This study investigated gender, developmental, and cross-cultural differences in the moral reasoning of 97 middle- and upper-middle class fourth and sixth graders in Mexico and the United States. A seven-item questionnaire from the Comprehension Subsections of the Wechsler Intelligence Scale for Children (Revised and III) dealing with moral standards and responsibilities was given to students, with both English and Mexican Spanish versions available in Mexico. Written responses were assessed to yield a cognitive-developmental score, a rating for care or justice orientation, and a rating for either a care, justice, both, or neither, response. Alternative solutions to the moral situations were content analyzed. Findings revealed that sixth graders had higher cognitive/developmental scores than fourth graders, with females having higher scores than males only in sixth grade. There were no significant gender, grade, or cultural differences in traditional care/justice orientation ratings. Sixth graders had a higher proportion of "both" and lower proportion of "neither" than did fourth graders. More females selected the complex category of "both" than did males, with the difference greater at the sixth than at the fourth grade level. Males in the United States scored higher than U.S. females on the care category, with the reverse the case for Mexican subjects. Qualitative analysis suggested cultural influences on moral reasoning responses, with Mexican children more likely than U.S. children to look for the owner of a found purse rather than the police, and to be concerned about control/organization in rule-guided games and privacy rights in voting. (Contains 14 references.) (KB)
A Comparison of the Moral Reasoning Skills of 4th and 6th Grade Children in Mexico and the U.S.

Gender, Care/Justice Orientation, & Culture

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Introduction

The purpose of the present study was to investigate gender, developmental, and cross-cultural differences in the moral reasoning skills of 4th and 6th grade school children of Mexico and the U.S.

For two decades, the study of the development of moral reasoning in children was dominated by Lawrence Kohlberg’s (cf. 1958) stage theory of a moral maturity based on justice. Carol Gilligan’s alternative theory (cf. 1977, 1982) postulated a gender-specific moral development, based on the evidence that females were culturally exposed to a different set of moral values, expectations, and social responsibilities than were males: specifically, care, nurturing, and relationships with others. Thus, gender differences in acceptable moral and social responsibility may have been the real basis for Kohlberg’s “androcentric” empirical findings that women did not, in general, reach as high a level of (justice-based) moral development as did men.

Numerous comparative empirical studies of the developmental of moral reasoning have been carried out and the results continue to be debated. In 1984, Lawrence Walker performed a meta-analysis of “studies using Kohlberg’s [moral dilemma] measure in which sex differences in development of moral reasoning were examined,” and concluded that “of 108 samples summarized, only 8 clearly indicated [a] significant difference favoring males” (1984, p. 688). This conclusion has also been debated.

A second controversy arises with the question of whether either of these viewpoints may be valid cross-culturally. One favored method of such investigation has been the presentation of Kohlbergian moral dilemmas to subjects in such diverse cultures as China, Germany, Iceland, and the Bahamas. Kohlberg himself carried out early research in Mexico (1969), comparing male children of that country with those in the US, Taiwan, and Turkey. Although he reported a “cultural universality of the sequence of stages” (p. 382) he found that “development was a little slower” in his samples of both Mexican middle-class urban boys and of isolated village boys in the Yucatan, as compared to the U.S. sample (p. 382).

This work has been highly criticized by Edwards (1980), who notes that among other problems, “...the published report includes absolutely no information about sample sizes or characteristics, testing methods, scoring procedures, and response variance” (p. 510). She did not mention the glaring omission of female subjects from Kohlberg’s groups.

No citations in the journal literature have to date been located which would indicate further such investigation of the development of moral reasoning in Mexico since 1969, although related work on themes in family values which may be unique to Latins has been carried out by Diaz Guerrero of the National Autonomous University of Mexico (cf. 1967, 1992) and by Fernandez-Marina (1958) in Puerto Rico. Kohlberg’s conclusions regarding Mexican youths
were compared to a Brazilian sample of children and adolescents by Biaggio (1976), who found that the Brazilian results resembled those reported from Mexico in 1969.

Are these questionable results valid today? Life has changed in many ways in Mexico (and in the U. S. ) since 1969. Although Mexico is not a fully industrialized nation, its proximity and responsiveness to U.S. culture has been considerably embellished through electronic media and satellite technology. American television is available via cable and/or “dish” in most middle-and upper-class homes while most lower-class families now have access to local television. Lifestyles have been changing as well, in response to a higher participation in the global economy.

The present study investigated some of the gender, moral orientation, and cultural issues mentioned above. Childrens’ moral reasoning was analyzed both quantitatively and qualitatively. Some interesting differences in the childrens’ solutions were uncovered, particularly with development, while there was also a much higher degree of similarity between the genders and cultures than was originally expected.

Methodology

Subjects: Four groups of middle- and upper-middle class children, from suburban Beltsville, Maryland and Cuernavaca, Morelos, participated.

Demographics:
- 97 subjects - 55 US and 42 Mexican
- 54 4th graders and 43 6th graders
  [4th mean age: 11.18; range: 9.0 to 11.25]
  [6th mean age: 12.36; range 11.42 to 13.58]
- 49 males and 48 females

Design and Procedure: An open-ended questionnaire composed of 7 items modified from the Comprehension Subsections of the WISC-R and WISC-III, dealing with both simple and higher level moral standards and responsibilities, was presented to the children in their classrooms. This subtest has been reported to “reflect the child’s knowledge of conventional standards of behavior, extensiveness of cultural opportunities, and level of development of conscience or moral sense,” among other attributes. (Sattler, 1988, p. 153). Both English and Mexican Spanish versions were available to the Mexican students: 23 elected to respond in English.

The childrens’ written answers were assessed both quantitatively and qualitatively:
1. A cognitive-developmental score of 2, 1, or 0 points per question was computed, based on the WISC manuals. It was anticipated that age differences would favor the older children.
2. A traditional Care or Justice rating awarded 1 point for Care- and/or 1 point for Justice-oriented responses. That is, answers containing both types of moral response could be credited for each part of the response, rather than forcing total rating into one or the other orientation.
3. A second moral response scoring provided a more specific approach to the answers: a
single 1 point per question was awarded for either a Care, Justice, Both, or Neither response. The novel Both score was initiated to provide a quantitative method for judging complexity of reasoning and orientation which is not as readily apparent with the traditional dichotomous scoring.

It was expected that neither gender nor country of origin would have significant influence on these moral orientation responses; age differences were probable.

4. Response analysis was carried out to categorize the children's alternative solutions to each moral situation. It was anticipated that the greatest cultural differences would become evident with this analysis.

5. A self-report on number of hours of television watched per day was included as a rough measure of cultural atmosphere and possible developmental differences.

Because of the unequal N of subjects, and unequal numbers of responses, the "percentage of total moral responses" was calculated from the raw scores on measures 2, 3, and 4 above, following the method adopted by Kohlberg for reporting such data (cf: 1969).

Coding: Two sets of experienced scorers rated the questionnaires for the cognitive, traditional Care/Justice, and the Care/Justice/Both/Neither coding, with an interrater reliability of .91. Any discrepancy was resolved by discussion. Coding was performed "blind" to subjects' gender, grade and culture. TV hours were recorded as given by the subjects.

The senior investigator coded the qualitative content of the answers. Although an attempt was made to follow the categories set up in the WISC manuals, additional solutions were often chosen by the children.

Results

1. Cognitive/developmental scoring

- There was a significant difference in cognitive scores due to Grade, with 6th graders scoring more highly than 4th, as had been expected due to maturation.¹

- Although females scored slightly higher than males in both cultures, the Gender difference was not significant.²

- No significant difference was found between the two Cultures.³ This finding is important in establishing the validity of this study, since in this instance, the questions did not appear to have a cultural bias.

- There was a significant Grade x Gender interaction, attributable to a greater advantage for females over males in 6th grade, but no significant Grade x Culture interaction. There was also a significant Gender x Culture interaction, attributable to a greater female advantage over males in the U.S. sample than was found among the Mexican subjects.

- There was no significant 3-way interaction.

2. Traditional Care/Justice Orientation

There were no significant differences between Genders, Grades, or Cultures on this scoring. (See Figure 1). This does not support Kohlberg's 1969 report or his theoretical propositions for justice-based morality.
- Only 10 of the subjects in this study responded consistently in a polarized Care or Justice manner, 9 of whom were in the 4th grade. Almost 20% of the children (8 4th-graders and 11 6th-graders) were found to score equal numbers of Care and Justice but there was no significant cluster of this group in any one Grade, Gender or Culture.

3. Care/Justice/Both Scoring

Main Effects - See Figure 2

- No significant Grade effects were found for either Care or Justice responses. Significant Grade differences were detected for both Both and Neither scores: 6th graders had a higher proportion of Both and lower of Neither than did 4th graders.4
- There were no Gender effects in the Care, Justice or Neither categories. However, there was a significant Gender difference in Both responses, with more females choosing this complex category than did males.3
- There were no Cultural differences in any of the responses.

2-way Interactions

- Grade x Gender analysis revealed no significant interactions for Care or Justice responses. However, there was a significant Grade x Gender interaction for Both responses, attributable to a higher female use of this category among 6th graders than among 4th graders. The reverse pattern was found for Neither scores.
- Analysis of Grade x Culture revealed no significant interaction pattern for any of the 4 categories of responses.
- Analysis of Gender x Culture interactions yielded significant results for the Care category of response. US males scored higher than US females, whereas the reverse was true for Mexican subjects. US males and Mexican females thus had higher response rates than US females and Mexican males.7

There were no other significant Gender x Culture effects.

3-way Interactions

- None of the 3-way interaction analyses yielded significant effects.

Correlations

- Cognitive scores were statistically correlated with the 4 moral response categories. It was noted that the cognitive scores and the total number of Both responses increased similarly from grade 4 to grade 6. Indeed, the correlation of individual cognitive raw score totals (over the 7 questions) and the individual raw Both score totals was highly significant: r = .604 (df=96, p<.001). This high correlation may signify that the expected maturational shift in childrens' cognitive/moral development as shown by the increasing cognitive scores is linked to the rise in the use of the Both category. As mentioned in the Abstract, this forces a critical look at the traditional reliance on a Care/Justice dichotomy when investigating moral development, even when compound answers are acknowledged. It is the Both scores which may be of developmental interest.
4. Moral Reasoning Responses

- Each question was analyzed for distinct responses to the moral question, and yielded 4 to 7 types of solutions. These were in turn analyzed by Grade, Gender, and Culture. Significant results are presented below.

#1: What should you do if you find a lady’s purse lying on the sidewalk?
Responses: Turn into authority (such as lost-and-found), Give to parent, Find owner, Give to Police, Other
- There were no significant differences due to Gender or Grade on this question.
- There was a significant difference due to Culture on the two responses of “Find owner” and “Give to Police”: Mexicans were significantly more likely to look for the owner, and significantly less likely to turn the purse over to the police. This is quite understandable culturally, since the reputation of the Mexican police for honesty leaves much to be desired.

#2: What is the thing to do if your neighbor’s little kid, a 1st grader, tries to start a fight with you?
Responses: Do not fight, Tell kid not to fight, Reason with kid, Tattle (to parents or teacher), Other.
- All categories except “Other” convey implicitly that the respondent would not fight: 91% of the U.S. and 85% of the Mexican children chose peaceable solutions. There is a Gender difference in “Reason with kid”: females were significantly more likely to try this approach than were males.
- There were two significant Grade differences: 6th graders were more likely to “Reason” than were 4th graders, while the 4th graders were more likely to “Tattle” to a parent or teacher.
- Culturally, Mexicans were significantly more likely to “Reason” than were the US students.
- It is of interest that the Wechler scoring for a similar question would give no points for Reasoning with the child. Additionally, the “Other” category included such responses as “Pick him up and take him home” (6th grade Mexican boy).

#3: Why do games have rules?
Responses: Don’t get hurt, Play fair, Don’t cheat, Control/Organization, Challenge (fun).
- Two differences were attributable to Gender: males were much more likely to be concerned with safety (Don’t get hurt) than were females, while females were more interested in having good control or organization over the playing of the game.
- Grade: 4th graders were significantly more likely than 6th to choose Don’t get hurt and (so people) Don’t cheat. Sixth graders chose Play fair and Control/organization as their major concerns.
- Culturally, concern for Control/organization was higher for Mexicans, while the US
children were significantly more interested in Playing fair.15

#4: What should you do if you have borrowed someone’s bike and it gets run over by a car?

Responses: Tell friend, Pay or replace, Tell & Pay or replace, Repair, Driver should pay, Tell parents, Other.

- The first 3 categories reflect attention to moral and financial responsibility for the bike. In terms of Gender, males were much more likely to either Tell their friend, or Pay for or replace the bike, while females were significantly more likely to do Both.16

- 6th Graders were significantly more likely choose Both than were 4th graders: 25% of these latter children thought that admitting the destruction was sufficient.17 A small number of 4th graders felt that the Driver should pay; this was still significantly higher than the number of 6th graders who thought that was possible.

- In terms of Culture, significantly more US children chose to both Tell and pay/replace than Mexican; while more Mexicans still felt that the Driver was responsible.18 The small number of US respondents who would pay for the bike may be due to the children’s knowledge of property insurance, which is less likely to be available in Mexico.

- It had been hypothesized that more Mexican than US children would suggest that the bike be repaired since bikes are much more expensive in their country, but there was no significant Cultural difference in this response.

#5. If you make a promise to your friend, why should you keep it?

Responses: General sense of trust or faith, Specific trust or faith, Loss of reputation, Loss of friendship, Hurt feelings, “I promised,” Other.

- All categories except “Loss of friendship” and “I promised” showed no significant Gender differences: females were somewhat more likely than males to consider the Loss of friendship as important.19 Male subjects were more likely to use the “I promised,” category, as did 4th Graders over 6th graders at a highly significant level.20

- Mexicans often appealed to a General sense of trust or faith, while more US children used specific trust to a friend: these two categories, when combined to a Sense of trust or faith, show no Cultural differences.

This seems to have been a difficult question for the younger children.

#6. Why is it that when we vote, we often keep our choices secret?

Responses: Fear of public pressure or criticism, Right to privacy, Make own choice, Others [might get] mad [or start] a fight, Dangerous, Other.

- There was one significant Gender difference: females felt somewhat more strongly than males about the Right to privacy when voting.21

- Privacy was also chosen at a significant level for 4th Graders over 6th graders; 6th graders were considerably more worried that voting can be Dangerous!22
- Culturally, the Right to privacy was of much higher concern overall to Mexicans than to Americans, who were more likely to choose with Fear of Public pressure or Criticism. US students were significantly higher than their counterparts in choosing “Make own choice.”

- It had been hypothesized that Mexican children would be more concerned with possible Danger connected with voting since the assassination of their presidential candidate several years ago. There was no significant Cultural difference in that category.

#7. Why are people who rob banks sent to jail?

- Gender accounted for a significant difference in the number of children who thought the moral reason was Punishment: females were somewhat higher than males in this choice. A surprising number of both genders answered that “It is wrong,” another zero answer on the Wechsler scoring. Males were somewhat higher than females for this category.

- 4th Graders felt more strongly that jail is a Deterrent than did 6th graders, and surprisingly, more 6th Graders answered that robbery is “Wrong” than did the younger children.

- US children selected Punishment as a factor significantly more often than did Mexicans; the latter felt that jail is a Deterrent to a higher extent. There may be two Mexican cultural explanations for this: one can live very nicely in jail in Mexico if there is sufficient funding from outside, so it would not therefore be too much of a punishment. On the other hand, without such funding, jails in Mexico are extremely harsh and difficult places. There is not, for example, any particular enforcing of basic human rights. Therefore, to lower income Mexicans, threat of jail would indeed be a deterrent.

Please Note!

- It is felt that many of these response analyses often mask very interesting effects which are only visible when looking at individuals or smaller groups, i.e., 4th grade US boys were the high scorers on the response “so people don’t get hurt” to the question about why games have rules. Is it possible that this is the year they start to play midget football? To clarify some of these effects, further idiographic analysis is planned.

5. Television and Moral Reasoning

- Number of hours of TV watched per day was correlated with the scores on the Care/Justice/Both/Neither analysis, and with the cognitive scores. There were no significant correlations. However, the following statistics are of interest:

  - 4th graders watch more TV than 6th graders [Means: 3.29 v 2.65 hrs]
  - US children watch more than Mexicans [Means: 3.89 v 1.84 hrs]
  - Males watch more than females [Means: 4.02 v 1.97 hrs]

Discussion
The present study supports the hypothesis that there is no gender difference in moral reasoning in children of these two grade school levels and two cultures. Baumrind (1986) has concluded that previous studies which found such differences have been flawed by failure to control educational level, culture, and class, all of which have been taken into account in the present work. It may, however, be the case that gender differences might be found in subjects of significantly younger or older age groups or in more widely varying cultural environments.

Donenberg & Hoffman (1988) observed a tendency in their older subjects to display more justice orientation, while younger children “often emphasized the morality of care” (p. 714). The traditional Care/Justice scoring of the present responses (Figure 1) resulted in virtually no difference in the scores of 4th and 6th graders, and justice was indeed chosen at a slightly higher rate by both age groups. However, when the Care/Justice/Both Scores are considered (See Figure 2), it is clear that 6th graders’ lower scores (as compared to 4th graders) on straight Care and straight Justice scoring are counterbalanced by a significantly higher reliance on the Both type of complex response. This data reveal a maturational change in the frequency with which subjects increase the complexity of their reasoning. The correlation of the Both and the Cognitive scores points to a similar developmental increase in the cognitive/moral reasoning process.

This study also supports the idea that there are indeed two “voices” as Gilligan has proposed, which children of both cultures consider when giving moral responses. Further, they are able to judge quite clearly the situations which call for Care, Justice, or Both, and this reasoning skill is refined with maturation. As Donenberg & Hoffman pointed out, "It may be, then, that future research should focus less on gender differences per se and investigate instead the process by which each moral voice, and the sensitivity to appropriately differentiate them, develop in both boys and girls" (1988, p. 715).
Bibliography


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Statistical Endnotes

1. Grade: 2-tailed t-test (96) = 3.184, p<.001.

2. Gender: t (96) = 1.162.

3. Culture: t = >1, ns.

4. Grade: Both: X² (1) = 10.30, p<.01; Neither: X² (1) = 13.02, p<.001.

5. Gender: X² (1) = 5.48, p<.02.

6. Grade x Gender: X² (1) = 8.43, p<.01.

7. Gender x Culture: X² (1) = 27.22, p<.001.

8. Find owner: X² (1) = 3.92, p<02.
   Give to police: X² (1) = 12.416, p<.001.

9. Reason with child: X² (1) = 8.64, p<.01.

10. Reason with child (4th v 6th): X² (1) = 6.12, p<.02
    Tattle: X² (1) = 8.59, p<.01.

11. Reason with child (US v Mex): X² (1) = 3.84, p<.05.

12. Don't get hurt (females v males): X² (1) = 7.226, p<.01.
    Control/organization: X² (1) = 7.218, p<.01.

13. Don't get hurt (4 v 6): X² (1) = 9.438, p<.01
    Don't cheat: X² (1) = 4.194, p<.05.

14. Play fair (4 v 6): X² (1) = 6.102, p<.02.
    Control/organization: X² (1) = 3.85, p<.05.

15. Control/organization (US v Mex): X² (1) = 15.726, p.001.
    Play fair: X² (1) = 6.1034, p<.02.

16. Tell friend (females v males): X² (1) = 9.07, p<.01.
    Pay or replace: X² (1) = 8.664, p<.01.
    Both of above: X² (1) = 15.7808, p<.001.

17. Both: (4 v 6): X² (1) = 15.7796, p<.001.

    Tell & pay or replace: X² (1) = 25.062, p<.001.
Driver should pay: $X^2 (1)= 17.327, p<.001.$


20. "I promised" (4th v 6th) - $X^2 (1)=9.01, p<.01.$


22. Right to privacy (4th v 6th): $X^2 (1)= 4.6768, p<.05.$
   Dangerous: $X^2 (1)= 11.0596, p<.001.$

23. Fear of Public pressure (US v Mex): $X^2 (1)=4.195, p<.05.$
   Right to privacy: $X^2 (1)= 16.2294, p<.001.$

24. Make own choice (US v Mex): $X^2 (1)=2.823, p,.01.$

25. Punishment (female v male): $X^2 (1)=3.9452, p<.05.$

26. "Wrong" (female v male): $X^2 (1)=5.9071, p<.02.$

27. Deterrent (4 v 6th): $X^2 (1)=3.5844, p<.10$
   "Wrong": $X^2 (1)=5.907, p<.02$

   Deterrent: $X^2 (1)=7.459, p<.01.$
FIG. 1. TRAD. CARE/JUSTICE

GENDER

<table>
<thead>
<tr>
<th>% OF RESPONSES</th>
<th>CARE</th>
<th>JUSTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FEMALE</td>
<td>MALE</td>
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GRADE

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<th>% OF RESPONSES</th>
<th>CARE</th>
<th>JUSTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4TH</td>
<td>6TH</td>
</tr>
</tbody>
</table>

CULTURE

<table>
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<th>% OF RESPONSES</th>
<th>CARE</th>
<th>JUSTICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US</td>
<td>MEXICO</td>
</tr>
</tbody>
</table>
FIG. 2. CARE/JUSTICE/BOTH

GENDER

% OF RESPONSES

40
30
20
10
0

CARE
JUSTICE
BOTH
NEITHER

FEMALE
MALE

GRADE

% OF RESPONSES

50
40
30
20
10
0

CARE
JUSTICE
BOTH
NEITHER

4TH
6TH

CULTURE

% OF RESPONSES

50
40
30
20
10
0

CARE
JUSTICE
BOTH
NEITHER

US
MEXICO

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