


Strengthening Integrity through Project-Based Civic Learning: Evidence from Higher Education

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ABSTRACT

This study investigates the effectiveness of Project-Based Civic Learning (PBCL) in fostering anti-corruption attitudes and behaviors among university students in Central Java, Indonesia. Grounded in the Theory of Planned Behavior (TPB) and character education theory, this research employs a mixed-methods design combining quantitative analysis of 200 student survey responses with qualitative insights from in-depth interviews. Quantitative results using PLS-SEM demonstrate that PBCL significantly strengthens students' attitudes, subjective norms, perceived behavioral control, and anti-corruption behavior, with all hypotheses supported ($R^2 = 0.61$, GoF = 0.55). Qualitative findings reveal four key mechanisms of internalization: strengthening personal integrity, collective reinforcement through social norms, overcoming challenges in project implementation, and developing reflective capacity leading to behavioral change. These results highlight that PBCL is not limited to cognitive learning but contributes to socio-cultural transformation within higher education by cultivating integrity-based values aligned with Sustainable Development Goal 16. The study concludes that PBCL is an effective pedagogical approach to building an anti-corruption culture in Indonesian universities. Practical implications include integrating PBCL into character education curricula and promoting participatory learning as a means of institutional reform. Limitations of this study lie in its regional scope and reliance on self-report data; future research should consider a national and longitudinal design.

Keywords: Project-Based Civic Learning, Theory of Planned Behavior, Anti-Corruption Education, Higher Education, Integrity

INTRODUCTION

Corruption is one of the most serious problems in Indonesia that not only causes economic losses, but also weakens democratic principles, exacerbates social inequality, and erodes public trust in government institutions and the rule of law (Hardi et al., 2023; Mungiu-Pippidi, 2015; Sahama et al., 2019). This phenomenon has become a global concern because it is seen as a major obstacle to sustainable development (Kaufmann et al., 2011). Within the framework of the Sustainable Development Goals (SDGs), the issue of corruption is explicitly listed in SDG 16: Peace, Justice and Resilient Institutions, specifically target 16.5 which emphasizes the reduction of corruption and bribery in all its forms (Transparency International, 2023; United Nations, 2025).

In Indonesia, the impact of corruption has extended to various sectors, including public services, education, and the political system (Hardi et al., 2023; Yusoff et al., 2023). Although the anti-corruption agenda has become a national priority, serious challenges are still faced. Based on Transparency International data, Indonesia's Corruption Perception Index (CPI) score in 2023 is 34 out of 100, placing Indonesia at 110 out of 180 countries (Heidenheimer et al., 2024; Yu & Li, 2022). This figure shows the weak effectiveness of prevention and law

enforcement systems in various sectors. In addition, in the socio-cultural context, corruption is often considered a reasonable and accepted practice, so that it is increasingly rooted in daily life (Ceschel et al., 2022; Jackson, 2025).

From a sociological perspective, corruption in Indonesia is often perpetuated by a permissive culture that considers gratuities or giving "thank you" as commonplace (Jackson, 2025; Sahama et al., 2019). This practice is not just a violation of the law, but part of a social habitus that is inherited between generations, reinforcing the normalization of corrupt behavior in the bureaucracy and social interaction (Ceschel et al., 2022; Hardi et al., 2023). The fight against corruption cannot be sustained solely through formal regulations; it also requires cultural interventions that dismantle permissive norms and cultivate a culture of integrity.

In this regard, higher education holds a strategic role in fostering integrity, public ethics, and anti-corruption awareness among the younger generation (Aksinudin et al., 2022; Nadir, 2024). The university not only serves as a place for knowledge transfer, but also as an arena for the formation of students' culture, character, and social identity (Nadir, 2024; Rasheed, 2023; Yusoff et al., 2023). In this context, anti-corruption education cannot be understood simply as cognitive delivery, but also as a socio-cultural project to rebuild integrity norms as part of a shared culture. Because most approaches are still limited to one-way lecture methods or seminar formats that often feel disconnected from students' real social contexts, the efforts made so far seem too normative and provide little space for genuine participation (Nadir, 2024; Sumaryati et al., 2022).

As an alternative approach, Project-Based Civic Learning (PBCL) has been recognized as a more effective method for fostering character and civic education (Narimo, Fathoni, et al., 2025). This model engages students in authentic project-based experiences that address public concerns, such as anti-corruption campaigns, policy advocacy, or community-based social monitoring (Faridli et al., 2024). By engaging in this model, students do not stop at acquiring theoretical insights; they also cultivate habits of reflection, teamwork, and active participation (Amiri, 2025; Bell, 2010; Sulaiman et al., 2024). This approach aligns with the Pancasila Student Profile, which emphasizes independence, moral honesty, critical thinking, and collaborative education. Furthermore, this approach aligns with the national policy framework supported by the Ministry of Education, Culture, Research, and Technology, namely through the Independent Campus Competition Program (Rasima et al., 2024).

The Theory of Planned Behavior (TPB) offers a useful lens for examining how PBCL influences student behavior. Three factors influence behavior, according to Ajzen (1991): attitudes, perceived control, and the impact of social expectations. These aspects are addressed simultaneously through PBCL collaborative assignments, real-world projects, and reflective activities. Simultaneously, character education theory emphasizes that moral thinking, ethical behavior, and emotional engagement must be integrated into education (Bagis, et al., 2024; Liu et al., 2025). Collectively, these perspectives imply that PBCL serves as a catalyst for broader sociocultural change, in addition to being a teaching strategy in academic institutions (Amiri, 2025; Liu et al., 2025).

However, research on this topic is still in its infancy in Indonesia. While conceptual debates have largely recognized the promise of PBCL for anti-corruption education, there is a lack of concrete data. Initiatives are often conducted through lectures or seminars that offer little opportunity for active student participation, and many studies are limited to descriptive analysis (Almazroui, 2023; Kusuma et al., 2022; Nadir, 2024; Sumaryati et al., 2022). On the other hand, research from various backgrounds indicates that project-based civic education fosters greater political engagement and civic awareness (Ceschel et al., 2022; Rasheed, 2023; Yusoff et al., 2023). Nevertheless, its specific role in addressing anti-corruption education within Indonesia's sociocultural setting remains insufficiently explored.

Thus, there is a research gap on how PBCL can effectively shape the anti-corruption attitudes and values of students in Indonesia, as well as how the process of internalizing these values takes place in the social and cultural context of higher education. Because they represent a new generation of prospective teachers who are strategically using education to create an anti-corruption culture, this research focuses on students in the Central Java region. This research offers a new contribution by testing the effectiveness of PBCL through mixed-methods design, developing a conceptual model that integrates behavioral theory, PBCL, and character education, and positioning PBCL as a socio-cultural strategy to build a culture of integrity in Indonesian universities.

LITERATURE REVIEW

Theory of Planned Behavior (TPB)

Theory of Planned Behavior (TPB) developed by Ajzen (1991, 2011). It emphasizes that individual behavior is determined by three main determinants: attitude toward the behavior, subjective norms, and perceived behavioral control. In the context of anti-corruption education, TPB provides a psychological framework to understand how students form a tendency to reject corrupt practices. PBCL is believed to be able to influence these three determinants: project experience can shape a positive attitude towards integrity, collaborative work reinforces social norms that support honest behavior, while direct involvement increases students' confidence to act against

corruption. In addition to psychological aspects, the formation of anti-corruption behavior is also related to character education. Liu et al., (2025) emphasizing that moral character consists of three dimensions: moral knowing, moral feeling, and moral action. PBCL can function as an integrative medium: students gain an understanding of the value of integrity (knowing), cultivate moral sensitivity through social experience (feeling), and implement it in real projects (action). Thus, character education theory complements the SDGs in explaining the internalization of anti-corruption values in higher education.

Character Education Theory

According to Ajzen's Theory of Planned Behavior (1991, 2011, 2020), three factors shape individual behavior: attitudes toward a behavior, societal expectations, and perceived control. This approach provides a psychological perspective to examine how students become resistant to corrupt activities when implemented in anti-corruption education. All three can be influenced by PBCL. Active involvement has been shown to cultivate more constructive attitudes toward ethical standards. Similarly, collaboration reinforces peer-driven norms that support honesty, whereas exposure to practical, project-based experiences enhances students' confidence to demonstrate integrity in their behavior.

Corruption and Higher Education

Beyond disrupting administrative procedures, corruption in universities undermines academic quality and erodes public trust (Kaufmann et al., 2010). In some situations, unethical behavior such as bribery or academic misconduct becomes increasingly common over time, impacting university culture (Mungiu-Pippidi, 2023; Yusoff et al., 2023). This fact emphasizes the importance of universities consciously cultivating integrity in their students (Aksinudin et al., 2022; Nadir, 2024). Therefore, anti-corruption programs in higher education should focus on promoting ethical values and an ethical academic climate, rather than simply complying with the law.

Project-Based Civic Learning (PBCL)

Project-Based Civic Learning (PBCL) is an extension of the concept of project-based learning into civic education (Fauziati, 2025). Students are viewed as civic actors in this approach, participating in local monitoring projects, policy lobbying, and anti-corruption campaigns (Bagis & Adawiyah, 2025; Bell, 2010; Larmer et al., 2015). PBCL provides reflective, authentic, and context-responsive learning, unlike traditional lectures or seminars (Amiri, 2025; Fauziati et al., 2025; Narimo, Sulistyanto, et al., 2025; Sulaiman et al., 2024). This paradigm aligns well with the Merdeka Belajar - Kampus Merdeka strategy and the Indonesian Pancasila Student Profile. Because both emphasize autonomy, teamwork, and character development, PBCL is a viable strategy for enhancing learning with integrity in higher education (Bagis et al., 2024; Rasima et al., 2024).

Hypotheses Development

PBCL and Perceptions of Anti-Corruption Behavior

Attitude is often considered the best indicator of behavioral intention in the Theory of Planned Behavior (Ajzen, 1991, 2011, 2020). Students typically form more positive opinions about integrity when they actively participate in community-focused projects, especially when anti-corruption instruction is included. Students who participate in PBCL activities are able to understand the importance of moral behavior in public life and are aware of the negative impacts of dishonest behavior. Previous research supports this idea. For example, Bell (2010) showed how project-based learning increases students' emotional engagement and fosters a positive perspective on social issues. Similarly, Sumaryati et al., (2022) found that project-based anti-corruption programs strengthened students' understanding of integrity, while Ceschel et al., (2022) reported that engagement in civic initiatives fostered more positive attitudes toward social justice. Drawing upon this theoretical and empirical foundation, the following proposition is advanced:

H1: Students' views on anti-corruption behavior are positively influenced by PBCL.

PBCL and Subjective Norms

In the Theory of Planned Behavior, subjective norms are defined as perceived social pressures and contextual expectations that influence an individual's willingness to act (Ajzen, 2011). Within the framework of the SDGs, such norms are essential in shaping ethical and responsible behavior. By encouraging collaboration and stimulating active involvement in community life, PBCL contributes to the development of shared norms that reinforce honesty and discourage corrupt practices. Research Abdurrahim et al., (2023) Shows that collaborative work in civics education strengthens students' collective ethical norms. (Rasheed, 2023) It was also found that project-based civic education increases students' perception of social participation norms. Similarly Yusoff et al., (2023) affirms that community involvement in social projects reinforces the norms of public transparency. Based on this evidence, this study hypothesizes that:

H2: Project-Based Civic Learning (PBCL) has a positive effect on students' subjective norms related to anti-corruption behavior.

PBCL and Perceived Behavioral Control

Within the SDGs framework, the determinants of behavior are not limited to attitudes and social norms, but also include perceived behavioral control namely, an individual's belief in their capacity to carry out a particular action (Ajzen, 2020). PBCL provides a real practice space for students to practice skills in refusing gratuities, reporting irregularities, or taking an active role in integrity advocacy. Thomas et al., (2000) shows that project-based learning is able to increase students' confidence in solving real problems. Sulaiman et al., (2024) research also found that PBCL strengthens students' self-efficacy in facing social challenges. Liu et al., (2025) asserts that practice-based learning experiences are able to increase the perception of individual control over ethical behavior. Therefore, the following hypothesis is formulated:

H3: Project-Based Civic Learning (PBCL) positively influences students' perceived behavioral control in rejecting corruption.

Attitude toward Anti-Corruption and Anti-Corruption Behavior

According to the Theory of Planned Behavior, as reflected in the SDGs framework, attitudes, subjective norms, and perceived behavioral control jointly influence intention, which in turn determines actual behavior (Ajzen, 1991). Within the scope of anti-corruption education, the emergence of students' anti-corruption behavior can thus be explained through these three determinants. Empirical findings reinforce this view: Nadir, (2024) demonstrated that positive attitudes and supportive social norms significantly strengthen students' commitment to integrity; Almazroui, (2023) highlighted the critical role of behavioral control as a predictor of ethical conduct among students in developing countries; while Kusuma et al., (2022) confirmed that the internalization of integrity values in higher education is simultaneously shaped by attitudes, norms, and perceived behavioral control. Based on these arguments, the following hypothesis is proposed:

H4: Attitudes, subjective norms, and perceived behavioral control positively influence the formation of students' anti-corruption values and behaviors.

Subjective Norms and Anti-Corruption Behavior

According to Ajzen (2011), subjective norms indicate the extent to which a person feels pressured by society to participate or not participate in certain activities. Social support from peers, lecturers, and the academic community can help college students become more determined to avoid unethical practices. According to (Rasheed, 2023), student engagement in actions that uphold public integrity is strongly influenced by social norms. Yusoff et al., (2023) reported similar results, indicating that community norms influence students' ethical behavior. Furthermore, Abdurrahim et al., (2023) found that students may be more likely to adhere to anti-corruption standards if they experience collective social pressure. The following theory is proposed based on these findings:

H5: Students' anti-corruption behavior is positively influenced by subjective standards.

Perceived Behavioral Control and Anti-Corruption Behavior

Perceived behavioral control, or a person's belief in their ability to perform an activity, is the final element in the TPB framework (Ajzen, 2020). Students with strong behavioral control are more willing to disclose dishonest behavior, more confident in refusing rewards, and more reliable in upholding their moral principles. According to Liu et al., (2025) research, ethical behavior is strongly influenced by students' self-efficacy. Sulaiman et al., (2024) found that project-based learning improves students' ability to face real moral dilemmas. Almazroui, (2023) also emphasized that behavioral control is one of the main predictors of moral behavior in the academic environment.

H6: The perception of behavior control has a positive effect on student anti-corruption behavior.

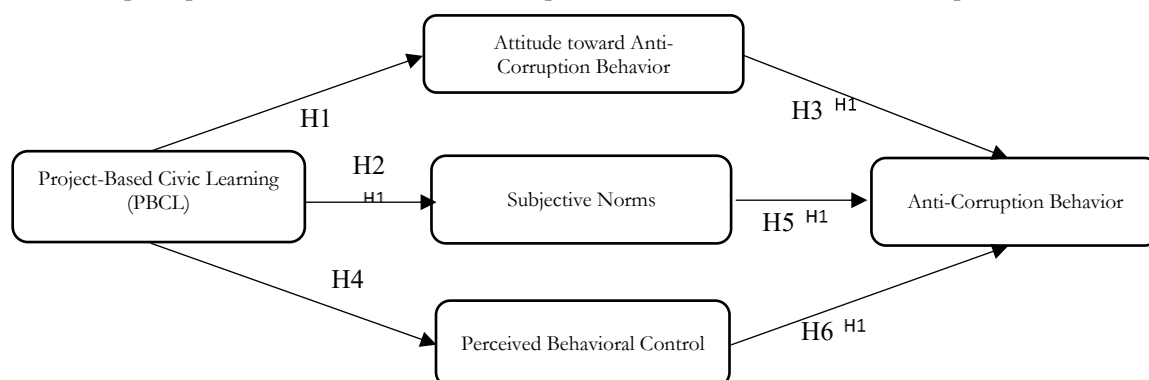


Figure 1: Conceptual Framework

RESEARCH METHODS

Research Design

This study uses a mixed-methods approach with an explanatory sequential design. In the first stage, quantitative data was collected to test a structural model that integrates Project-Based Civic Learning (PBCL), Theory of Planned Behavior (TPB), and character education. In the second stage, qualitative research is carried out to explore in depth the process of internalizing student anti-corruption values which cannot be fully explained through statistical data. This approach was chosen because it is able to capture the complexity of the formation of anti-corruption attitudes and behaviors from psychological, pedagogical, and sociocultural perspectives (Creswell & Plano Clark, 2018).

Location and Research Participants

The research was carried out in several universities in Central Java, both public and private, that have implemented project-based learning (PBCL) in Civic Education, Anti-Corruption Education, or similar courses. The research participants were semester IV–VI students from the social-humanities group (Education, Law, Political Science, Sociology, and Languages). Inclusion criteria: Students who have participated in PBCL in at least one course related to citizenship or public integrity. Willing to participate in filling out questionnaires and interviews. The quantitative sample size was determined by referring to the "10 times the most number of indicators" guideline on latent variables in the PLS-SEM model (Hair et al., 2021). With the number of indicators in this study, a minimum of 150–200 respondents is needed. For the qualitative stage, informants were selected using snowball sampling until they reached the point of information saturation.

Research Instruments

Quantitative Instruments

The instrument was a closed questionnaire with a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The indicators were developed based on the SDG construct (Ajzen, 1991, 2011, 2020) and character education literature.

Variable indicators: PBCL: involvement in project planning, team collaboration, critical reflection, social responsibility (Bell, 2010; Larmer et al., 2015; Thomas et al., 2000). Attitude toward Anti-Corruption: positive perception of integrity, attitude toward gratification, concern for social justice (Ceschel et al., 2022; Sumaryati et al., 2022). Subjective Norms: the perception of support from peers, lecturers, family, and community (Ajzen, 2011; Memon et al., 2021). Perceived Behavioral Control: confidence in being able to refuse bribes, the ability to report irregularities, confidence in dealing with social pressure (Liu et al., 2025; Sulaiman et al., 2024). Anti-Corruption Behavior: the intention to maintain integrity, involvement in anti-corruption campaigns, and actual behavior in academic and social situations (Abdurrahim et al., 2023; Nadir, 2024).

Qualitative Instruments

The instrument is in the form of semi-structured interview guidelines that explore students' experiences while participating in PBCL, reflection on integrity values, collaboration dynamics, and internalization of anti-corruption attitudes. Project documentation (logbooks, reports, campaign products) is used as additional data to reinforce triangulation.

Data Analysis Techniques

Quantitative stage: data is analyzed with Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS. Evaluation was carried out through: Outer model: indicator reliability (outer loading ≥ 0.7), construct reliability (composite reliability ≥ 0.7), convergent validity (AVE ≥ 0.5), and discriminant validity. Inner model: analysis of path coefficient, R^2 value, effect size (f^2), predictive relevance (Q^2), and significance test by bootstrapping 5,000 subsamples. Qualitative Level: data are analyzed by thematic analysis, including open codification, categorization, and theme drawback. Data Integration: quantitative and qualitative results are compared (convergence triangulation) to strengthen the validity of interpretation.

RESULTS AND DISCUSSION

Results

Respondent Description

Of the 250 questionnaires sent, approximately 210 were returned (a response rate of 84%), and 200 valid questionnaires were included in the analysis after verification of completeness. This response rate can be classified as very good because it is lower than the minimum recommended number in social surveys (Baruch & Holtom, 2008). According to the respondent profile, the majority were women (60%) aged between 19 and 22. By study program, approximately 45% came from education, 20% from law, 15% from sociology, and the remainder from political science and other social-humanities programs. This study highlights the heterogeneity of the social contexts experienced by students, as well as the need for data representation in understanding the dynamics of project-based learning and integrity in higher education (Altbach & de Wit, 2015; Marginson, 2022).

Table 1. Respondent demographics

Characteristics	Category	total	Percentage (%)
Gender	Male	80	40%
	Female	120	60%
Age	19–20	90	45%
	21–22	80	40%
	>22	30	15%
Study program	Education	90	45%
	Law	40	20%
	Sociology	30	15%
	Other	40	20%

Evaluation of Measurement Model (Outer Model)

The purpose of the measurement analysis model is to determine the construct validity and reliability. The results show that all indicators have factor loadings greater than 0.70, therefore they can be considered convergently valid (Bagis, Adawiyah, et al., 2024; Hair et al., 2021). The Average Variance Extracted (AVE) value for each construct is also greater than 0.50, indicating that the range of each indicator can be explained by the construct (Fornell & Larcker, 1981). According to reliability statistics, Cronbach's Alpha and Composite Reliability (CR) are both greater than 0.70, indicating that the research instrument can be considered reliable. Discriminant validity tests using the HTMT criteria show all values below 0.85, indicating that there are clear differences between the constructs (Dijkstra & Henseler, 2015). Overall, the measurement model has met the established criteria and can therefore be moved to a structural model.

Table 2. Outer Loading, AVE, CR, and Cronbach's Alpha

Construct / Indicator	Loading	AVE	CR	Cronbach's Alpha
Project-Based Civic Learning (PBCL)				
PBCL1: Project involvement	0.82			
PBCL2: Critical reflection	0.85			
PBCL3: Collaboration	0.78	0.64	0.88	0.83
Attitude toward Anti-Corruption				
ATT1: Integrity is important	0.88			
ATT2: Rejecting corrupt practices	0.84	0.72	0.89	0.81
Subjective Norms				
SN1: Peer pressure	0.79			
SN2: Lecturer's expectations	0.81			
SN3: Community expectations	0.77	0.63	0.86	0.80
Perceived Behavioral Control				
PBC1: Belief in rejecting gratification	0.73			
PBC2: Confidence in reporting irregularities	0.86	0.65	0.87	0.82
Anti-Corruption Behavior				
ACB1: Intention to maintain integrity	0.89			
ACB2: Actual behavior maintains integrity	0.75	0.68	0.90	0.84

Structural Model Evaluation (Inner Model)

To understand the relationship between latent variables, a structural model was applied. According to Chin, (1998), the analysis results show that the anti-corruption performance variable has an R² value of approximately 0.61, which is considered quite significant. The positive predictive relevance of Q² indicates that the model has predictive significance (Hair et al., 2021). The Goodness-of-Fit (GoF) metric yielded a value of 0.55, which is considered high (Tenenhaus et al., 2005). All path coefficients were significant at $p < 0.05$, supporting the proposed hypothesis.

Table 3. Hypothesis Test Results

Hypothesis	Relationship	β	t-value	p-value	result
H1	PBCL→Attitude	0.42	5.21	0.000	Accepted
H2	PBCL→Subjective Norms	0.38	4.87	0.000	Accepted
H3	PBCL→Perceived Behavioral Control	0.36	4.55	0.000	Accepted
H4	Attitude→Anti-Corruption Behavior	0.29	3.92	0.001	Accepted
H5	Subjective Norms→Anti-Corruption	0.25	3.55	0.002	Accepted
H6	Perceived Behavioral Ctrl→Behavior	0.31	4.10	0.000	Accepted
H7	PBCL→Anti-Corruption Behavior	0.27	3.76	0.001	Accepted

Qualitative Results

Thematic analysis of the interviews yields the primary theme, which is the internalization of anti-corruption principles through Project-Based Civic Learning (PBCL):

Theme 1. Strengthening Personal Integrity

Students stated that participating in a real-life project made them more aware of the importance of honesty and consistent behavior. The issue of corruption, previously considered abstract, became tangible.

"Through this project, I realized that refusing gratification is not just a theory, but a personal responsibility." (Student A, Education)

Theme 2. The Role of Social Norms and Group Pressure

Collaboration within project teams creates positive social pressure that encourages students to maintain integrity. They feel responsible not only for themselves but also for the team and community.

"If a friend starts to become indifferent, the others usually immediately remind them. So we maintain a mutual commitment to integrity." (Student B, Law)

Theme 3. Challenges of PBCL Implementation

Several students acknowledged obstacles, such as differing perceptions of corruption or time constraints in completing projects. This suggests that internalizing anti-corruption values is also influenced by external and contextual factors.

"Some say small gratuities are normal, so there are still differing views among us." (Student C, Sociology)

Theme 4. Critical Reflection and Behavioral Change

PBCL facilitates a space for reflection that empowers students to become more confident in rejecting even minor forms of corruption. They report changes in their daily behavior, such as refusing assignments or non-transparent use of activity funds.

"Now I'm more confident in saying no to small, dishonest practices, because I realize the significant impact." (Student D, English)

Table 4. Thematic Findings of PBCL on Students' Anti-Corruption Attitudes

Subject	Description	Example of a statement
Strengthening personal integrity	Students feel that anti-corruption issues are more real through the project.	"Refusing gratification is not just a theory, but a personal responsibility."
The role of social norms	Team pressure creates collective commitment	"We remind each other to maintain our commitment to integrity."
Implementation challenges	There are differences in perception and technical constraints	"There are still those who think that a small gratification is normal."
Critical reflection and behavioral change	Students are more confident in rejecting dishonest practices	"Now I am more willing to say no to small, dishonest things."

DISCUSSION

The model measurement results show that PBCL indicators, such as project engagement, critical reflection, and collaboration, have high factor loadings (0.72–0.85). This indicates that the PBCL dimensions are truly analyzed in the student learning process. This is in line with (Bell, 2010) and (Larmer et al., 2015), who emphasize the importance of collaboration and reflection as components of PBL. In the anti-corruption context, students' actual involvement in projects makes integrity more relevant and understandable, which increases positive attitudes

toward honest activities. In other words, the higher the level of PBCL mastery, the higher the likelihood of a strong anti-corruption attitude.

Students' attitudes toward anti-corruption behavior were demonstrated by rejection of corrupt practices, consistently high loading values (0.74-0.88), and indicators of positive perceptions of integrity. This supports the TPB framework, which states that attitudes are strong predictors of intensity and performance (Ajzen, 2011, 2020). This study supports the findings of (Sumaryati et al., 2022) that project-based learning increases students' moral awareness, as well as (Ceschel et al., 2022) who highlight the relationship between civic education and public education. Therefore, positive anti-corruption attitudes can be seen as a long-term outcome of a reflective and participatory learning process.

Students' subjective norms were also strengthened by the PBCL. All indicators of social pressure from peers, lecturers, and the community were valid, with loading values above 0.70. This indicates that social norms are an important mechanism for internalizing anti-corruption principles. (Rasheed, 2023) emphasized that community-based education can strengthen team commitment to ethical principles, while (Abdurrahim et al., 2023) highlighted the importance of group norms in civic education. Thus, students' experiences in this project not only strengthened individual attitudes but also reinforced social norms that support anti-corruption practices in a highly competitive environment.

Students' Perceived Behavioral Control (PBCL), measured by beliefs, can be used to measure satisfaction and integrity. The PBC can also be used to determine the loading threshold (0.73-0.86). The results of the study indicate that the PBCL can increase students' confidence levels in facing moral dilemmas. Liu et al., (2025) and Sulaiman et al., (2024) stated that practical experience gives students the ability to demonstrate ethics. Thus, the development of PBC through the PBCL indicates that students not only understand the importance of integrity but also have the ability to explain it in simple language.

Furthermore, student anti-corruption behavior, as the dependent variable, is determined by the intensity and active behavior that respects integrity, with loadings ranging from 0.75-0.89. This highlights the validity of anti-corruption practices as part of the PBCL-TPB model. This study supports the findings of Nadir, (2024) and Kusuma et al., (2022) that attitudes, norms, and behavioral control have a significant impact on integrity. However, more importantly, this study also shows that PBCL has a lasting effect on student anti-corruption activities. This highlights previous literature that has largely only addressed the relationship between PBCL and civic engagement (Ceschel et al., 2022; Yusoff et al., 2023). Thus, this study highlights PBCL as an effective pedagogical approach for socio-cultural interventions in Indonesian education..

Furthermore, the relationship between PBCL and anti-corruption activities is not only personal; it is also collective. In the context of higher education in Indonesia, students often form learning communities that function as agents of social change. Therefore, the success of PBCL in upholding student norms demonstrates that anti-corruption education is not only about fostering personal behavior, but also about fostering an environment of integrity at the academic level. This aligns with Bandura, (2001) view of social learning theory, which states that moral behavior develops in social interactions and is influenced by group dynamics. Thus, PBCL-based anti-corruption practices can be understood as a strategy aimed at changing institutional culture, rather than just individual culture.

In addition to quantitative analysis, qualitative analysis enhanced and deepened understanding of the internalization of anti-corruption values through PBCL. Students truly felt the relevance of anti-corruption issues when they reflected on a real-life project, in line with the principle of "personal integrity." This reinforces the findings of the external model, which showed that engagement and critical reflection on the project had a high level of content. According to Bell, (2010) and Larmer et al., (2015), critical reflection is an essential component of moral reflection and moral judgment.

Furthermore, the theme of "the role of social norms and peer pressure" explains why student subjectivity is so strong in the structural model. Positive social pressure is necessary for students to consistently uphold integrity. This supports subjective norm theory in the TPB (Ajzen, 2011) and, more recently, assertion that community-based learning strengthens teamwork. In other words, qualitative evidence suggests that PBCL not only improves individual performance but also strengthens social norms within the academic community.

Other items, such as "critical reflection and behavioral change," provide evidence that PBC is being thoroughly examined by students. These items describe fraudulent practices in everyday life, which is consistent with high loading indicators of PBC and anti-corruption activities. This supports the assertion of Liu et al., (2025) and Sulaiman et al., (2024) that real-life experiences enhance students' ethical capacity. Thus, the qualitative results are stronger than the quantitative ones, demonstrating the internalization of anti-corruption principles and enhancing the validity of the PBCL and TPB models as culturally sensitive teaching approaches in higher education.

Furthermore, this study adds to the international literature on anti-corruption education in developing countries. While most previous research has focused on normative approaches within school settings (Abdurrahim et al., 2023; Almazroui, 2023), this study demonstrates that a project-based approach is more effective in promoting

knowledge internalization. The fact that actual student behavior indicators show a high workload confirms that PBCL is not confined to the cognitive realm but is capable of demonstrating changes in actual behavior. This highlights the need for a shift in the paradigm of anti-corruption education from an instructional approach to a participatory, contextual, and collaborative approach.

CONCLUSION

Based on this study, Project-Based Citizenship Learning (PBCL) has a significant impact on students' behavior, norms, perceived behavioral control, and anti-corruption behavior. Quantitative results indicate that all constructs are valid and reliable with high loadings, and the structural model shows a significant R^2 value (0.61), positive predictive relevance, and high Goodness-of-Fit (0.55). In contrast, qualitative results highlight understanding by highlighting the mechanisms of internalization of anti-corruption values through personal integrity, social norms, critical reflection, and changes in student actions.

The implication of this study is the need to use the Theory of Planned Behavior (TPB) in anti-corruption practice, where PBCL is developed as a bridge between the cognitive, affective, and conscious aspects of mastery. Practical implications include recommendations for teachers to incorporate PBCL into character education curricula as a means to foster an integrity-based culture aligned with SDG 16.

This study has limitations related to its geographic location (Central Java), the use of self-report data that may be biased toward social groups, and the inability to control for moderating factors such as gender or cultural differences. To more deeply determine the dynamics of integrity internalization, it is recommended that this study use a national sample design, a longitudinal design, and investigate contextual factors. Thus, PBCL has the potential to be used not only as a teaching strategy but also as a model for socio-cultural transformation to create an anti-corruption generation in Indonesia.

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