Moral Judgment among Secondary School Students in Relation to Hidden Curriculum Practices: An Ex Post Facto Study

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Abstract

Moral judgment is an important aspect of students' ethical and social development. In addition to formal classroom instruction, school culture, teacher behaviour, peer relationships, institutional rules, and everyday interactions may contribute to students' moral understanding. The present study examines moral judgment among secondary school students in relation to hidden curriculum practices in Darjeeling District, West Bengal. An ex post facto research design was adopted, and the sample comprised 400 students, including 200 male and 200 female students, selected from 20 government secondary schools affiliated with the West Bengal Board of Secondary Education. Hidden curriculum practices were assessed using a 42-item Hidden Curriculum Assessment Scale, while moral judgment was measured using Ranjana Gupta's Moral Judgment Test. Descriptive statistics, factor analysis, Pearson's product–moment correlation, and regression analysis were reported. The hidden curriculum scale identified five dimensions and explained 66.26% of the total variance. Social Values and Ethics recorded the highest mean score ($M = 4.12$), whereas Autonomy recorded the lowest ($M = 3.76$). Hidden curriculum practices were positively correlated with moral judgment ($r = .72$, $p < .01$). The reported regression analysis indicated that hidden curriculum scores explained approximately 52% of the variance in moral judgment. Female students also obtained higher reported mean scores than male students across all five dimensions of moral judgment. The findings highlight the relevance of school culture to the study of students' moral development, while recognising the need for careful interpretation of the measurement properties and statistical results.

Keywords: hidden curriculum, moral judgment, secondary school students, ethical values, school culture, gender differences, Darjeeling District

1. Introduction

Education is concerned not only with the acquisition of academic knowledge but also with the development of values, attitudes, social responsibility, and ethical understanding. Schools provide opportunities for students to learn about fairness, cooperation, honesty, responsibility, and respect for others. These qualities are developed through formal instruction as well as through everyday experiences within the school environment.

Moral judgment refers to the process through which individuals evaluate actions and situations in relation to moral principles, intentions, consequences, justice, and responsibility. During adolescence, students encounter increasingly complex social relationships and ethical situations. Their moral understanding may be shaped by family experiences, peer relationships, cultural expectations, and educational environments.

The hidden curriculum is an important concept for understanding the informal educational experiences that occur alongside the formal curriculum. Jackson (1968) drew attention to the social processes and implicit expectations that characterise classroom life. School routines, teacher–student relationships, disciplinary practices, classroom participation, and peer interactions can communicate values and behavioural expectations that are not explicitly stated in textbooks or syllabi.

The hidden curriculum may provide opportunities for students to experience fairness, cooperation, inclusion, accountability, and independent decision-making. For example, consistent disciplinary practices may communicate expectations concerning responsibility, while respectful communication may encourage consideration of others' perspectives. Similarly, inclusive classroom practices may expose students to different viewpoints and promote reflection on equality and justice.

However, the relationship between hidden curriculum and moral judgment should be investigated empirically rather than assumed. Students' moral judgment may also be associated with age, family background, cognitive development, peer influence, and other contextual factors. Therefore, examining the relationship between students' perceptions of hidden curriculum practices and their moral judgment can contribute to a broader understanding of school-based socialisation.

The present study investigates this relationship among secondary school students in Darjeeling District, West Bengal. It also examines reported gender differences in five dimensions of moral judgment and considers the implications of the findings for school culture and educational practice.

2. Review of Related Literature

Previous studies have highlighted the importance of school environment and educational experiences in students' moral development. King and Matthew (2002), through a review of 172 studies, reported that collegiate experiences were associated with moral judgment development. Choudhary and Madhuri (2014) found a positive relationship between moral judgment and school environment dimensions, including acceptance, cognitive encouragement, and creative stimulation. Similarly, Kohoulat (2016) reported that students' perceptions of school

moral atmosphere significantly predicted moral development. These findings emphasise the relevance of institutional climate in understanding students' moral judgment.

Research has also examined gender differences and other factors associated with moral judgment. Mohanty (2008) reported significant gender differences in moral judgment among elementary school students, while Yadav (2014) and Kumar (2015) found gender-related differences among school students, with female students obtaining higher moral judgment scores in the latter study. However, Louis and Emerson (2011) found no significant gender difference, indicating that findings across studies are not entirely consistent. Research by Jan et al. (2006) and Hammond and Emler (2007) further demonstrated that relationships between moral reasoning and behaviour are complex.

Studies specifically addressing hidden curriculum, such as Alsubaie (2015), highlight how implicit school practices may reinforce values and attitudes beyond formal instruction. Together, these studies establish the importance of examining school culture, moral atmosphere, and everyday educational experiences. However, limited evidence directly addresses the relationship between hidden curriculum practices and moral judgment among secondary school students in Darjeeling District. The present study therefore addresses this contextual research need by examining the association between students reported hidden curriculum experiences and their moral judgment, while also analysing gender-wise differences in moral judgment.

3. Need and Significance of the Study

Moral judgment is relevant to students' ability to evaluate actions, understand responsibility, and respond to ethical situations. Although schools formally teach subjects and prescribe behavioural expectations, students also encounter moral messages through classroom routines, teacher behaviour, peer relationships, and institutional practices.

The present study is significant because it examines hidden curriculum practices as a possible correlate of moral judgment among secondary school students. Its findings may help teachers and school administrators reflect on how fairness, discipline, communication, inclusion, and student autonomy are experienced within schools.

The study also provides a context-specific investigation involving students from selected government secondary schools in Darjeeling District. Its findings may inform further research on school culture, ethical development, and student socialisation. However, the implications should be interpreted in accordance with the study's design, the quality of the instruments, and the statistical evidence available.

4. Statement of the Problem

The problem of the present study is stated as follows:

"Moral Judgment among Secondary School Students in Relation to Hidden Curriculum Practices: An Ex Post Facto Study."

5. Objectives of the Study

The study was guided by the following objectives:

1. To analyse hidden curriculum practices in selected secondary schools of Darjeeling District.
2. To examine moral judgment among male and female secondary school students.
3. To investigate gender-wise differences in the five dimensions of moral judgment.
4. To examine the relationship between hidden curriculum practices and moral judgment among secondary school students.
5. To investigate the extent to which hidden curriculum scores statistically predict moral judgment scores.

6. Hypotheses of the Study

The following null hypotheses may be formulated in relation to the objectives:

H_o1: There is no statistically significant difference between male and female secondary school students in their moral judgment scores.

H_o2: There is no statistically significant relationship between hidden curriculum practices and moral judgment among secondary school students.

H_o3: Hidden curriculum practices do not significantly predict moral judgment scores among secondary school students.

7. Methodology

7.1 Research Method and Design

The study employed an ex post facto research design to examine the relationship between hidden curriculum practices and moral judgment among secondary school students. The variables were measured as they existed, without experimental manipulation.

This design was suitable for investigating associations between students' perceptions of school practices and their moral judgment scores. However, it does not establish that hidden curriculum practices caused differences in moral judgment.

7.2 Population of the Study

The population comprised male and female students studying in Class IX in 63 government secondary schools affiliated with the West Bengal Board of Secondary Education in Darjeeling District, West Bengal.

7.3 Sample and Sampling Procedure

Twenty government secondary schools were selected from the identified population of 63 schools using simple random sampling. From each selected school, 10 male and 10 female students were selected through stratified random sampling.

The final sample consisted of 400 students, including 200 male and 200 female students. The sample was distributed equally by gender across the 20 selected schools.

Table 1. Sample distribution

Sampling characteristic	Number
Government secondary schools in the identified population	63
Schools selected	20
Male students	200
Female students	200
Total participants	400

7.4 Tools Used in the Study

Two tools were used to collect data: the Hidden Curriculum Assessment Scale and Ranjana Gupta's Moral Judgment Test.

7.4.1 Hidden Curriculum Assessment Scale

The 42-item Hidden Curriculum Assessment Scale was used to assess students' perceptions of hidden curriculum practices across five dimensions: Social Values and Ethics, Behaviour and Communication Skills, Gender Roles and Diversity, Learning and Competition Environment, and Autonomy. The items were selected from an initial pool of 50 following literature review and expert evaluation. The scale used a five-point Likert response format. Its reported test–retest reliability was 0.849. Factor analysis supported a five-factor structure, explaining 66.26% of the total variance, with a KMO value of 0.874 and a significant Bartlett's test.

7.4.2 Moral Judgment Test by Ranjana Gupta

Ranjana Gupta's Moral Judgment Test was used to assess students' moral judgment across five dimensions: Immanent Justice, Moral Realism, Retribution versus Restitution, Efficacy of Severe Punishment, and Communicable Responsibility. Adapted to the Indian context and reviewed by experts, the test examined students' judgments about punishment, intentions, consequences, and responsibility. The reported total-test split-half reliability was 0.53, test–retest reliability was 0.49, and external validity coefficient was 0.508. These relatively modest coefficients were considered when interpreting the findings.

7.5 Administration of the Tools

Permission was obtained from the heads of the selected schools, and class teachers assisted with data collection. Students received instructions about completing the tools, which were administered under appropriate classroom conditions to encourage independent responses and minimise distractions.

7.6 Statistical Techniques

The reported analyses included:

- Mean and standard deviation to describe gender-wise moral judgment scores.
- Independent-samples t-tests to examine gender differences in the five dimensions and total moral judgment.
- Pearson's product–moment correlation to examine the relationship between hidden curriculum practices and moral judgment.
- Simple linear regression to examine the statistical prediction of moral judgment from hidden curriculum scores.
- Factor analysis to examine the structure of the Hidden Curriculum Assessment Scale.

8. Analysis and Interpretation of Findings

8.1 Structure of Hidden Curriculum Practices

The reported factor analysis identified five dimensions of hidden curriculum practices. The KMO measure was 0.874, and Bartlett's test was statistically significant, $\chi^2(861) = 4685.32$, $p < .001$. The five factors collectively explained 66.26% of the total variance.

Table 2. Reported dimensions of hidden curriculum practices

Dimension	Mean	SD	Reported interpretation
Social Values and Ethics	4.12	0.51	High
Learning and Competition Environment	4.05	0.54	High

Behaviour and Communication Skills	3.98	0.56	Moderate–High
Gender Roles and Diversity	3.85	0.59	Moderate
Autonomy	3.76	0.61	Moderate

Social Values and Ethics recorded the highest mean score, followed by Learning and Competition Environment. Autonomy recorded the lowest mean. These results describe the relative mean scores of the dimensions; they do not independently establish the relationship between each dimension and moral judgment.

The reported classifications of the mean scores should be checked against the original response-scale anchors and scoring criteria before publication.

8.2 Gender-wise Differences in Moral Judgment

To examine gender-wise differences, the reported study compared the mean moral judgment scores of 200 male and 200 female students across the five dimensions and the total score.

Table 3. Gender-wise mean and standard deviation of moral judgment

Dimension	Gender	N	Mean	SD	Reported CR
Immanent Justice	Male	200	18.42	4.26	5.12
	Female	200	20.86	3.98	
Moral Realism	Male	200	17.35	4.12	5.36
	Female	200	19.74	3.85	
Retribution versus Restitution	Male	200	16.28	3.96	5.09
	Female	200	18.69	3.74	
Efficacy of Severe Punishment	Male	200	15.94	4.08	4.78
	Female	200	18.12	3.82	
Communicable Responsibility	Male	200	16.87	3.78	5.44
	Female	200	19.23	3.56	
Overall Moral Judgment	**Male**	**200**	**84.86**	**12.64**	**6.02**
	Female	**200**	**96.64**	**11.92**	

The reported mean scores show that female students scored higher than male students in all five dimensions and in overall moral judgment. The overall mean was 96.64 for female students and 84.86 for male students.

The reported analysis classified the gender differences as statistically significant at the 0.01 level. However, the supplied means, standard deviations, and critical-ratio values are not fully consistent with one another. Therefore, the statistical significance of these comparisons should be confirmed by recalculating the tests from the original participant-level data before drawing a definitive conclusion.

The observed mean differences are descriptive evidence of gender variation in this sample. Their interpretation should also take account of the reliability coefficients reported for the Moral Judgment Test.

8.3 Relationship between Hidden Curriculum Practices and Moral Judgment

The relationship between hidden curriculum practices and moral judgment was examined using Pearson's product–moment correlation.

Table 4. Correlation between hidden curriculum practices and moral judgment

Variable	N	Mean	SD	r	Reported significance
Hidden Curriculum	400	3.95	0.48	.72	$p < .01$
Moral Judgment	400	90.75	12.83		

The reported correlation coefficient was positive and strong ($r = .72$, $p < .01$). This indicates that higher hidden curriculum scores were associated with higher moral judgment scores in the sample.

The result is consistent with the proposition that students' perceptions of their school environment and their moral judgment may be related. However, correlation does not establish causation. It cannot demonstrate that hidden curriculum practices alone produced higher moral judgment, nor does it exclude the possibility that other student or school characteristics contributed to the observed relationship.

The reported reliability coefficients of the Moral Judgment Test should also be considered when interpreting this result, as measurement inconsistency can affect observed correlations.

8.4 Regression Analysis of Hidden Curriculum and Moral Judgment

Simple linear regression was reported to examine whether hidden curriculum scores statistically predicted moral judgment scores.

Table 5. Reported regression results

Predictor	B	β	t	R	R^2	F	Reported significance
Hidden Curriculum	9.84	.72	20.65	.72	.52	426.42	.000

The reported regression results indicate a positive association between hidden curriculum scores and moral judgment. The standardised regression coefficient was $\beta = .72$, and the reported coefficient of determination was $R^2 = .52$. According to this output, approximately 52% of the variance in moral judgment scores was statistically accounted for by the hidden curriculum score in the specified model.

This result suggests that hidden curriculum scores may be useful for understanding variation in moral judgment within the studied sample. However, the figure of 52% refers to variance explained statistically by the fitted model; it does not mean that hidden curriculum causally determines 52% of students' moral development.

The regression coefficients and test statistics should be recalculated or checked against the original statistical output before publication to ensure that all reported values are internally consistent.

9. Discussion

The findings provide a basis for examining the relationship between hidden curriculum practices and moral judgment among secondary school students in Darjeeling District. The reported factor analysis identifies five dimensions of hidden curriculum practices, reflecting social values and ethics, behaviour and communication skills, gender roles and diversity, the learning and competition environment, and autonomy.

Social Values and Ethics recorded the highest mean score among the five dimensions. This result suggests that this dimension received comparatively higher ratings in the supplied assessment results. The dimension is relevant to moral judgment because everyday school experiences may communicate expectations concerning fairness, responsibility, respect, and ethical conduct. Nevertheless, the mean score alone does not establish which specific practices are most closely associated with moral judgment.

Autonomy recorded the lowest mean score. This result identifies autonomy as a comparatively lower-rated dimension in the supplied data. Opportunities for independent thinking, student participation, and responsible decision-making may be relevant to moral reflection, but their specific relationship with moral judgment must be examined through dimension-level correlation or regression analyses.

The reported positive correlation between hidden curriculum practices and moral judgment indicates that students with higher hidden curriculum scores tended to have higher moral judgment scores. This finding supports further investigation into the relationship between school culture and students' moral reasoning. It does not establish that hidden curriculum practices independently caused the observed differences.

The reported gender-wise results show higher mean moral judgment scores among female students than male students across all five dimensions and in the total score. This pattern may warrant further investigation into the social and educational experiences associated with moral judgment. However, explanations involving gender socialisation, emotional development, or school experiences should not be treated as established causes because these factors were not directly tested in the supplied analysis.

The reliability coefficients reported for the Moral Judgment Test are relatively modest. This is an important consideration because limited measurement consistency can affect the precision and interpretation of mean differences, correlations, and regression estimates. The findings should therefore be interpreted cautiously and, where possible, supported by additional evidence about the instrument's measurement properties.

Overall, the study contributes a preliminary statistical account of the association between hidden curriculum practices and moral judgment. Reanalysis of the original data and further examination of individual scale dimensions would strengthen the conclusions.

10. Educational Implications

The findings suggest several areas for consideration in secondary school practice.

10.1 Promoting Social Values and Ethics

Schools may reinforce fairness, honesty, respect, responsibility, and cooperation through consistent classroom practices and institutional routines. Teachers' everyday conduct may provide opportunities for students to observe how ethical principles are applied in practical situations.

10.2 Encouraging Respectful Communication

Classroom discussion, collaborative activities, and constructive conflict resolution may provide opportunities for students to listen to different viewpoints and reflect on the intentions and consequences of actions.

10.3 Maintaining Fair and Inclusive School Practices

School leaders may review disciplinary practices, classroom participation, academic evaluation, and student responsibilities to ensure that expectations are fair and consistently applied. Inclusive practices can also provide opportunities for students to engage with different perspectives.

10.4 Supporting Responsible Student Autonomy

Schools may consider opportunities for students to express opinions, participate in appropriate decisions, and take responsibility for their actions. These practices can be explored as potential elements of a school environment that supports moral reflection.

10.5 Integrating Moral Reflection into Teaching

Teachers may use age-appropriate ethical dilemmas, reflective discussions, and collaborative problem-solving activities to encourage students to consider motives, consequences, fairness, and responsibility. The effectiveness of such strategies would need to be assessed separately.

These implications represent possible educational applications of the study. The reported analyses did not directly test the effectiveness of particular interventions.

11. Limitations of the Study

The study was limited to 400 students from 20 selected government secondary schools in Darjeeling District. The findings should not automatically be generalised to all secondary school students in the district or elsewhere.

The analysis was based on the reported statistical results rather than an independently reanalysed raw dataset. In addition, the supplied gender-wise means, standard deviations, and reported critical-ratio values appear inconsistent and require verification.

The reported reliability coefficients for Ranjana Gupta's Moral Judgment Test were relatively modest, particularly for the total score. This limitation should be acknowledged when interpreting the gender comparisons and the relationship between hidden curriculum and moral judgment.

The ex post facto design does not establish causal relationships. The correlation and regression results cannot rule out the influence of other variables, such as family background, age, peer relationships, or school-level characteristics.

Finally, the supplied analysis did not report separate correlations between moral judgment and each of the five hidden curriculum dimensions. Therefore, it is not possible to determine which dimension is most strongly associated with moral judgment from the overall correlation alone.

12. Suggestions for Further Research

Future studies may examine the relationship between each dimension of hidden curriculum and the five dimensions of moral judgment. Additional research could compare gender groups using verified statistical calculations and investigate whether the observed patterns remain consistent across different schools and student populations.

The measurement properties of the Moral Judgment Test should also be examined carefully, particularly its reported internal consistency and temporal stability. Where feasible, researchers may supplement questionnaire data with interviews, classroom observations, and analyses of school policies to understand how students experience the hidden curriculum.

Longitudinal or intervention-based studies could investigate whether changes in school practices are associated with changes in moral judgment over time. Such designs would provide stronger evidence about the direction and possible mechanisms of the relationship.

13. Conclusion

The present study examines hidden curriculum practices and moral judgment among secondary school students in Darjeeling District, West Bengal. The reported analysis of the Hidden Curriculum Assessment Scale identified five dimensions that collectively explained 66.26% of the total variance. Social Values and Ethics obtained the highest mean score, while Autonomy obtained the lowest.

The supplied results also reported a positive correlation between hidden curriculum practices and moral judgment ($r = .72$, $p < .01$), alongside a regression model with $R^2 = .52$. Female students recorded higher reported mean scores than male students across all five dimensions of moral judgment and in the total score.

These findings suggest an association between students' perceptions of hidden curriculum practices and their moral judgment. Nevertheless, the results require careful interpretation because the reported Moral Judgment Test reliability coefficients are relatively modest and the gender-wise descriptive statistics do not fully align with the reported test statistics. The original data and statistical output should be checked before the findings are treated as definitive.

The study highlights the value of examining school culture and everyday institutional practices as part of research into students' moral judgment. Further investigation using verified statistical analyses and stronger measurement evidence can help clarify the nature and extent of this relationship.

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