



Impact of anti-corruption learning on perceptions of anomie among undergraduate students

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Abstract

This study aims to explore the impact of an anti-corruption education course on the perception of anomie among 358 undergraduate students from two public universities. The study adopted a mixed-methods research design. The experimental group received a six-week anti-corruption education course comprising video-based modules while the control group received no intervention. Participants' perceptions of anomie were assessed using pre- and post-test surveys. Additionally, semi-structured interviews were conducted with a subset of participants from the experimental group. Two-way repeated measures analysis of variance and interview transcript thematic analysis were both used to analyse the data. The results demonstrated a significantly greater decline in anomie over time in the experimental group compared to the control group. Thematic analysis of the interview data provided further insight into participants' understanding of the negative consequences associated with corrupt practices. The results demonstrate that the anti-corruption intervention is helpful in reducing students' unethical attitudes and strengthening their commitment to moral conduct. Participants in the course provided positive reviews. Additionally, they shared that their viewpoints on different facets of corruption had undergone some changes. The results of this study have practical implications for both researchers and practitioners in the field of anti-corruption education.

Keywords: Anomie, Anti-corruption education, Corruption, Social norms, Undergraduate students.

Citation | Akhayeva, A., & Turgunbayeva, B. A. (2023). Impact of anti-corruption learning on perceptions of anomie among undergraduate students. *Journal of Education and E-Learning Research*, 10(4), 735-741. 10.20448/jeelr.v10i4.5189

History:

Received: 4 July 2023

Revised: 8 September 2023

Accepted: 26 October 2023

Published: 1 December 2023

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Publisher: Asian Online Journal Publishing Group

Funding: This study received no specific financial support.

Institutional Review Board Statement: The Ethical Committee of the Abai Kazakh National Pedagogical University, Kazakhstan has granted approval for this study on 11 December 2022 (Ref. No. P-1284-36).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

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Contribution of this paper to the literature

This paper presents empirical studies on anti-corruption education. This is the first study involving a video-based anti-corruption intervention. Future researchers can use our findings as a starting point to design their own anti-corruption interventions in undergraduate settings.

1. Introduction

Corruption and anomie are interconnected concepts that influence and reinforce each other within society. The term "corruption" refers to the abuse of authority for one's own benefit which frequently involves bribery, theft, nepotism, fraud or other unethical behaviour (Albanese, 2022; Lehtinen, Locatelli, Sainati, Artto, & Evans, 2022). The relationship between corruption and anomie can be better understood by looking at the societal elements that contribute to both phenomena. Weak institutional systems, a lack of ethical norms and perceived inequity contribute to corruption and the deterioration of social regulations and moral standards. The prevalence of corruption fosters an atmosphere of cynicism and disillusionment in which individuals may feel obligated to engage in corrupt practices as a method of survival or development within a society without strong moral and ethical foundations. Corrupt behaviour can flourish, sustaining the cycle of corruption and increasing anomie due to the deterioration of societal standards and the absence of social systems that provide support.

1.1. Literature Review

Corruption is a multifaceted issue that weakens society in multiple dimensions such as politics, economy, education and culture (Masud, Rahman, & Rashid, 2022; Qia & Yanting, 2023). This phenomenon contributes to the emergence of anomie, a concept originating in ancient Greece and biblical writings to denote various forms of social and moral disorder and evil. Later, a French sociologist named Emile Durkheim incorporated this concept into his theory of anomie. Durkheim observed that the sociological and cultural changes associated with modernization led to a loss of social restrictions that normally develop in family and social relationships. As a result, anomie develops through the breakdown of rules affecting individual behaviour and has profound implications for numerous aspects of organizational life. As a result, individuals may experience a sense of disorientation and alienation from society due to the perceived absence of supportive social systems (Pillay, Riaz, & Dorasamy, 2023). Jiang, Hu, Liu, Sun, and Xue (2020) ascertained that the concept of anomie is distinct from alienation which is caused by rigid regulations whereas anomie is caused by the dismantling of social regulations and the decay of moral standards. The authors suggest that anomie evokes a sense of aimlessness and wandering similar to drifting through an ocean without a clear sense of direction.

1.2. Problem Statement and Research Aim

According to Jetter and Parmeter's (2018) analysis of 36 potential corruption determinants across 123 countries, economic and institutional characteristics such as the duration of primary school are far more inclined to predict corruption than cultural or geographical factors. Education is a key sector for preventing and combating corruption as it can foster a culture of integrity, transparency and accountability among future generations (Khalil, Prinsloo, & Slade, 2023; Pizzolato & Dierickx, 2023). On the other hand, a recent in-depth analysis (Shaw & Mauro, 2023) discovered that a higher prevalence of corruption reduces income equality and undermines education as a sign of quality. Furthermore, students in high-corruption environments lack the desire to study hard or pursue further education because they feel that employment is not strongly correlated with academic achievement (Duerrenberger & Warning, 2018). Anti-corruption instruction could teach students to resist immoral behaviour and contribute to society.

There is a lack of empirical evidence on its effectiveness in shaping students' perceptions and attitudes towards corruption despite the prominence of anti-corruption learning. Existing studies are mostly descriptive or theoretical and do not provide sufficient evidence on how anti-corruption interventions impact students' attitudes and behaviors. For instance, Sumaryati, Suyadi, Nuryana, and Asmorojati (2022) evaluated an online anti-corruption education model during the COVID-19 pandemic. They developed fourteen anti-corruption actions in online media each with a different target group according to its content. The model was found to effectively enhance students' ability to translate their knowledge and anti-corruption attitudes into anti-corruption action behavior. However, this was a qualitative case study involving a sample of just 14 students. It is noteworthy that there is a gap in the literature about how anti-corruption education affects students' views of anomie which might be connected to corruption. Hence, this study aims to partially bridge this gap by investigating how an anti-corruption education course affects undergraduate students' perceptions of anomie. Specifically, the study will address the following research questions:

Research question 1: How did the anti-corruption education course influence students' perceptions of anomie?

Research question 2: What are students' reflections on their experience in the anti-corruption course?

This study attempts to gain insights into their perceived absence of supportive social systems by examining university students' perceptions of anomie. Understanding students' perceptions of anomie is crucial as it provides valuable information on their individual experiences and how they relate to corruption. Additionally, this study has practical implications for developing and implementing targeted educational programmes and interventions aimed at fostering ethics, integrity and good governance among students. Society may create a generation of individuals who are less prone to corruption and more appropriate to defend moral standards by addressing the main causes of anomie through these interventions. Targeting students' views of anomie can have a long-lasting effect on their attitudes towards corruption and their capacity to eradicate it since they represent future change agents, professionals and lawmakers.

2. Methods

This study followed a mixed-methods research design.

2.1. Participants

The researchers recruited the students at their institution to participate in the study by sending them email invitations in February 2023 with the help of the department heads. The invitations explained the study's goal and the procedures that participants would be asked to follow. Participants were considered to have agreed to participate once they clicked on a link to our self-administered survey form on Qualtrics. Only university students who could read Russian text were eligible for inclusion in the study. Careless responding (all items answered with the same response) was used as an exclusion criterion. A total of 385 students clicked on the survey link but 4 of them provided invalid responses and were not allowed to proceed further. Additionally, 23 students did not complete the required modules. Therefore, the final sample consisted of 358 voluntary undergraduate students aged 17-26 studying at various departments of two public universities during the 2022-2023 academic years.

2.2. Procedures and Measurement

The participants were randomly assigned to either the experimental group or the control group using a computer-generated randomization sequence. The experimental group received the anti-corruption education course using six video-based modules on the website thefightagainstcorruption.unodc.org while the control group received no intervention. The researchers obtained permission from the United Nations Office on Drugs and Crime (UNODC) to use their e-learning tool for research purposes and to create institutional accounts for the students. The participants were given a unique username and password to log in to the course modules and were asked not to share their credentials with anyone. The anti-corruption education course consisted of six interactive learning videos that covered topics such as gifts and hospitality, facilitation payments, intermediaries and lobbyists, social investments and reporting corruption. The participants were instructed to complete one video per week for six weeks at their own pace. Email reminders were sent weekly to encourage completion. Each video lasted about five minutes and was followed by an online quiz to test the participants' comprehension.

The participants completed an online survey that measured their perception of anomie using the scale designed by Bashir and Bala (2019) before and after the intervention. The measuring scale consists of 20 items that are intended to assess the degree of meaninglessness, isolation, normlessness and helplessness an individual experiences. Higher scores indicate higher degrees of anomie. The items are answered on a 5-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree". Upon expert review, one of the 21 items, "I think there are no clear rules in the recruitment of jobs" was removed from the questionnaire. The remaining 20 items were translated into Russian. The Russian-language scale was pilot-tested among five university students who were not part of the study sample to ensure the comprehensibility of the items for potential respondents. Spearman-Brown's even-odd reliability of the final instrument was 0.83.

Semi-structured interviews were conducted with a subsample of seven participants from the experimental group after the post-test survey to complement the quantitative results and gain more insights into the participants' perceptions of the anti-corruption intervention. The interviews were audio-recorded and transcribed verbatim using a professional transcription service. The transcripts were then subjected to thematic analysis.

2.3. Statistical Analysis

The Anderson-Darling test confirmed that both pre-test (.401) and post-test (.194) data were normally distributed. A two-way repeated measure analysis of variance (ANOVA) was carried out as a compilation test to assess whether the level of anomie changed between the intervention and control groups over the research period. The within-subjects factor was the time point where the questionnaire was filled out (either before or after the experimental procedures) and the between-subjects factor was the intervention. Results were considered statistically significant at an alpha level above .05. Generalized Eta² (η^2G) was used as a supplementary criterion to estimate the effect size that would have been observed if the predictor variable had been manipulated between subjects, thereby providing additional insights into the within-subject effects (Olejnik & Algina, 2003). Furthermore, a two-tailed unpaired t-test was applied with a Bonferroni adjustment ($.05/4 = .0125$). All analyses were conducted using the R programming language.

2.4. Ethical Considerations

The data were collected and stored using a secure online platform that ensured the confidentiality and anonymity of the participants. Participants were informed about the purpose and procedures of the study and gave informed consent to participate. The study followed the principles of the Declaration of Helsinki.

3. Results

3.1 Research Question 1: How Did the Anti-Corruption Education Course Influence Students' Perception of Anomie?

The questionnaire items as well as descriptive statistics on respondents' answers are given in Table 1. The data revealed a complex pattern leading to a conflicting impact of the educational intervention. However, mean scores for some items decreased at the post-test, particularly in the experimental group.

A two-way mixed ANOVA model revealed a significant effect of time ($F(1, 356) = 40.0, p < 0.001, \eta^2G = 0.052$) showing that perceptions of anomie decreased in both groups from pre-test to post-test. The main effect of group was also significant ($F(1, 356) = 4.65, p = .032, \eta^2G = .007$) implying that the experimental group had lower levels of anomie than the control group across both times. However, a two-tailed t-test on mean total anomie scores showed no statistically significant difference between the control group ($M = 61.54, SD = 6.39$) and the experimental group ($M = 62.32, SD = 6.29$) at the pre-test, $t(356) = 1.20, p = .244$.

Table 1. Descriptive statistics on undergraduate students' anomie scores (n = 358)

Item	CON pre		EXP pre		CON post		EXP post	
	M	SD	M	SD	M	SD	M	SD
1. I believe that higher authorities decide a person's future.	3.35	1.42	3.18	1.48	3.07	1.39	2.90	1.46
2. I think people follow whatever rules they want to follow.	2.92	1.40	3.06	1.40	2.92	1.36	2.85	1.38
3. I like to live by society's rules.	3.04	1.39	2.92	1.34	3.10	1.45	3.04	1.44
4. I think the life of an ordinary man is getting worse day by day.	3.03	1.38	2.97	1.43	2.98	1.48	2.85	1.46
5. I often have trouble deciding which rules to follow.	2.93	1.42	3.13	1.47	2.99	1.36	3.04	1.38
6. I believe that people care about one another.	3.10	1.39	3.39	1.37	2.97	1.47	3.01	1.44
7. I think higher administration does not care about the careers of unemployed educated youths.	2.96	1.46	2.85	1.44	2.98	1.50	2.71	1.38
8. I don't know whom I can trust and rely on.	3.22	1.45	3.10	1.40	2.89	1.44	3.05	1.35
9. I obey the laws no matter how much they interfere with my personal ambitions.	3.31	1.32	3.24	1.42	3.21	1.37	3.10	1.45
10. I believe that if the reward is sufficient, a person has reason to do anything.	3.44	1.37	3.53	1.35	2.87	1.45	2.95	1.40
11. I think public officials do not care about the problems of the common man.	3.27	1.45	3.20	1.41	3.17	1.42	2.97	1.41
12. If I work hard and study today, I am sure that a job will be open for me later.	3.18	1.34	3.31	1.41	3.35	1.48	3.11	1.46
13. I think getting a higher education is unimportant for a future life plan because it does not pay anything in life.	3.23	1.47	3.15	1.44	3.26	1.41	2.84	1.26
14. I have no idea what to do with my life.	2.87	1.46	2.97	1.42	2.95	1.35	2.83	1.39
15. I'm lonely and disconnected from my fellows.	2.64	1.26	2.55	1.29	2.79	1.45	2.36	1.32
16. My fate is beyond my control.	3.09	1.45	3.34	1.38	2.74	1.39	2.92	1.36
17. I think that if something works, it doesn't really matter whether it is right or wrong.	2.95	1.47	3.18	1.42	3.0	1.38	2.79	1.38
18. I believe that honesty does not always work while dishonesty is sometimes a better way to succeed.	2.89	1.39	3.08	1.47	2.97	1.33	2.63	1.25
19. In our society, I believe there are no clear moral guidelines to follow.	3.11	1.29	3.04	1.43	3.23	1.43	2.88	1.39
20. I believe that in spite of one's capability nobody knows what is expected of him or her.	3.03	1.39	3.15	1.40	2.99	1.44	2.76	1.38

Note: SD = standard deviation.
* Items with reversed scoring.

Additionally, there was a substantial interaction effect between time and group $F(1, 356) = 15.30, p < .001, \eta^2G = .020$). This suggests that the experimental group experienced a higher decline in anomie throughout the study than the control group. Figure 1 illustrates that the mean total anomie score decreased from the pre-test to the post-test in both groups but the two lines are not parallel. Those who participated in the anti-corruption course eventually reported a lower anomie level ($M = 57.59, SD = 6.47$) compared to those who were uninvolved ($M = 60.43, SD = 5.97$) which is corroborated by the t-test outcome, $t(356) = 7.0, p < .001$.

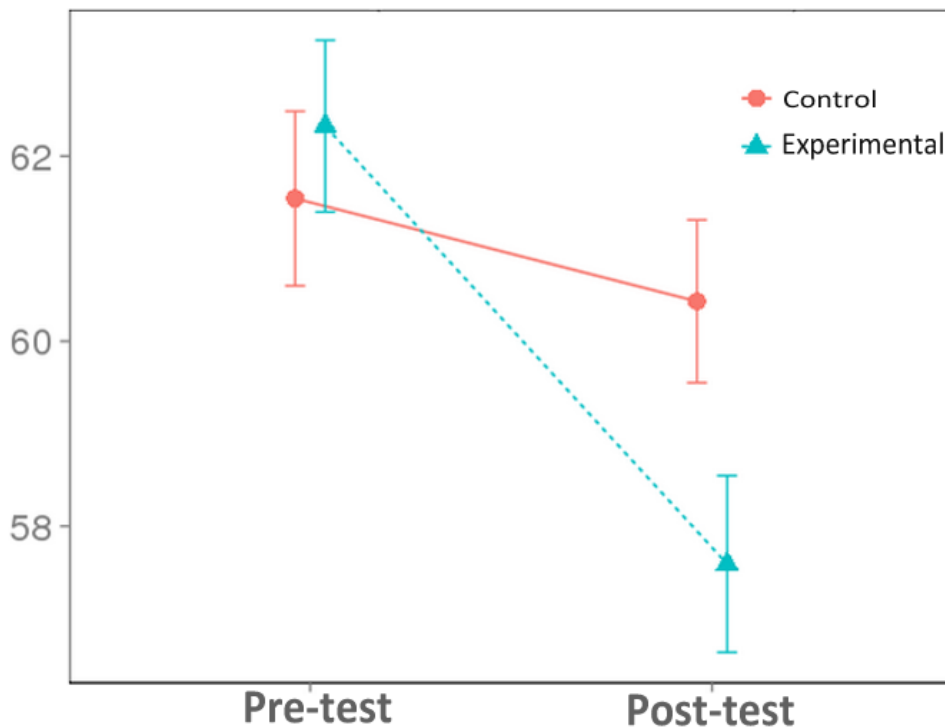


Figure 1. Mixed analysis of variance on undergraduate students' total anomie scores (n = 358).

3.2. Research Question 2: What are Students' Reflections on their Experience in the Anti-Corruption Course?

The influence of anti-corruption learning modules on undergraduate students' perceptions of anomie was visible in post-test interviews. Seven participants shared their perceptions which revealed a shift in their perspectives regarding various aspects of corruption. The thematic analysis of their responses is presented below.

Perceptions on the module "Unwelcome Gift": Participants acknowledged the potential conflicts of interest and compromised professional integrity associated with accepting gifts and hospitality. The module prompted a change

in their viewpoint with one student stating, "I used to think accepting gifts was harmless but now I realize it can really affect our ethical principles".

Perceptions on the module "Arrangement": The module focused on gifts and hospitality towards public officials which led students to think critically. They recognised the impact of extravagant social events and sponsored activities on decision-making processes. One student said, "It helped me realise how organizing expensive parties for public officials might create a sense of favoritism and damage transparency" in reference to their newly developed understanding.

Perceptions on the module "To pay or not to pay": The module sheds light on the legal and ethical implications of facilitation payments and corruption. Students became more aware of the drawbacks of offering payments without obtaining receipts. One student reflected, "The video has reinforced my conviction that giving bribes undermines our values and keeps the corruption cycle going which is particularly relevant in the context of Kazakhstan, so we should work towards a more transparent and ethical society".

Perceptions on the module "Mystery Middleman": The module discussing the use of intermediaries and lobbyists raised skepticism among students especially in unfamiliar business environments. Participants recognized the risks associated with relying on third parties and emphasized the importance of transparency and due diligence. One student expressed their concerns, stating, "Dianne's experience with the local intermediary made me realize the need to be cautious and carefully assess all intermediaries."

Perceptions on the module "Strange Letter": The module addressing corruption and social investments prompted students to consider the ethical implications of requests for support in exchange for business favors. Participants considered the delicate balance between corporate responsibility and potential corruption. One student shared their thoughts, saying, "I found myself reflecting on Christina's situation and how crucial it is for me to carefully evaluate the motives behind requests for support. It has made me more aware of the potential ethical challenges and the need for careful discernment in similar circumstances."

Perceptions on the module "Insider": The subject matter of insider knowledge made students aware of the ethical issues surrounding privileged information. Students recognized the importance of maintaining fairness in financial markets and refraining from exploiting inside information. This was recognised by a student who said, "I was especially taken away by the evidence of the daughter buying shares with inside information and it made me see how unfair judgements and immoral activities can make things complex".

4. Discussion

The study's findings suggest that the anti-corruption education programme was fairly successful in reducing anomie among undergraduate students which is in line with the tenets of the Institutional Anomie Theory (IAT). According to IAT, anomie results from the economy's influence on a variety of social institutions, including the family, education and politics speeding a state of normative deregulation (Cengiz, 2023). Anomie generates a crisis of values and an increase in unethical conduct such as corruption (Baron, 2023; Bielinski & Hovermann, 2021; Selk, 2022). IAT proposes that one way to reduce anomie is to strengthen non-economic institutions such as education and thus balance the influence of the economy (Hovermann & Messner, 2023). In this study, the anti-corruption course may be considered an intervention that attempted to strengthen the role of education as a social institution that promotes ethical values and norms and resists the pressure of economic aims and interests. The course might inspire students to critically examine their own attitudes and behaviours and promote a sense of moral responsibility and civic involvement by exposing them to a variety of corruption-related scenarios and issues.

The study's results align with its core constructs of attitudes, subjective norms and perceived behavioral control from the perspective of the Theory of Planned Behavior (TPB) Ajzen (1991). Attitudes refer to individuals' evaluations of a specific behavior, subjective norms involve the influence of social factors on behavior and perceived behavioral control relates to individuals' perception of their ability to perform a behavior. For example, in environmental research (Cao, Qiu, Wang, & Zhou, 2022), behavioral attitudes had a positive effect on tourists' pro-environmental behavioral intentions. In the context of anti-corruption education, the delivered course influenced students' attitudes by providing them with knowledge and awareness about corruption and its ethical implications. The modules allowed students to evaluate their beliefs and reassess the acceptability of corrupt practices. As a result, their attitudes towards corruption may have shifted leading to a decrease in anomie. Moreover, subjective norms which capture the influence of social factors may have played a role in the observed changes. The anti-corruption course introduced students to different perspectives, case studies and real-life examples that highlighted the negative consequences of corruption. By exposing students to these alternative viewpoints and promoting critical thinking, the course influenced their perception of corruption as a socially undesirable behavior. As a result, students may have internalized new social norms that discourage corrupt practices and promote ethical behavior. The third construct of TPB, namely perceived behavioral control, pertains to individuals' self-assurance in their capability to execute a specific behavior. The anti-corruption training might improve students' perception of control by preparing them with the information, tactics and critical-thinking abilities needed to resist and battle corruption.

Our findings can also be viewed in light of the Social Learning Theory (SLT) (Cerbin-Koczorowska, Przymuszala, Fabianowska, Galazka, & Zielinska-Tomczak, 2022). The theory posits that individuals learn through observation, imitation and reinforcement of behaviors demonstrated by others. In the context of the anti-corruption course, the videos presented real-life scenarios and ethical dilemmas allowing students to observe and learn from the experiences of others. Students were exposed to the potential consequences of corrupt practices and the importance of ethical behavior through these narratives. Students may have internalized these lessons and developed a stronger commitment to ethical values by observing the positive outcomes associated with resisting corruption and the negative consequences of engaging in corrupt acts. Thus, the anti-corruption education course may have influenced students' perceptions of anomie by providing them with role models, fostering critical thinking and strengthening their commitment to ethical behavior.

5. Implications and Limitations

The implications of these findings from IAT, TPB and SLT standpoints suggest that anti-corruption education programs should focus on shaping attitudes, social norms and perceived behavioral control. Efforts should be made to provide students with knowledge, critical thinking skills and exposure to real-life examples that highlight the negative consequences of corruption. The results of this study have several implications for research and practice in the field of anti-corruption education. The research shows that teaching students about anti-corruption through videos helps reduce their anomie. This supports the use of videos as a pedagogical tool for anti-corruption education because they can engage students' emotions, attention and interest, thus facilitating their learning outcomes (Shaaban, 2022; Shu & Gu, 2023). It can be speculated that the videos depicting corruption cases provide realistic and authentic contexts for students to apply their knowledge and skills regarding corruption and to reflect on their own attitudes and behaviors. Therefore, videos can be a valuable addition to the existing anti-corruption education curriculum which often relies on lectures, readings and case studies. Second, the outcomes of the study may be viewed as an exposure of the students' perspectives and experiences of corruption in Kazakhstan, a nation with high levels of corruption (Demircioglu & Sharipova, 2023). The study reveals some of the challenges and opportunities for anti-corruption education in Kazakhstan such as the need to address cultural differences, legal ambiguities, ethical dilemmas and social pressures related to corruption. Our findings could inform policy makers, educators, practitioners and researchers who are interested in developing and implementing anti-corruption education initiatives in Kazakhstan or similar contexts.

This study has certain limitations. First, this study used a convenience sample of undergraduate students from two universities in Kazakhstan which limits the generalizability of the results to other populations or settings. Further studies should employ more representative samples or conduct cross-cultural comparisons to enhance the external validity of the findings. Second, the study used a single intervention consisting of six modules to deliver the anti-corruption education course. However, this intervention might be insufficient to achieve the desired learning outcomes. Future studies could resort to more sophisticated means such as games, simulations or role plays to enhance students' engagement and motivation.

Some recommendations for educators and researchers can be made based on the results and limitations of the study. For educators, the study suggests that using video-based scenarios as a pedagogical tool for anti-corruption education can be effective in reducing students' perceptions of anomie and stimulating their critical thinking and moral reasoning skills. Therefore, educators should consider incorporating video-based scenarios into their anti-corruption education curriculum and design them in a way that is relevant, realistic and challenging for students. Educators should also provide students with opportunities to reflect on their own attitudes and behaviors regarding corruption and to apply their knowledge and skills in different contexts. Educators should also be aware of the cultural differences, legal ambiguities, ethical dilemmas and social pressures that students may face when dealing with corruption and provide them with guidance and support.

Investigating the transferability of anti-corruption knowledge and skills into real-world settings such as internships or professional contexts shed light on the practical implications of anti-corruption education for researchers. Additionally, the investigation of the mediating or moderating elements that influence the impact of anti-corruption education on perceptions of anomie would lead to a better understanding of the underlying processes and conditions that determine its success. Factors such as individual values, cultural norms and social contexts could be explored to determine how they interact with anti-corruption education in shaping students' perceptions and behaviors.

6. Conclusion

It is concluded that the anti-corruption course positively influenced participants' attitudes towards corruption, internalized new social norms and enhanced their perceived behavioral control, ultimately contributing to a decrease in anomie. Nevertheless, further research is needed to enhance the understanding of the transferability of anti-corruption knowledge and skills into real-world settings and to explore the long-term effects of such interventions.

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