regional and national levels, inviting more research sites and recruiting more participants. This measure would increase the representativeness of the sample and might produce results that can be applied to the broader context.

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