



# Impact of an ethics program on the moral decisions of school students

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## Abstract

The development of moral reasoning and decision-making constitutes a central component of contemporary higher education. This study aimed to determine the effect of an ethics training program on moral decision-making among school students. A quasi-experimental design with a non-equivalent control group was employed, using pretest and posttest measures to assess changes in moral reasoning, moral judgment, and ethical dilemma resolution. The sample consisted of students assigned to an experimental group, which received the intervention, and a control group that followed the regular curriculum. Results showed statistically significant posttest differences in favor of the experimental group, with improvements across the evaluated dimensions. The effect size suggests a moderate impact of the program on moral decision-making. It is concluded that the systematic implementation of structured ethics training can strengthen moral competencies in higher education contexts. These findings provide empirical evidence to support curriculum design aimed at students' integral development and highlight the importance of incorporating structured ethics programs in high school education.

**Keywords:** Ethics, Moral concept, Reasoning, Higher education, Intervention.

## Introduction

The development of moral judgment and the capacity for ethical decision-making among adolescents has become an increasing concern for contemporary educational systems worldwide. Rapid social transformations, cultural pluralism, technological changes, and the diversification of value frameworks have challenged traditional mechanisms of moral socialization, assigning new responsibilities to educational institutions (Ziadet et al. 2025). Schools are no longer expected solely to transmit academic knowledge, but also to actively contribute to the development of ethical reasoning, responsible citizenship, and reflective decision-making competencies. In certain educational contexts, these criteria are framed within specific ethical traditions, including the Catholic moral tradition, which proposes a systematic set of principles oriented toward human dignity, the common good, and personal responsibility.

Adolescence represents a critical stage for the consolidation of moral reasoning and the construction of identity (Kohlberg 1984, Piaget 1932). It is precisely during this period that students face increasingly complex social situations that

require them to evaluating conflicting values, considering different perspectives, and anticipating consequences. In this sense, the school environment plays a crucial role in shaping how adolescents interpret moral dilemmas, justify their decisions, and integrate ethical criteria into their daily conduct. In institutions with a religious identity, these processes are often articulated with axiological frameworks derived from specific religious traditions, which raises the need to empirically analyze how these frameworks influence moral decision-making.

Historically, moral education has followed diverse pedagogical paths. Initially, educational models emphasized the normative transmission of rules and expected behaviors. Later perspectives, influenced by constructivist and developmental theories (Piaget 1932), emphasized active participation, dialogue, and critical reflection as fundamental mechanisms for moral learning. Current research agrees that moral competencies are not acquired solely through prescriptive instruction but rather through of guided reflection, dilemma analysis, and deliberation in structured educational contexts (Rest 1986). From this perspective, moral education can be developed within different axiological frameworks, provided that reflective processes are promoted that allow

students to understand, justify, and apply ethical principles in concrete situations.

However, one of the main challenges in this field lies in the rigorous evaluation of educational programs aimed at moral development. Many school initiatives lack methodological designs capable of measuring their actual impact on students' decision-making. The scarcity of studies with comparison groups and pre- and post-intervention measurements has limited the collection of evidence supporting necessary pedagogical strategies. Consequently, there is a growing need for research adopting quasi-experimental or experimental designs and incorporating statistical analyses that allow relationships to be established between educational interventions and observable outcomes, even when these interventions are development within educational contexts with a defined religious identity.

In Latin America, this research gap is particularly relevant. Educational systems in the region include both secular and confessional institutions, within which the Catholic moral tradition has historically had a significant role in shaping educational projects. Nevertheless, empirical research evaluating the educational impact of structured programs inspired by this tradition remains limited, especially at the secondary education level.

Within this framework, the present study aims to evaluate the effect of a structured moral educational program on moral decision-making in secondary school students. The program was implemented in an institution with Catholic identity and is based on ethical principles derived from the Catholic moral tradition, understood as axiological framework of reference. This intervention was designed to promote ethical deliberation through guided reflection activities, moral dilemmas analysis, and structured dialogue within the school context. Rather than focusing on normative instruction, the program emphasizes students' active participation in reasoning processes that enable them to analyze situations, consider multiple perspectives, and justify their decisions based on ethical criteria.

To address this objective, the research adopts a quasi-experimental design with an experimental group and a control group, incorporating pretest and

posttest measurements. The independent variable corresponds to participation in the moral reflection program. The dependent variable is the level of moral decision-making, operationalized based on evaluative criteria consistent with ethical principles derived from the Catholic moral tradition, which constitute the normative reference used in the assessment.

The research question guiding the study is the following: to what extent does participation in a structured moral reflection program, grounded in principles of the Catholic moral tradition, influence the moral decision-making of secondary school students? The following hypothesis was proposed: students who participate in the moral reflection program will show significant improvements in moral decision-making, according to axiological criteria derived from the Catholic moral tradition (Lucas 2006), compared with students in the control group.

This study contributes to the literature in three main ways. First, it provides empirical evidence derived from a pedagogical intervention evaluated through a quasi-experimental design. Second, it expands the body of scientific production originating from Latin American contexts, including educational institutions with a confessional identity. Third, it offers pedagogical implications regarding the feasibility of integrating specific ethical frameworks within structured reflective strategies without compromising methodological rigor in their evaluation.

By situating moral education within an empirical and pedagogical framework, the present research seeks to advance the understanding of how educational programs inspired by specific ethical traditions can influence the strengthening of adolescent moral judgment when evaluated through systematic scientific procedures.

## Methodology

**Research design.** - The study was conducted under a quantitative approach with a quasi-experimental design of the pretest-posttest type with a single group, aimed at evaluating the effects of a reflection program based on Catholic ethics on the moral

decisions of secondary school students.

**Participants.** - The sample consisted of fifth-grade secondary school students from a public educational institution in Peru during the year 2025. The sample was selected through non-probabilistic convenience sampling, including students who voluntarily participated in the educational program.

**Intervention.** - The intervention consisted of the implementation of an ethical reflection program based on principles of Catholic ethics. This program included educational sessions oriented toward reflection on ethical principles, analysis of moral dilemmas, formation of moral conscience, and the development of virtues and values. The activities were carried out during school hours using participatory pedagogical strategies.

**Instrument.** - Data collection was conducted using a moral decision-making questionnaire composed of dichotomous questions (YES/NO) accompanied by a reflective justification. The instrument evaluated four dimensions: moral dilemmas, moral judgment, and moral conduct. The validity of the instrument was determined through expert judgment, and reliability was assessed using Cronbach's alpha coefficient.

**Data analysis.** - The data obtained from the pretest and posttest were analyzed using descriptive and inferential statistics in order to determine the changes in the level of students' moral decision-making after the implementation of the program.

**Results**

The results correspond to the evaluation of the effect of the Catholic ethics reflection program applied to the experimental group. The analysis was carried out in order to determine whether the implementation of the ethics program generated significant differences in the level of moral decision-making between students in the experimental group and those in the control group. For this propose, descriptive and inferential analyses were performed using normality tests and mean comparison tests.

**Descriptive statistics.** - Initially, the descriptive statistics of the posttest applied to both groups were analyzed. The results show initial differences between the control group and the experimental group in the levels of moral decision-making, revealing a favorable trend in the group that received the educational intervention (Table 1).

**Table 1.** Descriptive statistics of the posttest for the control group and experimental group in the moral decision-making questionnaire administered to adolescents from an educational institution in Huanchaco at the end of the experiment

		Posttest control group	Posttest experimental group - Moral
		Moral decisions	decisions
N	Valid	30	30
	Missing	0	0
Mean		20.3667	30.3000
Standard error of the mean		1.24336	0.87382
Median		21.0000	30.5000
Mode		16.00 <sup>a</sup>	29.00 <sup>a</sup>
Standard Deviation		6.81015	4.78611
Skewness		0.354	- 0.399
Std. error of skewness		0.427	0.427
Coefficient of variation		33%	16%
Minimum		9.00	20.00
Maximum		37.00	38.00

**Note:** Data obtained from the SPSS database

The results indicate that the experimental group showed higher means values compared to the control group, suggesting a possible effect of the educational

program on the development of students' moral judgment. The descriptive statistics of the posttest show important differences between the control and

experimental groups. While the control group had a mean of 20.37, the experimental group reaches a mean of 30.30, which suggests a significant effect of the educational intervention on the development of moral decision-making.

In order to complement this first approximation, other descriptive statistics associated with the study variables were analyzed (Table 2).

**Table 2.** Comparative descriptive statistics (posttest) across the dimensions of the Catholic ethics program to strengthen adolescents' moral decision-making in an educational institution in Huanchaco.

Statistics		Moral Reasoning (EG) Posttest	Moral Dilemmas (EG) Posttest	Moral Judgment (EG) Posttest	Moral Conduct (EG) Posttest
N	Valid	30	30	30	30
	Missing	0	0	0	0
Mean		8.4000	7.7000	7.5000	6.7000
Standard Error of the Mean		0.25189	0.28828	0.29459	0.31858
Median		8.00000	8.00000	7.00000	7.00000
Mode		8.00	9.00	7.00	7.00
Standard deviation		1.37966	1.57896	1.61352	1.74494
Skewness		- 1.043	- 0.367	0.106	- 0.547
Std. error of Skewness		0.427	0.427	0.427	0.427
Coefficient of variation		16 %	21 %	22 %	26 %
Minimum		4.00	5.00	5.00	2.00
Maximum		10.00	10.00	10.00	10.00

**Note:** Data processed using SPSS

These results allow us to observe the general distribution of scores obtained by students in the analyzed variable, as well as the preliminary differences between the study groups.

**Table 3.** Shapiro-Wilk normality test

Test of normality			
Shapiro - Will			
	Statistic	df	Sig.
Posttest control group	0.976	30	0.724
Posttest experimental group	0.948	30	0.150
<sup>a</sup> Lilliefors significance correction			

**Normality test.** - Before performing the mean comparison tests, the distribution of the data was evaluated using the Shapiro-Wilk test, with the aim of determining whether the data followed a normal distribution (Table 3).

The test results allowed the establishment of the statistical assumptions necessary for the application of parametric tests, confirming the appropriateness of the comparative analysis between groups.

**Comparison between experimental group and control group.** - Subsequently, an independent samples test was applied to determine whether there were statistically significant differences between the control group and the experimental group regarding the moral decision-making variable.

**Table 4.** Independent samples test for the moral Decision-Making variable

Proof of samples independent								
	Levene's Test for Equality of Variances				t-test for Equality of Means			
	F	Sg.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference

									Lower	Superior
YOU	Equal variances assumed	4.137	0.047	6,536	58	0	9.93333	1.5197	6.89131	12.97535
	Equal variances not assumed			6,536	52.029	0	9.93333	1.5197	6.88386	12.9828

The results show significant differences between both groups, which suggesting that the pedagogical intervention had an impact on the development of students' moral decision-making.

**Analysis by dimensions of the variable.** - In order to understand the impact of the program more precisely, a comparative analysis was conducted considering the specific dimensions of the moral decision-making variable (Table 5).

**Table 5.** Independent samples test by dimensions

Independent samples test										
		Levene's test for equality of variances		t test for the media equality						
		F	Sg.	t	df	Sig. (2-tailed)	Mean difference	Std. error difference	95 % of interval trust of the difference	
									Lower	Upper
<b>D1</b>										
D1	Equal variances assumed	2.301	0.135	5.836	5 8	0.000	2.33333	0.39981	1.53303	3.13364
	Equal variances not assumed			5,836	55,636	0.000	2.33333	0.39981	1.53231	3.13436
D2	Equal variances assumed	1.763	0.189	4.779	5 8	0.000	2.30000	0.48126	1.33666	3.26334
	Equal variances not assumed			4.779	53.717	0.000	2.30000	0.48126	1.33502	3.26498
D3	Equal variances assumed	0.377	0.542	5.934	5 8	0.000	2.66667	0.44935	1.76719	3.56614
	Equal variances not assumed			5.934	56.879	0.000	2.66667	0.44935	1.76682	3.56652
D4	Equal variances assumed	1.531	0.221	5.03.4	5 8	0.000	2.7000	0.53638	1.62632	3.77368
	Equal variances not assumed			5.03.4	53.373	0.000	2.7000	0.53638	1.62434	3.77566

The results show that some dimensions present more pronounced differences than others, suggesting that the educational program influences the components of moral reasoning in different ways.

**Analysis of the relationship between variables:** Additionally, a regression analysis was conducted to identify the relationship between the implementation of the educational program and the level of moral decision-making achieved by the students.

**Table 6.** Regression coefficients

Coefficients							
Model		Unstandardized coefficients			Standardized coefficients	t	Sg.
		B	Std. Error	Beta			
1	Constant	21.981	3.335		6.591	0	
	PretGE	0.448	0.174	0.437	2.57	0.016	
Dependent Variable: PostGE							

The coefficients obtained allow us to estimate the degree of influence of the program on the dependent variable.

**Statistical model adjustment.** - To evaluate the explanatory capacity of the model, the corresponding statistical summary was analyzed.

**Table 7.** Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Statistics of change				
					Change in R Square	F Change	df1	df2	Sig. F Change
1	.437 <sup>a</sup>	.0191	.0162	4.38153	.0191	6.603	1	28	.0016

Predictors: (Constant), PretGE

The results show a level of fit that suggests that the educational intervention explains a significant proportion of the variability observed in moral decision-making.

**Percentage distribution of moral decision levels.:** Finally, the levels of the variable were analyzed in percentage terms in order to identify the distribution of students according to their level of moral development.

**Table 8.** Levels of the moral decision-making variable (percentage distribution)

Level	Pretest GE level		Posttest GE level		Pretest GE level		Posttest GE level	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Low	14	46.7%	16	53.3%	21	70.0%	1	3.3%
Medium	14	46.7%	11	36.7%	8	26.7%	13	43.3%
Medium high	2	6.6%	3	10.0%	1	3.3%	10	33.4%
High	0	0.0%	0	0.0%	0	0.0%	6	20.0%
Total	30	99.9%	30	100.0%	30	100.0%	30	100.0%

The results show a greater concentration of students in the experimental group at higher levels of moral development, which reinforces the evidence on the effectiveness of the educational program.

## Discussion

The results obtained in the present study allow us to affirm that the implementation of the Catholic ethics reflection program had a significant effect on strengthening the moral decision-making of the participating students. The differences observed between the experimental and control groups confirm the hypothesis that an educational intervention guided by ethical principles can contribute to the development of moral reasoning among adolescents.

The statistical analysis shows that the experimental group achieved significantly higher levels in the moral decision-making variable compared with the control group. As observed in the posttest results, the mean of the experimental group clearly exceeds that

of the control group, demonstrating the impact of the implemented program. According to the inferential analysis, the bilateral significance obtained in the statistical tests ( $p < 0.05$ ) confirms that the differences found are not due to chance but rather to the pedagogical intervention implemented during the study.

From the perspective of this study, these results support the idea that ethical education inspired by the Catholic moral tradition can strengthen students' moral decision-making processes. The program applied is based on a conception of ethics oriented toward the development of moral conscience, reflection on ethical dilemmas, and the formation of moral judgment, elements that are part of the educational tradition of the Christian-inspired educational tradition.

Likewise, the analysis by dimensions shows that the impact of the program is manifested in different components of moral development. In particular, the

results reveal improvements in moral reasoning, the capacity to analyze moral dilemmas, moral judgment, and students' moral conduct. These elements constitute fundamental dimensions in the formation of ethical consciousness, as they allow students not only to identify morally problematic situations but also to reflect on the possible consequences of their decisions.

In this sense, the Catholic ethics program applied in this research was oriented toward promoting processes of moral reflection based on values such as the dignity of the person, responsibility, and the pursuit of the common good. These principles are part of a Christian-inspired anthropology that conceives of moral education as a process of integral formation of the person. From this perspective, ethical education is not limited to the transmission of norms but seeks to develop students' capacity for moral discernment.

The results of the study suggest that this educational approach contributes to strengthening moral decision-making within the school context. Empirical evidence indicates that students who participated in the program present higher levels of moral reflection compared to those who did not receive the intervention. Consequently, the implementation of educational programs based on ethical reflection may constitute a relevant strategy for promoting moral development in educational institutions that integrate a religious formative orientation.

Overall, the findings of the research confirm that implementation of a Catholic ethics reflection program can positively influence the development of students' moral decision-making. These results reinforce the importance of integrating spaces for ethical education within the educational curriculum, especially in institutional contexts where moral formation constitutes a central component of the educational project.

## Conclusions

The research presented demonstrates that the implementation of a Catholic ethics reflection program significantly contributes to strengthening the moral decision-making of participating students. The statistical results reveal significant differences

between the experimental group and the control group, confirming the hypothesis that a pedagogical intervention oriented toward ethical reflection can foster the development of moral judgment within the educational context. At the same time, the study shows that the impact of the program is manifested in different dimensions of moral development, particularly in moral reasoning, the capacity to analyze ethical dilemmas, and the formation of moral judgment. These results suggest that educational processes that incorporate systematic spaces for ethical reflection can strengthen students' ability to evaluate moral situations and make well-founded decisions. Likewise, the research highlights the pedagogical value of ethical education based on principles of Christian inspiration. The implemented program proposes moral reflection guided by values such as the dignity of the person, responsibility, and the pursuit of the common good, which promotes the development of a more reflective moral conscience among students.

Overall, the study's findings support the importance of integrating ethics training programs within school educational proposals. The empirical evidence obtained suggests that type of initiative can effectively contribute to strengthening moral discernment among adolescents, especially when articulated with the formative project of educational institutions.

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