



Introducing the Emotive Moral Competence Index (EMCI): A New Measurement of Moral Judgment

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Abstract

Background: According to the approaches of emotions in moral judgment, some moral emotions, especially guilt and pride can be considered its primary triggers. It seems that guilt and pride motivate moral judgment, such that the guilt is a moral emotion opposed to pride. Also, the horror stimulates an emotional reaction into the spectator.

Objectives: To appreciate the introduction of the new emotive moral test, the present study was designed to validate the emotional moral competence index (EMCI), to identify associations between EMCI and moral emotions, including pride and guilt, and the age of university students.

Methods: In this study, 177 students were selected, the participants were chosen fulfilling with differentiated education years, from the first to the fourth university grade. Fifty-seven students were assigned to the first group, 33 students to the second, 52 to the third, and 35 to the fourth group. The participants completed the emotive moral test. The effect inter-subjects of the four groups were examined by the multiple analysis of variance statistical method, and the relationships between EMCI and other sub-indexes were evaluated by correlation analysis.

Results: The introduced emotive moral test was a validated instrument of moral judgment. The validation of its EMCI index explicitly showed the inseparable emotive and cognitive relationship through two specific emotions, guilt and pride. Also, guilt was a moral emotion opposed to pride, and pride had a favorable impact on moral judgment. Finally, it indicated that the horror triggered an emotional reaction that inversely related to the spectator's age.

Conclusions: The findings indicated that both pride and guilt activate moral judgment. The EMCI was introduced, and its theoretical and empirical validity was shown. The EMCI explicitly demonstrates the inseparable emotive and cognitive relationship through two specific opposed emotions, guilt versus pride. Finally, pride has a favorable impact on moral judgment and the horror triggers an emotional reaction proportional to the habituation.

Keywords: Emotive Moral Competence Index, Guilt Versus Pride, Horror, Moral Emotions

1. Background

The cognitivist basis of moral judgment has not valued the role of the emotion in moral judgment (1-6), nevertheless, each moral experience is emotionally a priori perceived and cognitively posteriori assessed (7). Moral emotions are instantaneous reactions where the ego suddenly responds from its affective system to balance a just relationship with others and with its environment (4, 8), which is the emotive moral judgment (9-11).

The cognitive stage (4-6), the affective system (12-15), the model id, ego and, superego (16-18) stand foundation of the emotive moral judgment. The moral emotions depend on how the ego recognizes its inherent righteousness and evil (1, 12-18). The egos of other people have the role of moral

judgment, the emotional relationship between the moral authority and the person is fundamental in the life of the individual (19-29).

The Oedipus parricide activates horror, a repugnant sensation and an urgent desire to ignore the insupportable perception (18, 30, 31). The results of the anguish of the id castration done by the superego as the moral conscience and the tensions between the anguish of the id done by the superego and the operations of the ego, they act as the guilt (18-21).

Pride encourages the person for the success achieved to everything that exalts human dignity (25, 28-30). Pride is a pleasant emotion, an agreeable self-evaluation (28-30). The self-conscious emotions make a positive or negative estimation to the ego of the individual, motivating a positive

or negative reinforcement of behaviors (28-30).

The evolution of the individual in society implies less enjoyment, greater self-awareness of guilt (21). So, the habituation of the moral emotion can make any personal pleasant experience means to him/her an immense enjoyment, greater than in another person unaccustomed to that (29). Guilt and pride are primary motivators of moral judgment (12, 18, 27, 30), which establishes cognitive stages (4, 10). Therefore, the emotive moral judgment is a priori assessment charged with energy that impulses the action and a posteriori deliberation about if the action was correct. The emotive-cognitive stages are characterized by guilt and pride, as follows:

1.1. The Emotive Preconventional Level

The ego feels guilty or proud, egoistically seeking the pleasant energy of pride over guilt, without being aware of anything or anyone. This level is defined as stage one where punishment or reward is the stimulus of guilt or pride (12, 18). The stage two recognizes only an authority to whom the highest moral image is attributed, whose feedback signals approve or disapprove the ego's actions (12, 13).

1.2. The Emotive Conventional Level

The ego feels pleasure to be within the conventional rules. In the stage three, the moral is established by group manifestations, which mark what right is (4). Here, the ego feels proud of belonging or guilty by rejecting (21). The stage four determines that social rules increase guilt in the ego and diminish pleasure (4, 21-24). Thus, pride in the ego stimulates the correct behavior (25, 29).

1.3. The Emotive Postconventional Level

In the stage five, the guilt is increased by means of the social rules (21-24), it implies a breakage of the emotions provoked by the disreputable image about individual realized by a social minority (25, 29). In the last stage six, the moral maxims imposed by the superego are corrected (21). The individual will seek a superior self-perception and assessment than previous in front of his/her self and the others (25, 29).

Some contemporary approaches intend to assess the incidence of emotions in moral performance (1, 12, 30). Two emotions that can be considered in moral judgment are guilt (12, 18) and pride (25, 30). The emotional moral competence is defined as a priori reaction charged with energy that impulses the action and a posteriori evaluation of whether this impulse was correct (12, 27, 30). Searching in the literature showed neither index nor guilt and pride linked emotion and cognition.

2. Objectives

The purpose of the present study was to theoretically and empirically validate the Emotive Moral Test (EMT) and its main Emotional Moral Competence Index (EMCI). In addition, to validate sub-indexes, guilt (Guilt-EMCSI), pride (Pride-EMCSI), and to demonstrate the correlation between them. Also, to study whether the age of the participants positively correlated with Pride-EMCSI and inversely correlated with Guilt-EMCSI.

3. Methods

3.1. Participants

IN this study, 177 voluntary students were randomly selected in August, 2018, from the Superior Institute in Centla (Mexico), the confidence level was 95% and the margin of error was 5%. The inclusion criterion was an educational year of difference, from the first to the fourth, complying with the differentiated treatment (32). Here, 76% of the subjects were single, 70% were men and, the mean age was 24 years old. Moreover, 57 participants were allocated to the group one (mean age \pm SD = 20.58 \pm 4.11), 33 subjects to the group two (mean age \pm SD = 22.06 \pm 4.15), 52 subjects to the group three (mean age \pm SD = 24.87 \pm 7.45), and 35 subjects to the group four (mean age \pm SD = 30.79 \pm 7.97).

3.2. Instruments

The EMT (Supplementary file Appendix 1) was used for its validation. The EMT integrates a parricide story named "the Juan's story". It was explored in three iterations prior to the story reported. Also, it was developed to stimulate a horrific sensation in the participant, subsequently he/she was evaluated in six moral stages (5, 10). A comprehensive evaluation of the EMT items by a panel of twelve experts indicated that the CME items were adequate for the six stages. Figure 1 shows the EMT design. The dependent variable was established by the evaluation of the participants, who made the rating of the affirmations on an emotive scale from one to ten and, the three independent variables were: the parricide's story, six stages and, guilt/pride.

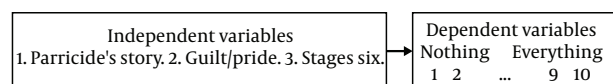


Figure 1. The EMT design

The EMCI examines the reactive emotional consistency of guilt and pride. The EMCI evaluates the effects inter-subjects and its quantification was made by the partition

of the sum of squares supplementary file (Appendix 2). The Guilt-EMCSI was quantified by adding the six arguments of the guilt and, pride-EMCSI by summing the six arguments of pride.

3.3. Statistical Analysis

I used SPSS-23 for analysis of variance, it was used to observe whether the treatments represented by the four groups of participants affected the EMCI. Additionally, the correlation analysis was applied to observe whether there were relationships between the EMCI, the sub-indexes, and the age and university years.

3.4. Ethical Considerations

All individuals voluntarily participated, researchers pledged that individual's data remain confidential and all participants knew just about his/her data if he/she wanted to.

4. Results

The EMT and EMCI followed criteria based on the theory and the obtained data. The first criterion established the effect of participant groups on the EMCI (32) and the other six criteria established correlations between EMCI and six emotive cognitive stages deduced theoretically (12, 27-30).

4.1. Educationally Differentiated Observations at the University Level

The first validation criterion was achieved. Table 1 shows that the inter-subject effects of the participant groups on the EMCI (32) were not significant. The significance of the effect was very low and borderline ($F = 0.962$; $P = 0.412$). Furthermore, the effect size indicator was very questionable. The observed power was 0.26 and partial Eta squared was 0.016, so it can be told that just 26% of the individual's variance was explained by the between-group variance.

4.2. Moral Emotion is the Motivator of Moral Judgment

The second criterion was achieved. This established that disagreeable emotion habituation was a factor of moral judgment (12, 29). People with higher educational level and greater age had less horror sensation. Table 2 shows the Horror-SI negatively correlates (-0.163) with the university year and the age of participants (-0.183).

4.3. Emotive Descending Correlation

The third criterion established that there was a descending emotive correlation, the higher stages were typical of the human maturation (5). Thus the horrific sensation should stimulate more first stages, typical of early ages and with less scholar experience than the last stages because of habituation of older people (12, 29). Table 2 indicates correlation values of the emotive stages and horror: three, four, five, and six (0.304, 0.280, 0.267, and 0.111) sorted from higher to lower. A contiguous increase of stages, one and two (0.287, 0.341), does not change trajectory and does not invalidate this criterion (33, 34).

4.4. Correlation Between Guilt and Horror

The fifth criterion was achieved. This criterion stated that the anguish of the parricide implied guilt (12, 18, 29) and the guilt would be decreasing (16). Table 3 shows that the guilt-EMCSI had a positive correlation with the horror-SI, negatively correlated with both university years and the age, while no correlation was shown regarding the pride-EMCSI.

4.5. Correlation Between Guilt and Age

This criterion was achieved. This criterion defined an inverse correlation between stages and guilt and pride (27). The guilt evolves as a human being grows and he/she contradicts values (22) and rules (12, 16). Thus guilt stimulates the first stages more than the last ones. Table 4 indicates that guilt-EMCSI correlates with the six stages in a descending way. Inversely, pride-EMCSI correlates with the six stages and gradually increases. There is a reverse in contiguous stages, however, these tendencies prevail and do not invalidate the EMT (33, 34).

4.6. Inverse Correlation Between Guilt, Pride and MCI Index

This last criterion was achieved. Pride and guilt had an inverse correlation with the EMCI (27). Table 5 demonstrates that the EMCI has a negative correlation with the guilt-EMCSI and a positive correlation with the pride-EMCSI. Furthermore, guilt-EMCSI and pride-EMCSI did not correlate; however, a negative value was found between them, which confirmed the antagonistic relationship between them.

5. Discussion

The present research showed that moral judgment has an emotional basis (10, 25), it extended the few studies on pride (29) and, an opposed relationship was empirically observed between pride and guilt (35). Additionally, guilt strongly and inversely correlates with the EMCI. The EMCI

Table 1. The Result of the Overall Effect of Four Scholar Groups on EMCI

Source	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power
University year	0.142	3	0.047	0.962	0.412	0.016	0.260
Error	8.506	173	0.049				
Total	24.914	177					
Corrected Total	8.648	176					

Table 2. Correlation Between sl-Horror, Longevity and Stages

	University years	Age	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
sl-Horror	-0.163 ^a	-0.183 ^a	0.287 ^b	0.341 ^b	0.304 ^b	0.280 ^b	0.267 ^b	0.111

^aThe correlation is significant at 0.05 level (2-tailed).

^bThe correlation is significant at 0.01 level (2-tailed).

Table 3. Correlation Between Horror, Age, Scholar and Guilt

	Guilt-EMCSI	Pride-EMCSI
University years	-0.202 ^a	0.054
Age	-0.162 ^b	0.113
sl-Horror	0.484 ^a	-0.030

^aThe correlation is significant at 0.01 level (2-tailed).

^bThe correlation is significant at 0.05 level (2-tailed).

Table 4. Correlation Between EMCSI-Guilt, EMCSI-Pride and Stages

Stages	EMCSI-Guilt	EMCSI-Pride
Stage 1	0.597 ^a	0.482 ^a
Stage 2	0.594 ^a	0.470 ^a
Stage 3	0.544 ^a	0.556 ^a
Stage 4	0.435 ^a	0.525 ^a
Stage 5	0.418 ^a	0.538 ^a
Stage 6	0.426 ^a	0.551 ^a

^aThe correlation is significant at 0.01 level (2-tailed).

Table 5. Correlation Between Guilt-EMCSI, Pride-EMCSI and EMCI

	Guilt-EMCSI	Pride-EMCSI	EMCI
Guilt-EMCSI	1	-0.132	-0.326 ^a
Pride-EMCSI	-0.132	1	0.323 ^a

^aThe correlation is significant at 0.01 level (2-tailed).

explicitly shows the inseparable emotive and cognitive relationship through two specific emotions, including guilt and pride.

The EMCI reinforces the dual theoretical precept of moral judgment (4, 34) and the pride is directly related to this competence. An applicable derivation of the findings is that the EMCI, the guilt-EMCSI and pride-EMCSI can be useful to unveil people who feel and reason ethically and, help to diagnose and prevent the moral anguish caused by the frustrated desire of wanting to do the right thing, which have terrible effects on health (36). Although more

validation research is required. The present results suggest that the sub-indexes can be used to evaluate workers who commonly carry out assessments at a low morality level, as few studies have examined the way by which emotions affect organizational ethics.

The shown sub-indexes and index help to the idea that solid professional ethics has a positive relationship with the organizational practice and job satisfaction. In addition, it supports the diagnosis of people's moral reasoning (37). Moral behaviors are positively related to well-being, while inversely, immoral behaviors are negatively related to mental disorder (38). Pride and guilt in moral judgment suggest that other emotions such as shame and indignation and, further learnings such as maximization and avoidance, self-conscious and non-self-conscious may do so as well (12, 39).

Most of the participants were male in the south-east of Mexico. This limits the generalizability of the results to populations in Mexico. More studies are needed, particularly in high school students, women and, employees.

5.1. Conclusions

A new way that values the emotive moral judgment was introduced. The theoretical and empirical validity of the EMT, its EMCI index, EMCSI-Guilt and EMCSI-pride sub-indexes were shown. Also, we showed that guilt and pride motivated moral judgment. Likewise, the guilt was a moral emotion opposed to pride, and pride had a favorable impact on moral judgment.

Finally, the importance of the validation procedure based on theoretical criteria was highlighted as follows: the moral emotion as a motivator, the moral emotional habituation, the descending relationship between the repulsion reaction and the moral stages, the inverse relationship between guilt and pride, and the rewarding moral emotion of success and pride favorably impacts the emotive moral judgment competence.

Supplementary Material

Supplementary material(s) is available [here](#) [To read supplementary materials, please refer to the journal website and open PDF/HTML].

Footnotes

Authors' Contribution: It is not declared by the authors.

Conflict of Interests: There is no conflict of interest in this study.

Ethical Approval: This study was performed in compliance with the ethical standards of the Institutional and/or National Research Committee, and the 1964 Declaration of Helsinki and its later amendments, or comparable ethical standards.

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References

- Greene J, Haidt J. How (and where) does moral judgment work? *Trends Cogn Sci*. 2002;**6**(12):517–23. doi: [10.1016/s1364-6613\(02\)02011-9](#). [PubMed: [12475712](#)].
- Amorim Arantes de Araujo V, Sastre Vilarrasa G. Morality, feelings and education. *Educar*. 2003;**31**:47. Spain. doi: [10.5565/rev/educar.304](#).
- Velez Garcia AE, Ostrosky-Solis F. From morality to moral emotions. *Int J Psychol*. 2006;**41**(5):348–54. doi: [10.1080/00207590500345898](#).
- Kohlberg L, Hersh RH. Moral development: A review of the theory. *Theory Pract*. 2009;**16**(2):53–9. doi: [10.1080/00405847709542675](#).
- Kohlberg L. Early education: A cognitive-developmental view. *Child Dev*. 1968;**39**(4):1013. doi: [10.2307/1127272](#).
- Haan N, Langer J, Kohlberg L. Family patterns of moral reasoning. *Child Dev*. 1976;**47**(4):1204. doi: [10.2307/1128466](#).
- Bericat E. Emotions. *Sociopedia*. 2012:1–13. doi: [10.1177/205684601361](#).
- Cresswell J, Wagoner B, Hayes A. Rediscovering James' principles of psychology. *New Ideas Psychol*. 2017;**46**:A1–6. doi: [10.1016/j.newideapsych.2017.03.001](#).
- Greene JD, Nystrom LE, Engell AD, Darley JM, Cohen JD. The neural bases of cognitive conflict and control in moral judgment. *Neuron*. 2004;**44**(2):389–400. doi: [10.1016/j.neuron.2004.09.027](#). [PubMed: [15473975](#)].
- Prinz J. The emotional basis of moral judgments. *Philos Explor*. 2006;**9**(1):29–43. doi: [10.1080/13869790500492466](#).
- Englander ZA, Haidt J, Morris JP. Neural basis of moral elevation demonstrated through inter-subject synchronization of cortical activity during free-viewing. *PLoS One*. 2012;**7**(6): e39384. doi: [10.1371/journal.pone.0039384](#). [PubMed: [22745745](#)]. [PubMed Central: [PMC3379986](#)].
- Tomkins SS. Distinguished contribution award: The phantasy behind the face. *J Pers Assess*. 1975;**39**(6):550–62. doi: [10.1207/s15327752jpa3906_1](#). [PubMed: [16367283](#)].
- Faigenbaum G, Castorina JA, Helman M, Clemente F. El enfoque piagetiano en la investigacion del juicio moral: Alternativas frente al naturalismo y el relativismo. *Estud Psicol*. 2014;**24**(2):205–22. doi: [10.1174/021093903765762910](#).
- Piaget J, Petit N. *[Seis estudios de psicología]*. 1st ed. Barcelona: Barral; 1991.
- Keltner D, Haidt J. Social functions of emotions at four levels of analysis. *Cognit Emotion*. 1999;**13**(5):505–21. doi: [10.1080/0269993993979168](#).
- Stoltz T. Consciousness in Piaget: Possibilities of understanding. *Psicologi Reflexao Critica*. 2018;**31**(1):1. doi: [10.1186/s41155-018-0110-3](#).
- Nisan M, Kohlberg L. Universality and Variation in moral judgment: A longitudinal and cross-sectional study in Turkey. *Child Dev*. 1982;**53**(4):865. doi: [10.2307/1129123](#).
- Freud S. *[Das ich und das es]*. Leipzig: Internationaler Psychoanalytischer Verlag; 1923. doi: [10.1097/00005053-192404000-00085](#).
- Kohlberg L, Wasserman ER. The cognitive-developmental approach and the practicing counselor: An opportunity for counselors to rethink their roles. *Pers Guid J*. 1980;**58**(9):559–67. doi: [10.1002/j.2164-4918.1980.tb00450.x](#).
- Berthe B. Le sentiment de culpabilité au travail, necessaire au management des hommes. *La Revue Sciences Gestion*. 2017;**285-6**(3):31. doi: [10.3917/rsg.285.0031](#).
- Gray L. Becoming self harm, theodicy and neo-primitive organizing – necessary evil or evil of necessity? *Cult Organization*. 2008;**14**(2):151–69. doi: [10.1080/14759550802079291](#).
- Banmen J. Guilt and shame: Theories and therapeutic possibilities. *Int J Adv Counselling*. 1988;**11**(1):79–91. doi: [10.1007/bf00715584](#).
- Kemp M. Dehumanization, guilt and large group dynamics with reference to the west, Israel and the Palestinians. *Br J Psychother*. 2011;**27**(4):383–405. doi: [10.1111/j.1752-0118.2011.01250.x](#).
- Jaramillo J. El sentimiento de culpa, el superyo y la pulsion de muerte. *Rev Colomb Psicol*. 1992;**1**(1):30–7. doi: [10.15446/rpc](#).
- Shi X. Continuing commentary: Emotions of guilt and shame: towards historical and intercultural perspectives on cultural psychology. *Cult Psychol*. 2009;**15**(3):363–71. doi: [10.1177/1354067x09337870](#).
- Gausel N, Brown R. Shame and guilt-do they really differ in their focus of evaluation? Wanting to change the self and behavior in response to ingroup immorality. *J Soc Psychol*. 2012;**152**(5):547–67. doi: [10.1080/00224545.2012.657265](#). [PubMed: [22930996](#)].
- Illouz E. Emotions, imagination and consumption. *J Consum Cult*. 2009;**9**(3):377–413. doi: [10.1177/1469540509342053](#).
- Taylor J. Hume on the dignity of pride. *J Scott Philos*. 2012;**10**(1):29–49. doi: [10.3366/jsp.2012.0026](#).
- Etxebarria I, Etxebarria I, Urdaneta E. Profiles in emotional aging: Does age matter? *Aging Ment Health*. 2018;**22**(10):1304–12. doi: [10.1080/13607863.2017.1286450](#). [PubMed: [28282728](#)].
- Tracy JL, Robins RW. Emerging Insights into the nature and function of pride. *Curr Dir Psychol Sci*. 2016;**16**(3):147–50. doi: [10.1111/j.1467-8721.2007.00493.x](#).
- Steinfath H. Emociones, valores y moral. *Univ Philos*. 2015;**31**(63). doi: [10.11144/javeriana.uph31-63.evms](#).
- Cohen J. A power primer. *Psychol Bull*. 1992;**112**(1):155–9. doi: [10.1037//0033-2909.112.1.155](#). [PubMed: [19565683](#)].
- Lind G. The moral judgment test: Comments on villegas de Posada's critique. *Psychol Rep*. 2006;**98**(2):580–4. doi: [10.2466/pr0.98.2.580-584](#). [PubMed: [16796117](#)].
- Lind G. The meaning and measurement of moral judgment competence revisited - A dual-aspect model. In: Fasko D, Willis W, editors. *Contemporary philosophical and psychological perspectives on moral development and education*. New Jersey: Hampton Press; 2008. p.185–220.
- Cohen TR, Wolf ST, Panter AT, Insko CA. Introducing the GASP scale: A new measure of guilt and shame proneness. *J Pers Soc Psychol*. 2011;**100**(5):947–66. doi: [10.1037/a0022641](#). [PubMed: [21517196](#)].
- YektaKooshali MH, Esmaeilpour-Bandboni M, Andacheh M. Intensity and frequency of moral distress among Iranian nurses: A systematic review and meta-analysis. *Iran J Psychiatr Behav Sci*. 2018;**12**(2). doi: [10.5812/ijpbs.10606](#).
- Rezaei Kalantari M, Nadi Khalili R. The relationship between spirituality in workplace, organizational commitment and professional ethics among girl's senior high school teachers. *Iran J Psychiatr Behav Sci*. 2018;**12**(2). doi: [10.5812/ijpbs.62356](#).

38. Azimpour A, Derakhshan Z, Ghanbari S. Morality and psychopathology: Tendencies to personality disorders and some other mental disorders among individuals with high and low moral identity. *Iran J Psychiatr Behav Sci.* 2018;**13**(1). e14966. doi: [10.5812/ijpbs.14966](https://doi.org/10.5812/ijpbs.14966).
39. Sznycer D. Forms and functions of the self-conscious emotions. *Trends Cogn Sci.* 2019;**23**(2):143-57. doi: [10.1016/j.tics.2018.11.007](https://doi.org/10.1016/j.tics.2018.11.007). [PubMed: [30583948](https://pubmed.ncbi.nlm.nih.gov/30583948/)].