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**Validity Study of the Mexican Version of the
Moral Judgment Test, MJT**

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Validity Study of the Mexican Version of the Moral Judgment Test, MJT

Georg Lind¹

The following analysis of the validity of the Mexican version of the Moral Judgment Test (MJT), is based on data gathered in 1996 by Prof. Cristina Moreno, Universidad de Monterrey (UdeM). The data stem from 99 college students of UdeM. Prof. Moreno also translated the MJT into Spanish.²

Different C-score in samples from different countries may be either due to real differences of moral judgment competence or due to differences in the meaning of the test items and thus due to a lack of cross-cultural validity. Therefore, any cross-cultural comparison requires that we carefully check the validity of translated versions of the MJT before we try to interpret C score differences as real. Hence, in the following analysis of the Mexican MJT we test the hypothesis that all differences found are due to measurement problems rather than due to substantial differences. Only if we can discard this possibility by careful analysis, we can safely conclude that any differences found are of substantial nature. From experimental studies of moral judgment behavior, four criteria for cross-cultural validity have emerged (see Lind, 1998):

- a) Preference for moral principles: the preferences for alle six Kohlbergian stages of moral reasoning should be monotonously increasing from Stage 1 to Stage 6, without any inversion of Stages.
- b) Quasi-simplex structure: the inter-correlations among the six preference (attitude) scores should make up a quasi-simplex, that is, they should be highest in the cells nearby the diagonal, and lowest in the outmost corners.
- c) the correlations between the C score on the one hand and the six preference scores on the other, should also monotonously increase from Stage 1 to 6;
- d) the correlation of the C score with level of education should be markedly positive; at least, the C score for subjects with a comparable level of education should also be comparable.

Summary of the analyses and recommendation

The analyses of the data show that the Mexican version of the MJT meets almost perfectly the first three criteria for cross-cultural validity. (The fourth criterion has not been studied yet.)

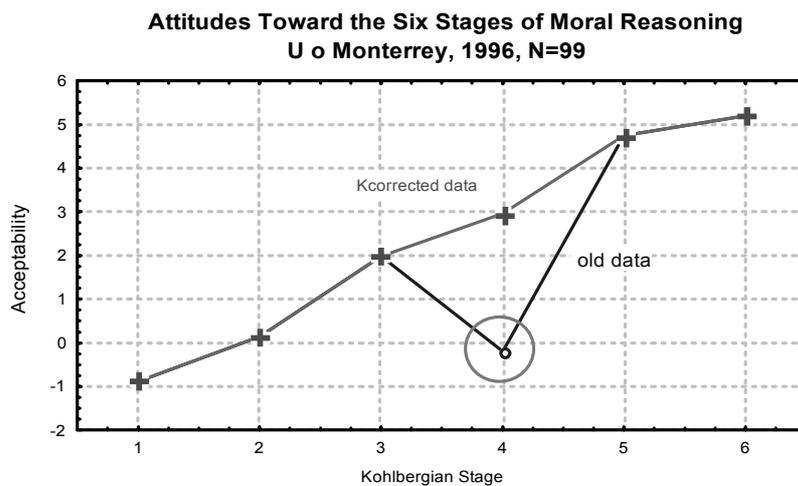
In a first analysis, there were some deviations from the criteria. However, it was discovered that all Stage-4-items of the second dilemma, con-arguments were inverted.³ The deviations all disappeared completely after this mistake was corrected.

Therefore, I consider the Mexican version of the MJT as fully equivalent to the German and Spanish version and to all other language versions which meet the above criteria for cross-cultural validity.

Nevertheless, for better comparison, I recommend to use the Spanish version throughout the Spanish speaking world.

a) Preference Hierarchy

Criterion: the preferences for all six Kohlbergian stages of moral reasoning should be monotonously increasing from Stage 1 to Stage 6, without any inversion of Stages. Note that the steepness of the curve does not reflect test validity



but real differences in level of moral judgment competence.

Finding:

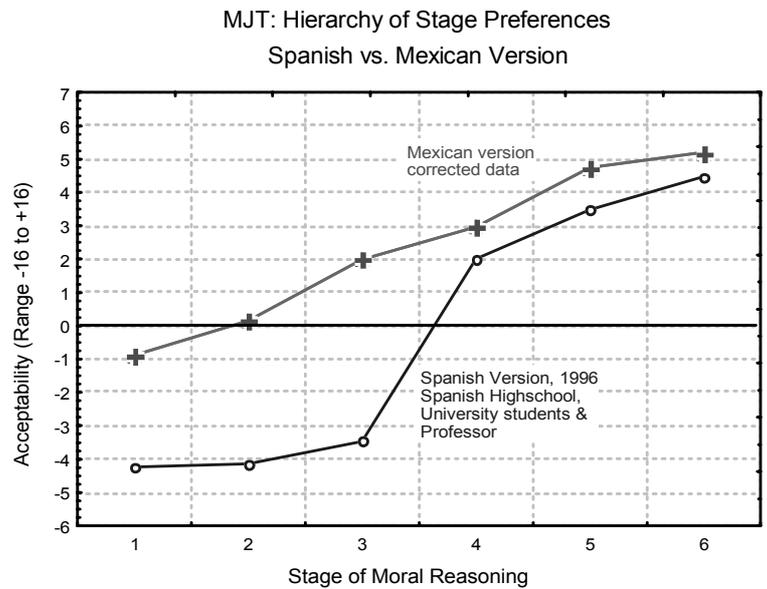
The overall preference hierarchy for the six stages is very much in line with the theoretical criterion except stage-4-items.

We should expect that Stage-4 arguments are preferred at least as high as Stage-3 arguments, but less than Stage-5 arguments.

After correction of the data file, the data fits perfectly the first validity criterion.

Comparison of the Mexican and the Spanish version of the MJT

Note that the Spanish validation samples contains a wider developmental range of subjects.



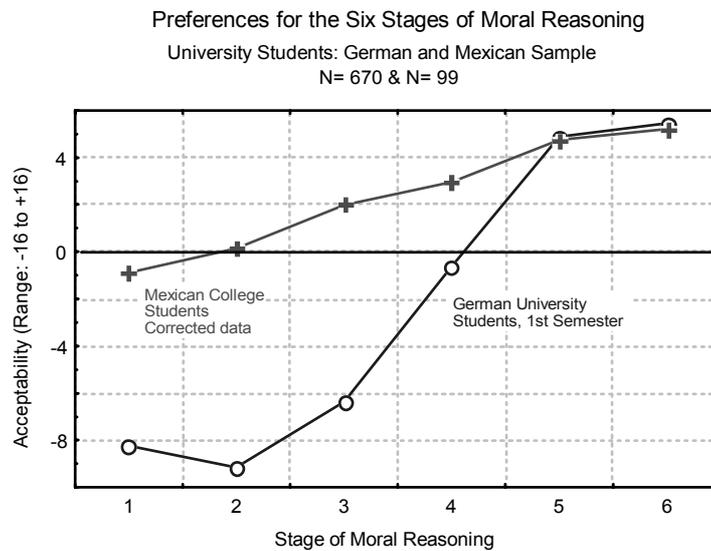
Finding:

The Spanish data are well in line with the first validity criterion. All stage preferences increase monotonously with stage order.

After correction, the Mexican version also fits the criterion. The acceptability of stages increases completely monotonously.

Comparison of the Mexican and German Version

Note that the German sample consists of first semester university students of a wide range of fields.



Finding:

The German (like the Spanish) data are also fully in line with the criterion of a monotonous preference hierarchy.

Note that the slope of the line linking the data points in the Mexican sample, is less steep than that of the German sample, implying differences in the C-score. However, these differences do not invalidate the measurement but rather indicate a real difference of level of moral judgment competencies between these two samples.

b) Quasi-Simplex Structure of Stage Inter-correlations

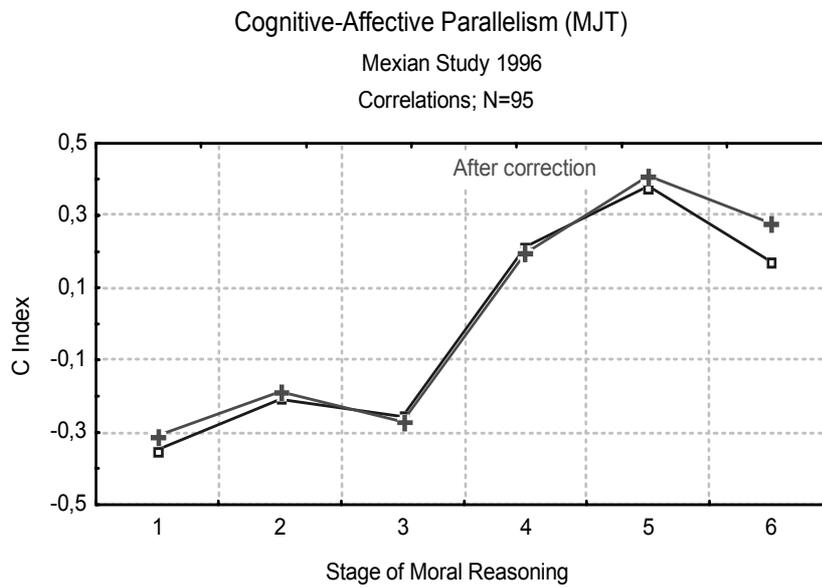
Criterion: the inter-correlations among the six preference (attitude) scores should make up a quasi-simplex. The ideal is that the correlations along the main diagonal (from left above to right below) are highest and that they decrease monotonously from there to the lower left and the upper right corner.

Finding:

	ST_1	ST_2	ST_3	ST_4	ST_5	ST_6
ST_1	1.00					
ST_2	.63	1.00				
ST_3	.57	.53	1.00			
ST_4	.10	.24	.10	1.00		
ST_5	.29	.26	.29	.29	1.00	
ST_6	.31	.22	.27	.20	.41	1.00

The overall picture is much in line with this expectation, except for stage 4 reasoning and, to some degree, also with stage 3 reasoning. (Before correction.)

Whether the pattern of correlations fit the criterion of a quasi-simplex structure is better seen when these correlations are submitted to factor analysis, using main component extraction and standard varimax rotation.



Finding:

Stage 4 is out of line.

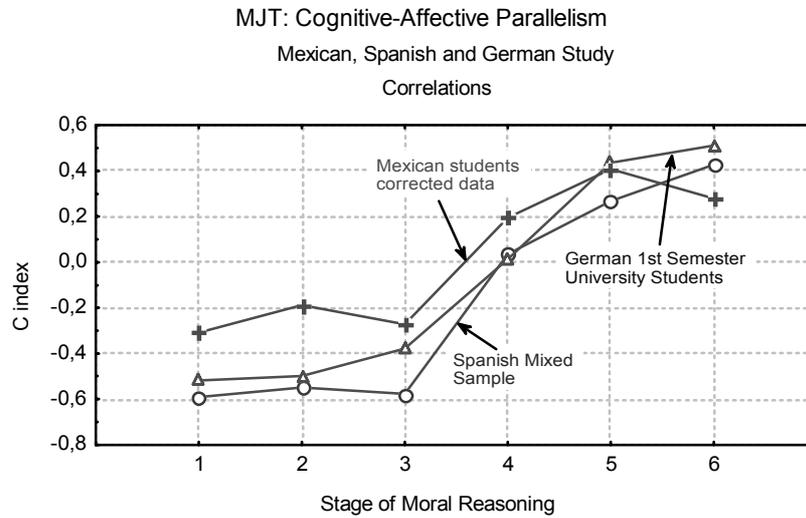
After correction, stage 4 fits perfectly this criterion.

In comparison, the Spanish data almost all are located on the semi-circle that represents a perfect quasi-simplex structure. No inversion of stages occurs.

The Mexican data (see above) also fit the criterion well, though the loadings are not stretched as widely as in the Spanish sample, because the over-all variance in the Mexican sample was smaller.

c) Cognitive-Affective Parallelism

Criterion: the correlations between the C score on the one hand and the six preference scores on the other, should also monotonously increase from Stage 1 to 6. They should increase from highly negative to highly positive as one goes from Stage 1 to Stage 6.



Finding:

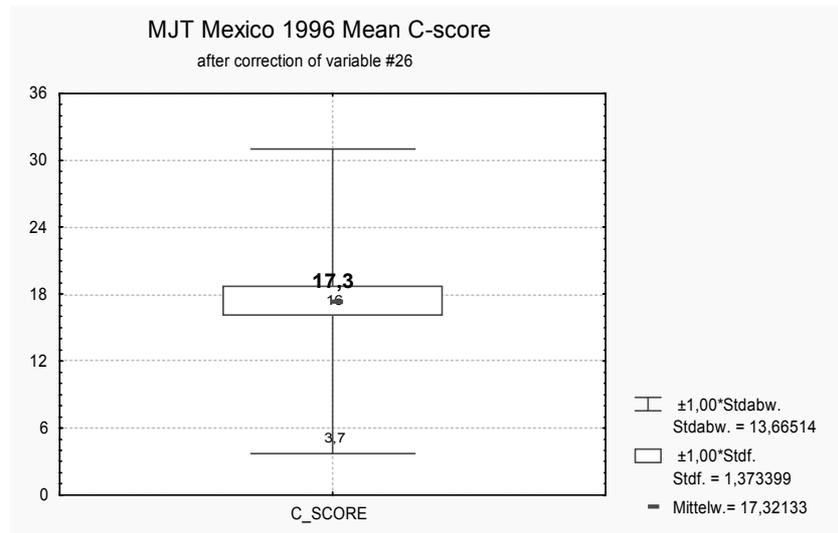
Overall the data support the hypothesis that the present Mexican MJT-version is theoretically valid. Most correlations between the attitudes toward each of the six Kohlbergian Stages on the one hand and moral judgement competence on the other, except Stages 4 (or Stage 6) and 3. The Stage 4 correlation should not be higher than the Stage 6 correlation, and the Stage 3 correlation should be higher than the Stage 2 correlation.

After correction, the Stage 6 correlation is better in line with this validation criterion as it is clearly higher than the Stage 4 correlation and not much lower than the Stage 5 correlation.

For comparison, in this graph the findings from all three samples are depicted.

After correction, the Mexican data fit this criterion as well as the other two sets of validation data, the Spanish and the German. The only exception is the stage 6 correlation with the C-score. Yet this deviation is only small.

d) Distribution of Moral Judgment Competence (C-score; JMT)



Mexican mean C score: **18.3**

After correction the mean C score is only slightly different: **17.3**

Spanish Study's mean C scores:

College students: **30.9**

Uni / Business Administration: **29.9**

German 1st semester Uni students' mean C-score: **42.5**

Notes

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3. I wish to thank Professor Roberto Hernández, Universidad de Monterrey, Departamento de Física y Matemáticas, for detecting this error in the data.