The Meaning and Measurement of Moral Judgment Competence in Psychology, And a Neurological Hypothesis

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By now (2019) terminology and definitions used in this presentation have been revised: "Moral Judgment Competence" is now called "Moral Competence." It is defined as the ability to solve problems and conflicts morally, that is, on the basis of one’s moral principles through deliberation and discussion, instead of the use of violence and deceit, or through submitting to an authority (Lind 2019: How to Teach Morality. Berlin: Logos). The MJT is now called Moral Competence Test (MCT).
Content

- Background
- Moral Dilemmas as the Starting Ground
- The Two-Aspect-Theory
- The Moral Competence Tests (MCT)
- The Relevance of Measured Moral Competence for Morally Related Behavior
- Some Implications for Neuro-Moral Research

Note: Edited 2019; GL
Background

- Training as an experimental psychologist; minors: philosophy, economics, biology, linguistics
- Development of a new method for testing moral-cognitive functioning with an experimentally designed questionnaire: The *Moral Competence Test* (MCT)*
- Research program since the early 1970es: Cross-national, longitudinal, and experimental studies (SFB 23)
- Epistemological ‘affiliations’
  - Striving for *conceptual parsimony* (Ockham) and falsifiability (Popper)
  - Defining dispositions as *inseparable aspects* rather than as components or substances (Baruch Spinoza, Jean Piaget)
  - Avoiding *category error* in defining dispositions (Gilbert Ryle)
- Development of a highly effective method for fostering moral judgment competence: KMDD

*Note: Edited 2019; GL*
Starting Point: Moral Dilemmas

- A ‘moral dilemma’ signifies that people ‘have’ moral orientations, that is, moral ideals or principles.
- Only people who have moral ideals (moral sensitivity) can have moral dilemmas.
- To cope with moral dilemmas more is needed than only moral orientations, namely an ability to solve conflicts of moral orientations, which we call *moral competence*.
- Note: A moral dilemma lies in the eyes of the beholder, since every person may view a moral situation differently.
Doctor’s Dilemma

A woman had cancer and she had no hope of being saved. She was in terrible pain and so weakened that a large dose of a painkiller such as morphine would have caused her death. During a temporary period of improvement, she begged the doctor to give her enough morphine to kill her. She said she could no longer endure the pain and would be dead in a few weeks anyway. The doctor complied with her wish.

Do you disagree or agree with the doctor's behavior?
When a Friend Refuses to Share

Christopher wants to build a huge tower in the building blocks corner of the kindergarten. However, three other children already have used up all blocks but a few for their zoo. The rules say that four children are allowed to use them, but the others refuse to share with him.

Who is right?
The Dual-Aspect-Theory of Moral Behavior

- There are two fundamentally different, though inseparable aspects of moral behavior:
  - Affective aspects (*moral orientations*), and
  - Cognitive aspects (*moral competencies*).
- Both aspects can be observed as aspects of *pattern* of behavior (a *single* act or performance is too ambiguous).
- Both aspects can vary independently from each other.
- ‘Moral behavior’ is behavior which is guided at least to some degree by a person’s own moral orientations (ideals, principles), whatever they may be.

Related but Distinct Constructs

- Behavior that complies with social norms is ‘conformity’
- Behavior that complies with the law is ‘law-abiding behavior’
- Behavior that tries to maximize the good of others at the expense of one’s own interests is ‘altruistic behavior’
- The intention to do something which is morally good is a ‘moral intention’ or ‘moral attitude’

Whether or not these constructs are empirically related to moral behavior or moral judgment competence, is a question which needs to be studied empirically.
Affective Aspects

**Definition**: Moral orientations, ideals, principles, preferences, values or attitudes are all words which are used to describe the tendency of a person to accept a particular moral orientation versus the tendency to reject it.

Following *Lawrence Kohlberg*, we distinguish six qualitatively different types of moral orientations, which are ordered from low to high, from Stage 1 to Stage 6.

(In contrast to Kohlberg, we do *not* assume that moral competence develop in a ‘stage-wise’, invariant and holistic way.)
How Valid are Universal Moral Principles?

- The ‘formal’ criterion of *universalizability* -- introduced by Kant to distinguish moral principles from social and religious conventions -- is of eminent import. It has paved the way for modern legal systems and international laws.

- Kant’s qualification of moral principles as being *unconditionally valid* applies only to a very few principles. Typically, moral universal principles allow, and even require, exceptions, namely when other principles contradict them --> Moral dilemmas.

- However, moral principles are not *relativistic* like cultural and religious norms. Exceptions from a moral principle must always be justified by other moral principles.
A principle, yes, but unconditional?

- A very few moral principles are *unconditionally* universal, like respect for human dignity.
- Other principles are *conditionally* universal since they can be confined by other principles:*
  - Individual rights (confined by collective rights)
  - Legal justice (forgiveness)
  - Truth (protection of life)
  - Property (human solidarity and dignity)
  - Protection of life (quality of life, security)

* These examples are meant only as examples but deserve a more detailed discussion.
“Act only on that maxim through which you can at the same time will that it should become a universal law.”

Categorical Imperative I
Immanuel Kant (1785)
Groundwork of the Metaphysics of Morals
Moral Orientation: Respect for Human Dignity

“So act that you treat humanity, both in your own person and in the person of every other human being, not merely as a means, but always at the same time as an end.”

Categorical Imperative II
Immanuel Kant (1785)
Groundwork of the Metaphysics of Morals
Six Types of Moral Orientations
Adapted from Kohlberg’s Stage-Model

- **Type 1**: Use of physical or psychological force as a criterion of moral rightness: Right is what the stronger party wants.
- **Type 2**: Morality of simple exchange: “I do to you what you do to me.”
- **Type 3**: Appeal to group solidarity and cohesion: “If this will harm my family or my friends, I will not accept it.”
- **Type 4**: Appeal to the law as the ultimate arbiter: "The law is on my side!"
- **Type 5**: Keeping social contracts: “I ought to do what I promised to sustain mutual trust.”
- **Type 6**: Referring to *universal* moral principles: “This would be the most just and universalizable principle for everyone.”
Moral Orientations: Globally accepted?

<table>
<thead>
<tr>
<th>Country</th>
<th>Moral orientation (Kohlberg’s stages)</th>
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<tbody>
<tr>
<td>Germany (West)</td>
<td>1</td>
</tr>
<tr>
<td>Austria</td>
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<td>Poland</td>
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<td>Yugoslavia</td>
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</table>

First Semester University Students 1977

Moral Orientations: Globally accepted? (2)

Morocco (Aghbal, 2003)                China (Zhao, 2003)
Moral Ideals and ‘Immoral’ Behavior

Universities 1st Sem, N=1288 (md)
Male Prisoners (1), N=58 (mean)
Male Prisoners (2), N=122 (mean)
Young male pris. (3), N=42 (mean)
Cognitive Aspects

Ideals -> Competencies -> Behavior
Some reasons why, in a particular situation, people do not behave morally when we think they should?

1. They give other drives higher priority because of fatigue, hunger, thirst, fear, cognitive dissonance, social pressure ...
2. They lack moral sensitivity and are not able to take a moral point of view.
3. They perceive another moral principle as relevant than we do, and follow it rather than ‘our’ principle.
4. They see ‘our’ moral principle as conflicting with another important moral principle (dilemma situation) and chose to make an exception. (>> “in the eyes of the beholder”)
A Definition:
Moral Judgment Competence is ...

"the capacity to make decisions and judgments which are moral (i.e., based on internal principles) and to act in accordance with such judgments."

(Lawrence Kohlberg, 1964, p. 425)

Note: We have extended Kohlberg's definition on the basis of Habermas' theory of communicative ethics: Moral competence is the ability to solve problems and conflicts morally, that is, on the basis of one's moral principles only through deliberation and discussion, instead of through the use of violence and deceit, or through submitting to an authority. 2019; GL
Expanding the Definition: Democratic Discourse Competency...

... is the ability to solve a conflict between people and group of people through moral discourse rather than violence and power.

Experimental Principles of Cognitive-Developmental Test-Construction

- **A Moral Task: Responding to Counter-suggestions**
  - "Piaget ... used judgments plus explanations (instead of judgments only) as criteria for operational competence, and considered *counter-suggestions* essential to the clinical method." (Lourenço et al., 1996, p.146)

- **Competence Revealed in Form or Organization of Responses**
  - "The structures we seek to tap in test construction and arrive at in test scoring are abstractable from responses as their *form or quality.*" (Kohlberg, 1984, p. 402)
  - "[Structure] is a construct rather than an inference, and is warranted only on the grounds of *intelligible* ordering of the *manifest items.*" (p. 408)

- **Structure Must be Built Into Observation**
  - "If a test is to yield stage structure, a concept of that structure must be built into the initial act of observation, test construction, and scoring; it will not emerge through pure factor-analytic responses classified by content." (p. 401-402)
The Moral Competence Test (MCT)

- **Purpose**: Instrument for research and for the evaluation of educational methods and programs
- **Restriction**: Not allowed for high-stakes testing & selection
- **Special Feature**: Simultaneous measurement of moral orientations and moral competence
- **Standard version**: Two dilemmas (workers-dilemma; doctor-dilemma); more dilemmas available, e.g., P. Bataglia
- **Age-range**: from 10 years (may need special assistance)
- **Cross-cultural validation**: Certified versions in 39 languages (German, English, Spanish, Russian, Chinese, Arab etc.)


Note: edited 2019; GL
The Moral Competence Test as a N=1 Experiment

- The Moral Task
  - To Rate Supportive and Counter-Arguments in Regard to Their Moral Quality

- 6 x 2 x 2 Experimental, Multivariate Design
  - a. Moral Quality of Argument (6 Stage Orientations)
  - b. Opinion-Agreement of Argument (Pro and Contra)
  - c. Dilemma-Context of Argument (Two Dilemmas)

- Structural Scoring (organization of manifest items)
  - Multivariate Analysis of Variance
  - Index of Moral Competence: C-score

Note: Edited 2019, GL
Two Response Patterns Indicating Low versus High Moral Competence

<table>
<thead>
<tr>
<th>Arguments</th>
<th>Person A</th>
<th>Pro</th>
<th>Person B</th>
<th>Pro</th>
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<td>-3 -2 -1 0 +1 +2 +3 +4</td>
<td>-3 -2 -1 0 +1 +2 +3 +4</td>
</tr>
</tbody>
</table>

Person A: Opinion: “I agree with this decision”
C-score: 00.4

Person B: Opinion: “I agree with this decision”
C-score: 92.2
The Criteria of Validity: Four Universal Characteristics of Moral Judgment Behavior

- **Quasi-Simplex Structure of Stage-Correlations**
  - Adjacent Kohlbergian stages of moral reasoning are seen as more similar than more distant stages (Kohlberg, 1958)

- **Hierarchical Preference Order**
  - The six Kohlbergian stages are preferred in the very order in which the normative theory ranks them (Rest, 1969)

- **Affective-Cognitive Parallelism**
  - "Affective and cognitive mechanisms are inseparable, although distinct: the former depend on energy, and the latter depend on structure." (Piaget, 1983, p. 71)

- **Non-fakeability**
  - Moral competencies cannot be faked upward
A Methodological Note: The Insignificance of Significance

- Statistical significance tests, like most omnibus statistics, are mostly inappropriate in the absence of...
  - random sampling
  - multivariate information and contrasts
  - calculation of the a priori probability of the hypotheses
  - effect size measures
  - Well-defined, falsifiable theories

- Improvements are the analysis of...
  - relative effect sizes (correlation coefficient $r$)
  - absolute effect sizes (absolute differences)
  - contrasts and multiple predictions (joint probabilities)

References
Validity Criterion: Quasi-simplex: Correlation Matrix (Kohlberg, 1958)

Variables: Percentage of use of each Stage

<table>
<thead>
<tr>
<th></th>
<th>St1</th>
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<th>St4</th>
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<td>.23</td>
<td>-</td>
</tr>
</tbody>
</table>

Kohlberg, (1958, pp. 100 & 104). N = 83 boys, age 10 to 16
① Quasi-Simplex-Structure: Kohlberg Interview

Ideal Pattern

Interview Pattern: Good, not perfect
Quasi-simplex Structure: Moral Competence Test (MCT)

MCT Pattern:
Nearly perfect

Note: The Moral Judgment Test (MJT) has been renamed to Moral Competence Test (MCT). 2019; GL
Validity Criterion: Preference Hierarchy

First Semester University Students 1977 (Medians)

Validity Criterion: ③ Affective-Cognitive Parallelism

Groups:
- US Pro Choice, N=157
- US Pro Life, N=154
- D 1st Sem Univ, N=1288
- D 5th Sem Univ, N=812
- CH Voc Students, N=579
- D Prisoners, N=58

Sources:
- Lind (1977)
- Wischka (1982)
- Gross (1997)
Validity Criterion: ④ Moral Competence Cannot be Simulated Upward, Like Moral Orientations

The DIT-Experiment (Emler)

The MCT-Experiment (Lind)
The Traditional View:
Morality Has No Relevance for Behavior

- The scores in Kohlberg’s test “hardly correlate significantly with moral behavior.” (Shulman & Mekler, 1985, S. 16)

- "The correlation is not large. At average it is r = 0.30" (Uhl, 1996, p. 100; my translation, GL)

- “One need not score at Kohlberg's highest stages in order to exhibit high degrees of moral commitment and exemplary behavior.” (Colby & Damon, 1992, p. 328)

- “The force exerted by the moral sense of the individual is less effective than social myth would have us believe. Though such prescriptions as 'Thou shalt not kill' occupy a pre-eminent place in the moral order, they do not occupy a correspondingly intractable position in human psychic structure.” (Milgram, 1974, p. 6-7)
Breaking a contract

Sample: 31 college students

Criterion: Not sending back the questionnaire

Factor: Stage of Moral Judgment, Kohlberg’s Interview-Method.

Effect size: $r = .57$

Source: Krebs & Rosenwald, 1977
Obeying to Social Rules

Moral Stage (MJI, Kohlberg)

Rule-keeping Experiments

1. Vocabulary test
2. Language test
3. Honesty
4. No return of questionnaire
5. No whistle blowing

Sources
From Sprinthall et al., 1994, p. 190
Original studies
1 - 3 from Kohlberg & Candee, 1984
4 Krebs & Rosenwald, 1977
5 Brabeck, 1984

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Helping Behavior and Civic Protest

Experiment

1. Arrested for civil protest
2. Helping under duress
3. Intentions to help
4. Refusing to administer shocks

Original studies:
1. Haan et al., 1968
2-3. McNamee, 1977
4. Kohlberg & Candee, 1984
Task:
- Electronically presented dilemmas on which the participant had to decide

Sample:
- n = 104 students

Design:
- Randomized experim. and control groups

Source:
- F.-J. Mansbart (2001)

<= High moral competence (MCT C-score) results in faster decision-making.

<= Slow decision-making results in the feeling of stress.

Indicators for strength of motivation show only a low or zero relationship with speed of decision-making.

Source: F.-J. Mansbart (2001)
**Ability to Learn**

**Intervention:** A 15-minute video on organ transplantation

**Measurement:** Knowledge test about organ transplantation before and after the video

**Moderator variable:** Moral competence (MCT, C-score).

**Participants:** 9th graders

**Finding:** Correlation between moral competence and ability to learn (knowledge gain) $r = 0.22$

**Source:** Heidbrink, 1985
Teachers with high moral competence
Use more cooperative learning in class
Student with high moral competence have lower drug consumption

Finding: Not in 7th grade, but in 9th grade, moral judgment competence lowers the risk of drug consumption (tobacco, alcohol, hasch), especially with students who report high life burdens (stress).

Hypothesis: Neural Implications of Moral Competence

- People with low moral competence will hardly recognize a moral dilemma if it occurs (Sociopathy)
- “Medium” people will recognize a moral dilemma, but cannot ‘solve it’ and, therefore, will stay highly excited for a long time
  - Reduced cognitive capacities
  - Risk of burn-out syndrome
  - Risk of use of violence, drug abuse and depression
- “High” people will recognize a moral dilemma and will be able to cope with it through deliberate action
  - Emotional intelligence
  - Good academic performance
  - Democratic leadership
Expected emotional reactions of people with low, medium and high moral competence

Hypothesis

Arousal

Time ->

Dilemma

Low

Medium

High
References


More publications: http://www.uni-konstanz.de/ag-moral/