Original Research Paper

Factors Influencing Students' Cheating Behaviours: an Empirical Evidence from China

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Abstract: There is an ample evidence to show how students' cheating behaviours formed in Western countries, comparatively, few studies focused on Chinese students. The purpose of this study is to measure the influence of attitude, subjective norm (SN), perceived behavioural control (PBC), and additional variable which is moral obligation on intention among Chinese students who were studying in China and the U.K. A total of 540 useable questionnaires were collected based on web-based method for further hypotheses testing. The results show that attitude, SN, PBC and moral obligation positively influence intention to cheat respectively. The SN displays significant positive influence on attitude and moral obligation. In addition, statistically significant differences in SN, PBC and intention were obtained between gender, majors and educational level and studying places which show that males had more intention than females on cheating. Major of management students had more PBC than engineering and economics students, fresh and sophomore had more PBC than junior students, and students who were studying in U.K are more influenced by SN compared to who were studying in China. This study enriches the existing knowledge on how Chinese students' attitude, SN, PBC and moral obligation on cheating intention based on divergent demographic characteristics.

Keywords: Chinese Students' Cheating Behaviours, Moral Obligation, Theory of Planed Behaviour.



1. Introduction

Academic dishonesty among university students includes a wide range of unacceptable behaviours that violate the principle of integrity [1]. According to Wang [2], academic dishonesty refers to students who want to acquire a higher score at the expense of justice and fairness utilising cheating or plagiarism (e.g., hire ghostwriters, copying internet resources, collaboration). The concept of cheating, being a kind of academic fraud [3] received much attention from educators in the past fifteen years [4]. Because studies indicated that a majority of students cheat [5], for instance, about 65% - 87% of American college students admitted they have cheated during their college studies over the past six decades [6]. Also, many students do not have knowledge of the criteria that are institutionally applicable for determining cheating [4]. Those cheating behaviours result in students' future deviant behaviours (e.g., shoplifting, vandalism, assault, etc.) [5].

In order to address cheating, certain studies have investigated a wide range of individuals and contextual factors related to academic dishonesty. For example, scholars have found that gender [7], major [8], age [9] and other stable personality factors [10]. However, those findings are often weak and inconsistent [11]. Contextual factors include value orientation [1], peer influence [6], educational background [12] and many more. Nevertheless, few studies have proposed conceptual models to explain how some of these variables work together to influence cheating [5]. Moreover, although many studies have been conducted in the West, few have focused on Asia, especially the China [2]. It is important to conduct these investigations for several reasons, first, China has become major players in the world economy [11], second, a large proportion of Chinese students are studying in the West [13]; and third, Chinese academic dishonesty has threaten other countries' standards of education [14]. Therefore, it is necessary to understand what motivates Chinese students to cheat.

The theory of planned behaviour (TPB) is one of the most popular theories for predicting students' cheating [15] and many studies confirmed its validity and usefulness [16.17], indicated that the moral obligation is included in the TPB is showing some promising predictive power for measuring the intention toward cheating, recent scholars argued that one's attitude is influenced by the prevailing social environment has been almost ignored in literature [4]. The potential links between the norm-related relationship factors and cheating is not well understood [11]. In addition, [5] demonstrated that many scholars do propose theoretical models have utilised smaller samples. Hence, the purpose of this study is to strengthen existing knowledge on how attitude, subjective norm (SN), perceived behavioural control (PBC) and moral obligation influence Chinese students' intentions toward cheat in mainland China and the U.K.

2. Literature Review

2.1. Theory of Planned Behaviour

The TPB is an extension model of theory of reasoned action (TRA) as it overcomes the limitations of TRA in ignoring non-volitional factors can influence one's behaviour by the inclusion of PBC as an additional predictor into the TPB model [18] Accordingly, intention is the key and best predictor of actual behaviour which influenced by attitude, SN and PBC. Generally, the more favourable attitude and SN, and the high confidence the perceived control, lead to higher should be the individual's intention to engage in the behaviour in question [19], stated that TRA and TPB are among the most popular behavioural theories to assess one's intention and actual behaviour in literature, such as leisure [20], tourism, consumer behaviour and education [3], Besides, many studies indicated that TPB allows researchers to explore the impact of other contextual factors which might help to explain behaviour which in line with revealed that there is clearly much room for improvement to TPB.

2.2. Attitude

Attitude refers to an individual's held beliefs concerning a specific behaviour and its implications [16], It can be resulted from an individual's past experience and from the overall evaluation of that behaviour which can be essentially pleasant or unpleasant [20]. In contrast with attitude towards a specific behaviour reflects an individual's preference or state of mind that remains unchanged in relation to that behaviour in marketing literature. Although majority of previous studies revealed that positive appraisals of cheating behaviour predicted dishonest behaviour the role of attitude toward academic dishonesty but still engage in cheating or other dishonest behaviours [21]. That a large proportion of students perceived cheating as being socially acceptable although they feared the consequences of being caught, because they have enough justification to support unethical practices (e.g., pressure to obtain good grades, a lecturer who deserved it, difficult material and resentment

towards a system that drove them to it, etc.). Those realties therefore provide some level of support for attitude influencing their cheating, which corresponds to Koc and Memduhoglu [3] reported that attitude significantly predicted cheating behaviour and Carpenter and Reimers [22] also found similar results.

Therefore, the following hypothesis is proposed: *H1: Attitude significantly influences intention towards cheating.*

2.3. Subjective Norm

Cheating can be viewed as a social phenomenon because one's cheating behaviour is influenced by the prevailing social environment [2]. Ajzen [23] defined SN as the social driving force of perceived opinions of significant others that decides whether to perform a given behaviour. Individuals who believe that their significant others (e.g., family members, close-friends) support their intention to perform a specific behaviour will be more likely to do that. Accordingly, SN focuses on the expectations of a person, institutions or organisations deemed important by the individual performing a given behaviour [5], thus, he or she feels a certain level of social pressure to conduct such a behaviour [23]. Certain studies showed that students tended to cheat more when cheating was common among their significant others or they believed that their significant others were cheating in the learning environment [24]. The SN played the most important role in determining one's cheating. However, the potential negative influence of SN on cheating also needs to be considered due to some empirical studies revealed that a negative relationship was found [2].

Based on above arguments, the following hypothesis is proposed:

H2: SN significantly influences intention towards cheating.

Several studies have suggested that SN positively influenced individual's attitude and personal norm (PN) among the literature [5]. These relationships also can be detected in educational literature because one of the primary goals of educational system is to help students to develop appropriate social behaviour [11]. As such, students are encouraged to cultivate cooperative and prosocial attitudes and behaviours as well as to learn social skills so as to maintain harmonious relationships with others indicated that one's overall evaluation of cheating can be influenced by two aspects: 1) active cheating is self-interest cheating in that it involves a students taking advantage of the ties of friendship with fellow students [25]; and 2) passive cheating is social-interest cheating that is motivated by the desire to assist a friend. In other words, students in close relationships with others would abstain from cheating because they do not want to disappoint people with whom they feel close [21]. Thus, cheating attitude among the significant others consider to be very influential factor for the adoption of cheating behaviour. Moreover, strong SN would develop compliant behaviour with others and lead to social success as friend-based cheating behaviour will increase a higher loyalty. Specifically, the quality of SN could constitute a significant indicator of academic adjustment or misbehaviour of students [16]. This means that social pressure to help friends cheat might overcome the concern of violating regulative rules against cheating [11]. Thus, the loyalty to friendship is an influential neutralization technique that is employed by cheaters to justify their cheating and to explain away the self-obligation norm and guilt of cheating. In certain circumstances, for some students, cheating with friends pass an examination is perceived to be pleasant or make themselves feel good

Therefore, students were more positive attitudes and personal moral obligation to engage in cheating in instances where they perceived that SN would endorse such practices, and the following hypotheses are proposed:

H3: SN significantly influences attitude towards cheating. *H4: SN* significantly influences moral obligation towards cheating.

2.4. Moral Obligation

Moral obligation reflects one's personal feelings regarding the duty to engage [7] or to refuse to engage in a specific behaviour (e.g., guilt, reluctance, or the sense that the behaviour is incompatible with an individual's value and principles) [11]. Student perceived cheating personal moral obligation is another important factor in influencing their cheating behaviours [11]. However, the concept of moral obligation has been almost ignored in the educational literature. Beck and Ajzen [15] included moral obligation as additional predictor into TPB model for measuring students' cheating and found that it enhanced model's predictive capacity. Recently, more scholars have investigated the influence

of moral obligation on cheating, for example, Alleyne and Phillips [26] found that moral obligation significantly increased the TPB's predictive power for cheating while [11] reported similar results.

Therefore, the following hypothesis is proposed:

H5: Moral obligation significantly influences intention towards cheating.

2.5. Perceived Behavioural Control

PBC refers to an individual's perception in terms of how easy or difficult it may be perform a given behaviour [23]. According to Alleyne and Phillips [26], an individual's perceived ease or challenge to perform the behaviour can be formed from past experience and anticipated impediments. If one thinks in the direction of cheating is easy, it is to assume that cheating is a behaviour that is easy in his or her mind [3]. In contrast, when individuals perceive the cheating as challenging, or when they encounter obstacles to its enactment, the low perceived control of cheating may become a significant factor dissuading them from undertaking that behaviour, even if their attitudes toward cheating and SN are strongly supportive of it [11]. Certain studies showed that how PBC significantly influenced one's cheating represented a more salient factor accounting for behavioural action among university students while Koc and Memduhoglu [3] also reported similar results. However, few studies have shown that the role of PBC in determining cheating are conflict, for example, Harding et al. [27] found PBC insignificantly influenced one's cheating.

Therefore, the following hypothesis is proposed: *H6: PBC significantly influences intention towards cheating.*

3. Methodology

3.1. Operationalisation

A self-administrated questionnaire was used for this study and all measurement scales and items were adapted from available literature. The first section includes exogenous variables: SN (three items), attitude (four items), moral obligation (three items) and PBC (three items) were adapted from Alleyne and Phillips [26]. The second section includes exogenous variable which three items used to measure intention were adapted from Chudzicka-Czupała et al. [16]. The last section includes relevant demographic information: gender, major, age and educational level. All questionnaire items utilised amultiple scale types such as Likert (seven-point Likert scale), bipolar, and semantic differential scale. In addition, all questionnaire items were translated into Chinese through the back-translation method to assist respondents in understanding the research contents.

3.2. Data Collection

A convenience and purposive sampling technique were used to acquire samples in this study. A total of 503 questionnaires were distributed to students who are studying in three undergraduate institutions in Xuzhou City, Jiangsu Province by cooperated lecturers during class time.



Figure 1. Theoretical Research Model

According to L. Wang et al. [2], a large proportion of students are studying in higher-educational institutions in Xuzhou compared to other regions. On the other hand, 303 questionnaires were distributed to students who are studying in the U.K, these questionnaires were introduced in international student forums and WeChat groups. The potential respondents browsed the largest free online survey questionnaire collection website (https://www.wenjuan.com) to complete the questionnaire using a scanned OR code to ensure anonymity and reduce possible pressure from researchers. A monetary incentive of 3 RMB/person was offered to respondents to increase the response rate. A pilot test was conducted from 15 November to 24 November with 30 respondents to assume the validity and reduce any problems that may affect the quality of obtained data. Then, the formal questionnaires were distributed to potential respondents from 28 November to 13 December. Finally, a total of 540 usable questionnaires were completed and returned which excessed Cochran [28] suggested that for target population is infinite, a minimum sample size of 384 is recommended while Kline [29] demonstrated that a minimum of 200 sample size and between 10 and 20 cases per parameter is required for further statistical analysis.

4. Finding and Discussion

4.1. Descriptive Analysis

Of 540 respondents, 41.5% were male and 58.5% were female. 97.4% of respondents were studying in bachelor's degree in their first year (35.2%), and 33.3% were aged in 20 years. Majority of respondents were studying in Management-related majors (e.g., business administration, hospitality and tourism management, E-business management, etc.) and 65.4% of respondents are studying in China.

Table 1 elicits the demographic characteristics of samples (See Table 1). Furthermore, KMO and Bartlett's test showed that Kaiser-Meyer-Olkin Measure of Samling Adequacy value was 0.888, p < 0.05, indicating sampling adequacy. The results showed that skewness ranged from -1.599 to -0.764, and kurtosis ranged from -0.844 to 2.905. According to Byrne (2016), to observe distribution was normality if the skewness and kurtosis with a measure value ranging from -2 to +2 and -7 to +7 respectively, thus, preserving data normality.

4.2 Confirmatory Factor Analysis

Makriidis et al. [4], stated that the standard factor loadings below 0.5 should be rejected. All factor loadings ranged from 0.699 to 0.863. The model fit summary revealed that CMIN = 183.542, DF = 94, CMIN/DF = 1.953 < 3, p < 0.05, GFI = 0.96 > 0.9, AFGI = 0.942 > 0.8, PGFI = 0.663 > 0.5, SRMR = 0.045 < 0.08, NFI = 0.959 > 0.9, RFI = 0.948 > 0.9, IFI = 0.98 > 0.9, TLI = 0.974 > 0.9, CFI = 0.98 > 0.9, PNFI = 0.752 > 0.5, PCFI = 0.767 > 0.5, RMSEA = 0.042 < 0.08, indicating a good model fit. Furthermore, the results showed that composite reliability (CR) value for each variable was higher than the threshold of 0.7 and average variance extracted (AVE) value for each variable was higher than the threshold of 0.5, indicating convergent validity was established (See Table 2). Moreover, the results showed that both the maximum shared squared variance (MSV) and the average shared squared variance (ASV) were less than the AVE, and no correlation value between each variable exceeded 0.9, meaning that the discriminate validity was established (See Table 3).

Items	Characteristics	Frequency	Percentage (%)
Gender	Male	224	41.5
	Female	316	58.5
Age	Below 18	10	1.9
	18	99	18.3
	19	101	18.7
	20	180	33.3
	21	102	18.9
	22	29	5.4
	23	12	2.2
	24	3	0.6
	Above 24	4	0.7
Major	Science	28	5.2
-	Engineering	72	13.3

Table 1.	. Demographic	Information	(N =	540)
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	Management	216	40
	Economics	144	26.7
	Other	80	14.8
Education background	Diploma	3	0.6
-	Bachelor	526	97.4
	Master and above	11	2
Educational level	Fresh	190	35.2
	Sophomore	131	24.3
	Junior	182	33.7
	Senior	32	5.9
	Other	5	0.9
Study place	U.K.	187	34.6
_	Local	353	65.4

Table 2. Convergent Validity

Variable	Item	Factor	CR	AVE	S.D.
(Cronbach's		loading			
Alpha)					
PBC ($\alpha =$	1. For me to cheat on an exam it is difficult – easy	0.724	0.778	0.539	1.282
0.776)	2. If I want to, I can cheat on an exam false – true	0.777			1.189
	3. Even if I had a good reason, I could not bring myself	0.699			1.245
	to cheat on an exam (likely – unlikely)				
SN ($\alpha =$	1. If I cheated on a test or exam, most people who are	0.807	0.860	0.673	1.349
0.859)	important to me would disapprove – not care				
	2. No one who is important to me think it is ok to cheat	0.838			1.367
	on an exam (disagree – agree)				
	3. Most people who are important to me will look down	0.815			1.262
	on me if I cheat on an exam (likely – unlikely)				
Attitude ($\alpha =$	1. I believe cheating is bad - good	0.828	0.905	0.705	0.988
0.905)	2. I believe cheating is unpleasant – pleasant	0.863			1.016
	3. I believe cheating is foolish – wise	0.829			0.950
	4. I believe cheating is useless – useful	0.839			1.024
Moral	1. I would not feel guilty if I cheated on an exam (false	0.780	0.808	0.584	1.229
obligation (a	- true)	0.734			1.175
= 0.806)	2. Cheating on an exam goes against my principles				
	(likely – unlikely)	0.778			1.396
	3. It would be morally wrong for me to cheat on an				
	exam (likely – unlikely)				
Intention ($\alpha =$	1. If I had the opportunity, I would cheat on an exam	0.794	0.844	0.643	1.083
0.842)	(unlikely – likely)	0.832			1.157
	2. I would never cheat on an exam (true – false)				
	3. I may cheat on an exam in the future (false – true)	0.778			1.167

Table 3. Discriminate Validity

Variable	AVE	MSV	ASV	1	2	3	4	5
1. PBC	0.539	0.232	0.166	0.734				
2. SN	0.673	0.426	0.223	0.403	0.820			
3. Attitude	0.705	0.166	0.115	0.248	0.269	0.840		
4. Moral	0.584	0.376	0.251	0.482	0.480	0.407	0.764	
obligation								
5. Intention	0.643	0.426	0.293	0.455	0.653	0.402	0.613	0.802

4.3. Structural Model Estimation

Structural equation modelling was performed for hypotheses testing. The model fit showed that CMIN = 335.247, DF = 98, CMIN/DF = 3.421 < 5, p < 0.05, GFI = 0.93 > 0.9, AFGI = 0.903 > 0.8, PGFI =

0.67 > 0.5, SRMR = 0.194, NFI = 0.926 > 0.9, RFI = 0.909 > 0.9, IFI = 0.946 > 0.9, TLI = 0.934 > 0.9, CFI = 0.946 > 0.9, PNFI = 0.756 > 0.5, PCFI = 0.773 > 0.5, RMSEA = 0.067 < 0.08, indicating a good model fit and the outcomes are tabulated in Table 4 and Figure 2.

Table 4. Research Outcomes

Items	Parameter	Estimate	р	C.R.	Decision
H1	Attitude> intention	0.156	***	3.774	Supported
H2	Subjective norm> intention	0.449	***	8.281	Supported
H3	Subjective norm> attitude	0.291	***	5.983	Supported
H4	Subjective norm> moral obligation	0.494	***	9.408	Supported
H5	Moral obligation> intention	0.303	***	5.836	Supported
H6	Perceived behavioural control>	0.148	***	3.476	Supported
	intention				

Note: *** denotes p < 0.001.



Figure 2. Research Outcomes

4.4. Comparison Test

Certain empirical evidences supported that students who were more incline to cheat stayed in highly collectivistic societies (i.e., Eastern countries) vs. individualistic societies (i.e., Western countries) [1] [7]. Previous studies also showed that females reported less cheating than males, freshmen cheated more than upper year students [11], and business students revealed more cheating than non-business students [15]. Therefore, an independent sample t-test and ANOVA were conducted to test the significance of various gender, age, major, education background, educational level and study place in different study constructs.

The results showed that cheat intention for male and female is significantly different (t444.002 = 1.161, p < 0.05). The average cheat intention for male was 0.102 higher than the average intention for female. The results revealed that SN for studying in U.K and studying in China is significantly different (t411.351 = 2.047, p < 0.05). The average SN for studying in U.K was 0.21 higher than the average SN for studying in China. Moreover, A Scheffe post hoc test showed that the major group of Management, regarding PBC, was statistically higher than the major group of Engineering and Economics respectively, p < 0.05 values. The mean difference (I-J) between the major group of Management and Engineering was 0.314 whereas the mean difference (I-J) between the major group of PBC compared with Engineering and Economics students. In addition, the Scheffe post hoc test revealed that the educational level of junior, regarding PBC, was statistically lower than the educational level of fresh and sophomore, respectively, p < 0.05 values. The mean difference (I-J) between the mean difference (I-J) between the major group of PBC compared with Engineering and Economics students. In addition, the Scheffe post hoc test revealed that the educational level of fresh and junior was 0.352 and the mean difference (I-J) between Sophomore and junior was 0.408, indicating both fresh and sophomore students had a higher level of PBC compared with junior students.

4.5. Discussion

Focusing on Chinese students' cheating behaviours, the extended model that incorporated moral obligation, attitude, SN, PBC and intention was empirically tested. The results showed that attitude positively influences intention toward cheating ($\beta = 0.156$, p < 0.05) which in line with past studies showed that attitude positively predicted one's cheating behaviours [17]. Chinese students who perceive cheating is useful and wise behaviour are more willing to engage in cheating behaviour. Thus, H1 was supported. This study's results showed that SN positively influences attitude ($\beta = 0.291$, p < 0.05), moral obligation ($\beta = 0.494$, p < 0.05) and intention ($\beta = 0.449$, p < 0.05) respectively. According to Zhang and Yin [1], collectivistic value plays an essential role in determining one's cheating behaviour in China, in this circumstance, individuals who believe that their significant referents (e.g., close-friends, colleagues, classmates) support their intention to perform a given behaviour will be more likely to do that. Current study revealed that individuals' significant others who think cheating is not a serious issue and not care about their cheating behaviour leading to one's positive attitude, less personal feeling of guilty as well as higher intention to engage cheating behaviour in future. Thus, H2, H3 and H4 were supported.

This study showed that moral obligation positively influences intention toward cheating ($\beta = 0.303$, p < 0.05). This corresponds to Chudzicka-Czupała et al. [16] argued that moral obligation should be incorporated into TPB for predicting students' cheating behaviours. Our results showed that students who are less guilty on cheating, perceive cheating is not against their personal principles, and less moral wrong feelings result in their higher possibility to perform cheating. Thus, H5 was supported. McCabe et al. [6] demonstrated that PBC plays an important role in determining students' cheating behaviours. Our results showed that PBC positively influences intention ($\beta = 0.148$, p < 0.05). This means that students who have confidence to overcome obstacles on performing cheating on exams result in their highly intention to do that in future. Thus, H6 was supported.

In addition, this study showed that male had higher intention scores to perform cheat compared with female, which in line with Cheung et al. [13] stated that females revealed less cheating than males. The influence of SN for students who were studying in U.K are higher than who were studying in China. Chinese education is that it is examination and rote-oriented, with less emphasis on creativity [19]. Specifically, pressure to pass an exam is derived from their family, society and cultural value [23]. Thus, it is not surprise that the relationship between the perception of cheating among peers and the likelihood of one's own cheating can be found out of China [17]. According to McCabe et al. [6], business students have been found to cheat more than non-business students. Our results confirmed that students who were studying in Management had more confidences to take cheat compared with students who were studying in Engineering and Economics. Furthermore, our results reported that junior students perceived that cheating is a complicate behaviour compared with fresh and sophomore students, they had less confidences or motivations to perform cheating behaviours.

4.5.1. Theoretical Contributions

First, previous studies have investigated the influence of demographic characteristics (e.g., age, gender, major, educational level) on students' cheating behaviour [18]. Nevertheless, those results are generally inconsistent and even controversial [21]. This study's results indicated that Chinese males are more likely to engage in cheating compared to females; students who were studying in major of Management are more perceive ease to undertake cheat compared to Engineering and Economics students; rookie and sophomore university students have more confidences to perform cheating compared with junior students. In addition, Chinese students who were studying out of China are more fragile by their peer's (e.g., close-friends, classmates) influences compared with who were studying in China.

The results of this study did not find that students who hold negative attitudes, but still engage in cheating behaviour [9]. It falls in line with other studies which showed that a positive attitude results in higher possibility in engaging cheating in future [11] Social influence seems to play the most important role in determining one's cheating since SN had the most influence on intention compared to other components of TPB. Meanwhile, researchers should consider the role of SN in collectivistic-value societies. Because individuals are more easily become fragile when they receive their significant others' opinions and suggestions. Such influence not only influence one's behavioural intention directly, but also effects on an individual's personal feelings and attitudes towards a particular object. Moral obligation is the second important predictor for estimating one's cheating in this study. But the influence of moral obligation is underestimated in the educational literature [9]. This study indicates that an individual's cheating can be derived from his or her personal feelings and self-judgement.

When individuals' perception about cheating is low guilty and not against their self-principles, they are willing to engage in cheating in future. The predictive power of PBC of estimating one's cheating is complicated in past studies [3]. Our results confirmed that PBC positively influences one's cheating intention. Individuals who perceive cheating is not a challenge, the high control of cheating significantly results in their cheating intention in future.

Furthermore, few studies have conducted students' cheating in Asia, especially in China [12], although a large proportion of Chinese students are studying outboard and more Western researchers need to understand what motivations to boost Chinese students' cheating behaviours in other countries. This study provided the basis for future research in replicating the quantitative data analyses and thus, understanding the influence of attitude, SN, PBC and moral obligation on Chinese students' cheating behaviours with various demographic background.

4.5.2. Practical Implications

Several practical implications can be obtained from the findings of this study. Since attitude positively influences one's cheating intention, educators, lecturers and managers have responsibilities to educate university students that cheating is a bad and foolish behaviour. The negative consequences may not happen immediately during the studying journey, but such behaviours can lead to various ethical or even deviant behaviours in the future work. More importantly, creating a clear academic environment is important for students due too many unethical academic behaviours happened in China in past several years. Thus, university managers and lecturers also have responsibilities to provide an impartial academic environment, particularly for exams.

Chinese students are particularly influenced by their significant others. Hence, publicity and advertising about unethical regulations (e.g., cheat) are necessary to be undertaken in the campus of universities. University managers can hold academic disciplinary meetings regularly with all students at the beginning of the semester and before the examinations. Each student has to recognise that cheating is a disapprove behaviour, thus, influencing their close-friends and classmates. When students perceive cheating is easy are more willing to engage in cheating. University managers and lecturers should intentionally create certain barriers to avoid students' cheat behaviours. Participating examinations without cellphone, utilising signal blocker, cancel verbal warning, make connection between exam performance and class performance will increase students' perceptions about costs on cheating. Such implementations result in students re-consider whether it is worth to perform cheating on exam.

Students who feel guilty and morally wrong if they cheated on an exam are less likely to cheat. Educators should teach their students that cheating is one of various unethical behaviours, not only influence their personal studying career, but also become a morally wrong behaviour in their life. Moreover, it is important to spread the right personal value and academic disciplines to new students as fresh and sophomore students are more willing to overcome obstacles to engage in cheating. Meanwhile, business-related lecturers and managers should pay more attention on their students' exams since business students are more willing to engage in cheating compared to engineering and economics students. Increasing divergent thinking instead of rote learning about examination papers also can achieve students and lecturers' expectations.

5. Conclusion

Intention is a robust predictor for actual behaviour, but there is still a research gap between intention and actual behaviour in literature. China's universities cancelled all mid- and final exams throughout the 2022 year due to COVID-19 pandemic, thus, future studies can measure students' actual cheating behaviours based on current research framework. Second, part of respondents (i.e., U.K students) were recruited from online groups, it is difficult to ensure the reliability and accuracy of those respondents' information. In addition, majority of the respondents were studying in management, economics, and engineering. Although the comparison test achieved researchers' expectations, future studies can consider recruiting more divergent majors' students as their respondents.

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References

- [1] Y. Zhang, and H. Yin, "Collaborative cheating among Chinese college students: the effects of peer influence and Individualism-Collectivism orientations," *Assessment & Evaluation in Higher Education*, vol. 45, no. 1, pp. 54-69, 2020.
- [2] L. Wang, P. P. Wong, and Q, Zhang, "Travellers' destination choice among university students in China amid COVID-19: Extending the theory of planned behaviour," *Tourism Review*, vol. 76, no. 4, pp. 749-763, 2021.
- [3] S. Koc, and H. B. Memduhoglu, "A model test towards university students' cheating behaviour in the context of the theory of planned behaviour," *Cypriot Journal of Educational Sciences*, vol. 15, no. 4, pp. 727-748, 2020.
- [4] O. Makridis, and F. Englander, "Normative revisionism about student cheating," *Journal of Academic Ethics*, pp. 1-23, 2020.
- [5] H. Yu, P. L. Glanzer, B. R. Johnson, R. Sriram, and B. Moore, "Why college student's cheat: A conceptual model of five factors," *The Review of Higher Education*, vol. 41, no. 4, pp. 549-576, 2018.
- [6] D. L. McCabe, and L. K. Trevino, "Individual and contextual influences on academic dishonesty: A multicampus investigation," *Research in Higher Education*, vol. 38, no. 3, pp. 379-396, 1997.
- [7] C. H. Lin, and Y. M. Wen, "Academic dishonesty in higher education A nationwide study in Taiwan," *Higher Education*, vol. 54, no. 1, pp. 85-97, 2007.
- [8] D. L. McCabe, K. D. Butterfield, and L. K. Treviño, "Academic dishonesty in graduate business programs: Prevalence, causes, and proposed action," *Academy of Management Learning & Education*, vol. 5, no. 3, pp. 294-305, 2006.
- [9] H. A. Klein, N. M. Levenburg, M. McKendall, and W. Mothersell, "Cheating during the college years: How do business school students compare." *Journal of Business Ethics*, vol. 72, no. 2, pp. 197-206, 2007.
- [10] B. E. Whitley, "Factors associated with cheating among college students: A review," *Research in Higher Education*, vol. 39, no. 3, pp. 235-274, 1998.
- [11] A. P. Y. Tsui, and H. Ngo, "Social-motivational factors affecting business students' cheating behavior in Hong Kong and China," *Journal of Education for Business*, vol. 91, no. 7, pp. 365-373, 2016.
- [12] B. L. Stiles, M. Pan, E. E. LaBeff, and N. Wong, "The role of academic entitlement in college cheating: A comparison between China and the United States," *Research in Higher Education Journal*, vol. 34, pp. 1-15, 2018.
- [13] H. Y. Cheung, J. Wu, and Y. Huang, "Why do Chinese students cheat? Initial findings based on the self-reports of high school students in China," *The Australian Educational Researcher*, vol. 43, no. 2, pp. 245-271, 2016.
- [14] L. Visentin, "Corruption rife in international student's sector of leading Australian universities," *ABC's four corner's reports*, 2015.
- [15] L. Beck, and I. Ajzen, "Predicting dishonest actions using the theory of planned behavior," *Journal of Research in Personality*, vol. 25, no. 3, pp. 285-301, 1991.
- [16] A. Chudzicka-Czupała, D. Grabowski, A. L. Mello, J. Kuntz, D. V. Zaharia, N. Hapon, A. Lupina-Wegener, and D. Börü, D. "Application of the theory of planned behavior in academic cheating research–cross-cultural comparison," *Ethics & Behavior*, vol. 26, no. 8, pp. 638-659, 2016.
- [17] J. Yang, "Predicting cheating behavior: A longitudinal study with Chinese business students," *Social Behavior and Personality: An International Journal*, vol. 40, no. 6, pp. 933-944, 2012.
- [18] L. Wang, "Why do Chinese students often cheat on exams at home, but less abroad," *Journal of Research in Humanities and Social Science*, vol. 9, no. 8, pp. 60-76, 2021.
- [19] A. de Leeuw, P. Valois, I. Ajzen, and P. Schmidt, "Using the theory of planned behavior to identify key beliefs underlying pro-environmental behavior in high-school students: Implications for educational interventions," *Journal of Environmental Psychology*, vol. 42, pp. 128-138, 2015.
- [20] Z. Wang, P. P. Wong, and L. Wang, "The influence of consumer ethnocentrism on intention toward domestic electric vehicle selection," *Journal of Business Administration and Social Studies*, vol. 6, no. 2, pp. 62-72, 2022.
- [21] H. Park, and J. Blenkinsopp, "Whistleblowing as planned behavior A survey of South Korean police officers," *Journal of Business Ethics*, vol. 85, no. 4, pp. 545-556, 2015.

- [22] M. A. Fauzi, M. H. Hanafiah, and V. Kunjuraman, "Tourists' intention to visit green hotels: Building on the theory of planned behaviour and the value-belief-norm theory," *Journal of Tourism Futures*, pp. 1-22, 2022.
- [23] I. Ajzen, "The theory of planned behavior," Organizational Behavior and Human Decision Processes, vol. 50, no. 2, pp. 179-211, 2021.
- [24] S. E. Carrell, F. V. Malmstrom, and J. E. West, "Peer effects in academic cheating," *The Journal of Human Resources*, vol. 43, no. 1, pp. 173-207, 2008.
- [25] M. A. Yukhymenko-Lescroart, "Ethical beliefs toward academic dishonesty: A cross-cultural comparison of undergraduate students in Ukraine and the United States," *Journal of Academic Ethics*, vol. 12, no. 1, pp. 29-41, 2014.
- [26] P. Alleyne, and K. Phillips, "Exploring academic dishonesty among university students in Barbados: An extension to the theory of planned behaviour," *Journal of Academic Ethics*, vol. 9, no. 4, pp. 323, 2011.
- [27] T. S. Harding, M. J. Mayhew, C. J. Finelli, and D. D. Carpenter, "The theory of planned behavior as a model of academic dishonesty in engineering and humanities undergraduates," *Ethics & Behavior*, vol. 17, no. 3, pp. 255-279, 2018.
- [28] W. G. Cochran, Sampling techniques (3rd ed.). Wenmister: John Wiley & Sons, 2007.
- [29] R. B. Kline, *Principles and practice of structural equation modeling (3rd ed.)*. New York: Guilford Press, 2015.