The Cross-Cultural Validity of the *Moral Competence Test*:* Findings from 29 Cross-Cultural Studies[1]

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2005

Updated 2021

[1] Paper prepared for the American Psychological Association APA, Aug. 18-22, 2005. Parts of this paper have been already presented on other occasions. *The MCT was formerly called Moral Judgment Test (MJT)

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Abstract

The Moral Competence Test (MCT) was developed 30 years ago to assess simultaneously moral attitudes and moral Competencecompetence for use in evaluation and cross-cultural studies (Lind, 1978; 1985a; in press). Rigorous criteria for checking the *pragmatic validity* and cross-cultural validity of the MCT were drawn from well-established postulates of cognitive-developmental theory: a) *Preference hierarchy* (Rest), b) *Affective-cognitive parallelism* (Piaget), and c) *Quasi-simplex structure* (Kohlberg). Research is presented showing that the MCT has been - successfully validated in 40 different language versions since its conception. Research also corroborates Piaget`s and Kohlberg's notion that morality has a competence-aspect which can be clearly distinguished from, and measured independently of, its affective aspects (like moral orientations or attitudes or values). In sum, the MCT is well suited for domestic as well as cross-cultural research into moral development and education.

Three decades ago, most measurement in the domain of moral Competenceand behavior are confined to assessing moral affects, that is, the preference for principled moral reasoning or the importance of various moral orientations. Kohlberg's *Moral Judgment Interview* (MJI) appeared to assesses also the cognitive aspect, i.e., moral *competence* (Colby et al., 1987; Kohlberg, 1958; 1964; 1981). Yet this method is cumbersome and too costly to be used in research and evaluation studies which require large samples. Moreover, the MJI provides only one combined score for both aspects (Lind, 1989).

While there has been a long tradition of measuring *affects* (like orientations, attitudes and values) in the moral domain, the measurement of *competencies* in the moral domain ha been given little attention. Up until the work of Piaget and Kohlberg, psychologists had not even be aware of the fact that moral behavior has a competence aspect and, therefore, confined morality solely to the affective domain of human behavior (Krathwohl et al., 1962). Kohlberg (1964) was the first to provide an explicit definition of *moral judgment competence,* as "the capacity to make decisions and judgments which are moral (i.e., based on *internal* principles) and to act in accordance with such judgments" (p. 425; emphasis added).[3] Note that this definition refrains from imposing specific moral values on each and every individual but requires only that each individual – regardless of culture – pursues her or his moral values in a morally consistent manner. This ensures cultural fairness when measuring moral competence.

Therefore, in 1977 Lind and his associated set out to develop a new instrument, the *Moral Competence Test* (MCT), to make both aspects of moral behavior simultaneously visible: *moral orientations* (the affective aspect) and moral *competence* (the cognitive aspect). It was to be used in a large scale cross-cultural and longitudinal studies (Lind 1978; 1985a; 2002; Lind &

[3] Though he was not the first to use this concept. Already in 1874 in "The descent of man, and selection in relation to sex", Charles Darwin wrote on *moral competencies* in the way we use this term today.

Wakenhut, 1985).[4] The biggest difficulty was to define a moral *task*. The measurement of a particular *competence* it closely tied to the kind of tasks for which that competence is needed.[5]

Lind and his colleagues considered several options (Lind, 1978; 1985a; Lind & Wakenhut, 1985). To test moral judgment competence as defined by Kohlberg (1964), it would be not sufficient to observe, as in rule-conformity research, merely a participant's 'ability' to obey the rules set up by society (cf., May & Hawthorne, 1928; Milgram, 1974). Informed by the theory of communicative ethics (Habermas, 1983; Apel, 1990), by Piaget's use of "counter-suggestions" in his clinical interviews (see also Lourenço & Machado, 1996; Inhelder et al., 1974) and by Keasey's (1974) research on adolescents' ability to deal with counter-arguments, they chose as a moral task a communication situation in which the participants had to rate moral arguments pro and contra their own opinion on a specific moral issue. That is, for the participant the main moral task involved in taking the MCT is to engage in a moral discourse by rating arguments speaking *in favor* and *against* her or his opinion on a fundamental moral dilemma. Counter-arguments often elicit both *self-protective* emotions as well as *moral* emotions (Haidt, 2001), that is, the tendency to protect one's own judgment, and the tendency to seek moral truth as Festinger's (1957) theory of *cognitive dissonance* describes it. As much research has shown (e.g., Keasey,

[4] Note that the MCT has been constructed only for use in scientific research and evaluation studies (e.g., for evaluating the effects of certain methods of moral or character education, but *not* for diagnosing or selecting individuals or group of individuals. The MCT is not suited for the latter use, and as the author, I do not approve of it. A copy of the MCT may be obtained from the author georg.lind@moralcompetence.net .

[5] As Kohlberg (1985) notes: "In studying moral behavior we are concerned with studying action in which the subject gives up something or takes risks where not doing so would appear to be to his or her immediate advantage. ... Thus, it is the overcoming of these situational pressures on either a verbal or a physical level that constitutes the test of moral behavior" (p. 522).

1974; Damasio, 1994), it takes high competencies in order to control strong moral and *a*moral emotions.[6]

Psychological and Cross-Cultural Validity of Psychological Tests

In an objective test of moral competence like the MCT, moral orientations have to be represented in short sentences in order not to overburden the subjects' short term memory with long and complex statements when making the evaluative response. In contrast to an open-ended interview in an objective test, the subject is also deprived of the possibility of making clarifications and explanations to make sure that the test scorer truly understands what she or he wants to communicate. Therefore, objective tests must not only be checked carefully for semantic validity but also for pragmatic validity if we want to be sure that there is maximum communicative validity or, as Campbell (1963) called it, "conceptual overlap."

By *ppsychological validity* of a test we mean that each item of a test and the test as a whole correctly represents what we want it to mean. This requires also *semantic* validity. Yet it is more than that. The *psychological* validity of the German master version of the MCT has been checked by carefully re-reading the items and by asking six noted experts in the area of moral development research to critically examine each item.[7] In the process of cross-cultural validation of the

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[7] I wish to thank all experts involved in this: Tino Bargel, Rainer Döbert, Thomas Krämer-Badoni, Gertrud Nunner-Winkler, Gerhard Portele, and Roland Wakenhut.

MCT, we sought to establish semantic validity through three means. First, the author of the foreign language version, typically herself or himself an expert on Kohlberg's stage model and Lind's *dual aspect theory* of moral behavior and development, not only translates the test item by item but also checks her or his translations against the theory. Second, most authors double-check on semantic validity through back translations. Third, in cases of uncertainty, experts on the theory who also are native speakers of the target language are asked to critically comment on the items of the MCT.

Psychological validity refers not only to the semantic correctness of a statement but also to its emotional and practical meaning. Our instructions and test items may be hundred percent semantically correct and still the subjects may understand them in a different way and thus their responses may be easily misinterpreted and mis-scored. We must be all the more alert when we deal with complex matters like morality. As Kohlberg (1958, 1981) warned, a single argument, taken by itself, can never be a reliable sign of a specific moral orientation or moral competence; it must be always interpreted in context. This is why traditional ways of checking the "reliability" and "validity" of test items are insufficient if not just wrong. When studying the pragmatic validity of a test, we need to look at *relationships* and *structures*.

The *semantic validity* of the master version of the MCT was checked in two ways. First, a small sample of subjects was asked to talk aloud when filling out the MCT and write down any comments they wanted to make. From this material we could detect many misunderstandings which were provoked by the wording of the MCT. Subsequently, the test items were revised and resubmitted to the same procedure. Second, the responses of the subjects were submitted to four types of relational analysis, which will be described below in more detail. Looking at the relations and inter-correlations between the responses to the MCT, enables one to detect further

instances of pragmatic invalidity, which the subjects did not need to be aware of. This latter method is also used to check on the pragmatic equivalence of translated versions of the MCT.

Signs of psychological equivalence [8]

The psychological validity of the MCT can be checked by using three well-established facts regarding the nature of moral competence (Lind 1985 a; 1985 b; 2002; 2019; Schillinger, 2006):

1. *Two aspects*: Morality is not only a matter of moral *orientations* (attitudes, values etc.) but also of moral *competence* (Kohlberg, 1963). Both aspects cannot be separated but can be clearly distinguished (Piaget, 1976; 1981; Higgins, 1995).[9] While it would be easy to simulate one's moral orientations in any direction, it should not be possible to simulate one's moral competence *upward* (Emler et al., 1983; for confirmation, see Lind, 2002).

2. *Quasi-simplex*: Moral orientations do form a stage-typical order. Stage-typical orientations which are perceived as adjacent (e.g., stage 2 and 3 orientations in Kohlberg's stage model) are rated in a more similar way than moral orientations which are considered as being more distant (e.g., stage 2 and stage 5 orientation). Thus moral stage orientations should, as

[8] In older publications Lind also used correlation of moral competence with level of education as a fourth criterion. Because there is a certain circularity involved in this criterion, it is dropped from this list.

[9] "However, one should note that there are cognitive aspects to all of Rest's components, and Kohlberg's idea of a stage as a structured whole or a world view cuts across Rest's componential model. ..." (Higgins, 1995, p. 53).

Kohlberg (1958) argued, correlate higher the closer they are located on Kohlberg's scale. They should form a *Quasi-Simplex Structure*.[10]

3. *Preference order*: Stage-typical moral orientations form a universal *hierarchical preference order* (Kohlberg 1958, 1984). Thus, regardless of cultural and ideological background, social class, age or gender, people should prefer (or reject) them in the same way (see Rests, 1969; Narvaez, 1998, p. 14).

4. *Parallelism*: According to Piaget's theory of *Affective-Cognitive Parallelism*, measure of moral orientation and moral competence should correlate strongly with each another (Lind 1978; 2002). However, this correlation may break down if something is at stake for the participant because he or she may then simulate the orientation measures in the direction of greater 'social desirability.'

Findings on the cross-cultural validity of the MCT

The last three criteria have been used as validation criteria in cross-cultural research.[11] In sum, these are the findings:

1. Quasi-simplex structure: In his original study of 83 boys age 10 to 16, Kohlberg (1958, pp. 100 & 104) found a pattern of correlations forming such a simplex-structure as *Figure 2*

[10] Quasi-simplex is a simplex in which sizable error measurements are allowed. Perfect simplex is reasonable only if measurement errors are negligible. I prefer the weaker prediction, though one could also argue otherwise. I wish to thank Debbie D. Reese for this clarification.

[11] The first criterion, supported by two laboratory experiments (Lind, 2002; Wasel, 1994) is not required as a criterion for cross-cultural validation for economical reasons.

shows. Comparing Kohlberg's data with an ideal simplex-structure from fictitious data (*Figure 1*) shows that they fit well though not perfectly.[12]

Studies using the MCT show an even better fit to this criterion (for an example, see *Figure 3*). The quasi-simplex structure was found in all cultures in a similar way. In no study was this hypothesis disconfirmed.

2. Hierarchical preference order for Kohlberg's six stages of moral orientations:[13] *Moral attitude* are defined as the subject's mean *acceptability ratings*[14] of all arguments that represent a particular moral orientation. Thus, attitudes toward each stage are represented either by an index ranging from -16 to +16 or, if means are calculated, by an index from -4 to +4. In order to be valid, the six moral orientations which Kohlberg used to define his stages, must be ordered according to their stage numbers, with the highest stage 6 preferred the most and stage 1 preferred the least.

As Figure 1 shows, this is indeed the case for the samples from various countries. In fact, all 29 language-versions of the MCT show the same monotonous increase of preference from low stage orientations to high. In all cultures, *principled moral orientations* (Stages 5 and 6) are preferred most as adequate level of reasoning for solving moral dilemmas, and preconventional orientations (Stages 1 and 2) are rejected the most. As expected, the preferences for conventional orientations (Stage 3 and 4) are in between these extremes. Although, the preference for

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[12] Note that Kohlberg used *relative* frequency of stage usage in interviews as an indicator of stage preference (they are also called *ipsative* because they always add up to 100 percent), implying that some indices must correlate negatively with one another (as some percentages get high, others must go down by definition).

[13] Originally, Kohlberg (1958) defined six stages of moral orientations, which he later reduced to five, but afterwards reconfirmed. See Kohlberg, Boyd & Levine, 1990.

[14] Up to the year 2001, the test asked respondents to rate the arguments' "degree of acceptability." To emphasize more the subjectivity of this rating task, the subject is now instructed to express how much she or he *accepts* or *rejects* each argument. I wish to thank Dr. Michael Hauan, University of Missouri, for convincing me on this issue.

conventional reasoning remains always within this range, it varies considerably from culture to culture. Participants in more traditional cultures prefer the norms of the social group to which they belong more than participants from more modern cultures do.

3. Affective-cognitive parallelism: This criterion is operationalized as the pattern of correlations between the six moral orientations on the one side and the C-index for moral competence on the other.

The parallelism criterion is also very well met by all language-versions of the MCT. In *Figure 5*, the findings from a study of German 1st semester university students are depicted as an example (for more examples, see also Lind, 1985; 1985a). In all cultures, the MCT's C-index correlates systematically with the subjects' attitudes towards each of the six stage-typical moral orientations: it correlates highly negative with low-stage-orientations and highly positive with high-stage-orientations, while the correlations with medium stage-orientations are in between. In other words, the higher the moral competence of people, the more clearly they reject low stage moral reasoning as inadequate, and the more clearly they prefer stages 5 and 6 as adequate stages of reasoning and discourse for solving a moral dilemma.[15] Again, this holds true for all different language versions of the MCT. As an example, the findings from a Malaysian study are depicted in *Figure 6*.[16]

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[15] Note, however, that this is true only for observations in "regular" situations. Affective-Cognitive Parallelism seems to become unobservable if something is at stake for the subject (Lind, 2002a; 2002b). Subjects may simulate socially desirable moral attitudes or may "underachieve" by showing less moral competence than they are capable of, or do both, thus blurring the picture we get. While indices of moral attitudes are susceptible to simulation either "up" or "down" (Emler et al., 1983), moral competencies may not fully show if the situation is aversive as, e.g., under time pressure.

[16] Study by Latif Anwar, Faculty of Education Study, Unversiti Putra Malaysia 43400 Serdang Selangor Malaysia, personal communication.

Discussion

Good measurement and progress of scientific understanding depend on each other. Our understanding of the process and conditions of moral development depends as much on good measurement, as good measurement depends on our knowledge of this object (see e.g., Messick, 1995). Therefore, progress in both fields is not linear but is mutually dependent. It is, as Kohlberg (1981) called it, a "bootstrapping" process in which we base the construction of new measurement methods on the facts which we already know, in order to explore further yet unknown grounds. The construction of the Moral CompetenceTest is part of this bootstrapping process. Its construction and validation had been based on well-supported theoretical assumptions about moral Competenceand development, and the data produced by the MCT in different cultures support very well those assumptions.

The findings of these studies have methodological, theoretical and practical implications of high import. Methodologically, they clearly support the cross-cultural validity of the experimentally designed MCT. Because the certified versions of the MCT have been successfully submitted to the rigorous validation process outlined by Lind (in press), the MCT scores mean the same in all these cultures. Thus, differences found across various cultures truly reflect differences in regard to moral *orientations* and moral *competence* and cannot be discounted as lack of semantic or pragmatic equivalence of the different language versions of the MCT.

The findings from these 29 validation studies do not only support the theoretical validity of the MCT but also corroborate the empirical validity of core assumptions of cognitive-developmental theory (Piaget, 1981; Rest, 1969; Kohlberg, 1958): Moral judgement and behavior is not only a matter of an individual's moral *orientations* but also reflect his or her cognitive func-

tioning, and both aspects are not separable though distinguishable: while moral orientations can be easily simulated in any direction, moral competencies can only be simulated downward but not upward. Yet, moral orientations show some developmental order from low to high. Finally, moral orientations are – under normal conditions – highly correlated with moral competence: the higher an individual's ability to apply their moral orientations to decision-making the more they prefer principled moral reasoning and the more they reject pre-conventional (that is, low-stage) reasoning. When experiencing pressure from outside, however, this affective-cognitive parallelism may break down as seen in the case of moral segmentation (Bataglia et al., 2002; 2003; Lind, 2000 a; Schillinger, 2006). It should be noted, however, that another core assumption of cognitive-developmental theory, the hypotheses of invariant stage-wise progression has been refuted by MCT studies. Moral competence can *regress*, especially when formal education is of low quality or when it is provided for less than ten years (Lind, 2002).

The findings reported in this article also have important *practical* implications. First, the MCT can indeed be used to measure and compare the competence aspect of moral behavior in various cultures. This opens up a whole lot of interesting research questions which have a bearing on educational policy making, like the question, whether different learning environments have a differential impact on moral learning. So far, the competence aspect of morality could only be measure by an interview method (Colby et al., 1987) which is hardly suited for research or evaluation studies that involve large numbers of participants. Other instruments are confined to measuring the preference for principled reasoning or the importance of various moral orientations but cannot assess moral competence.

Second, highest preference for post-conventional moral orientations seems to be a universal phenomenon, whereas the ability to apply these orientations is mostly lacking. Hence there

seems to be no need to "teach" or "instill" values, but rather a need to foster moral competence. For that, effective methods are available like Blatt and Kohlberg's method of dilemma discussion or its successor, the Konstanz method of dilemma discussion (Lerkiatbundit et al., 2006; Lind, 2003). In some countries, formal education does also contribute considerably to the development of moral competence (though not as much as the aforementioned methods do). In many countries, however, schools and teacher education seem to lack the quality required for fostering moral competencies.

The studies discussed here have also brought about unexpected findings which raise important new questions like the phenomenon of 'moral segmentation.' Methodologically, this means that we need to look not only at the 'global' C-score but also at the C-score for each dilemma separately in order to achieve an adequate description of people's moral competence in different cultures. The phenomenon of segmentation requires us to look more closely into the impact of external authorities like churches on individual's moral competence. And we will also have to rethink the role of teachers as an authority in the process of moral learning.

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Appendix: Validated and Certified Foreign Language Versions of the MCT

	Language	(Co-)Authors
1	Deutsch (Master copy)	Dr. Georg Lind; Item-Reviewers: Tino Bargel, Dr. Rainer Döbert, Dr. Michael Hauan, Dr. Thomas Krämer-Badoni, Dr. Gertrud Nunner-Winkler, Dr. Roland Wakenhut, Dr. Thomas E. Wren et al. (1977-2002)
2	Basque	Prof. Santiago Palacios Navarro (1982)
3	Czechian	Dr. Birgita Slovácková (1999)
4	Chinese	Zhao Zhanqiang M.A. (2004).
5	Chinese (Taiwan)	Dr. Chi-Ming Lee (2004)
6	English	Dr. Georg Lind (1984)
	English, additional subtest	Dr. Patricia Bataglia, Marcia Schillinger-Agati & Dr. Georg Lind (2003)
7	Finnish	Prof. Matti Ýlen (1999)
8	Flemish (Belgium)	Dr. Bart Duriez & Pieter-Jan De Marez, Catholic University Leuven, Belgium
9	Flemisch (Netherlands)	Dr. Michael Gross (1992)
10	French	Dr. Michael Gross (1992)
11	Greek	Dr.. Katerina Mouratidou (2002). (provisionally certified)
12	Hebrew	Dr. Michael Gross (1992)
13	Hungarian	Dr. Varine Szilagyi Ibolya (1994)
14	Iranian	Soudabeh Saeidi-Parvaneh, M.A. (2003)
15	Italian	Dr. Anna Laura (1995)
16	Latvian	Gints Malzubris, M.A. (2002)
17	Macedonian	Marijana Handziska, M.A. (2001)
18	Malaysian	Latif Anwar (2001), Sin Chek Neng, UPM, Malaysia (2005)
19	Moroccan (Arabic)	Dr. Ahmed Aghbal (2003) (provisionally certified)
20	Philippine	Jasmine Tuboro, M.A. (2001)
21	Polish	Aleksandra Cislak, M.A. (2005)
22	Portuguese (Brazilian)	Dr. Patricia Bataglia (1998)
	Additional subtest	Dr. Patricia Bataglia, Dr. Marcia Schillinger-Agati, M.A. & Dr. Georg Lind (2003)
23	Romanian	Tatiana Chicu, M.A., Beatrice Popescu, M.A. & Stefania Puschila, M.A. (2004) (provisionally certified)
24	Russian	Ilya Krumer, M.A. (2000)
25	Sinhalese (Sri Lanka)	Sanjee Perera, M.A. (2002)

26	Spanish	Dr. José Luis Trechera (1996), Cristina Moreno, R. Hernández (1999)
27	Tamil (Sri Lanka)	Sanjee Perera, M.A. (2002)
28	Thai	Prof. Sanguan Lerkiatbundit (2003)
29	Turkish	Dr. Nermin Ciftci (1996)

In meanwhile eleven more languages have been added.

Criterion #1: Quasi-Simplex Structure

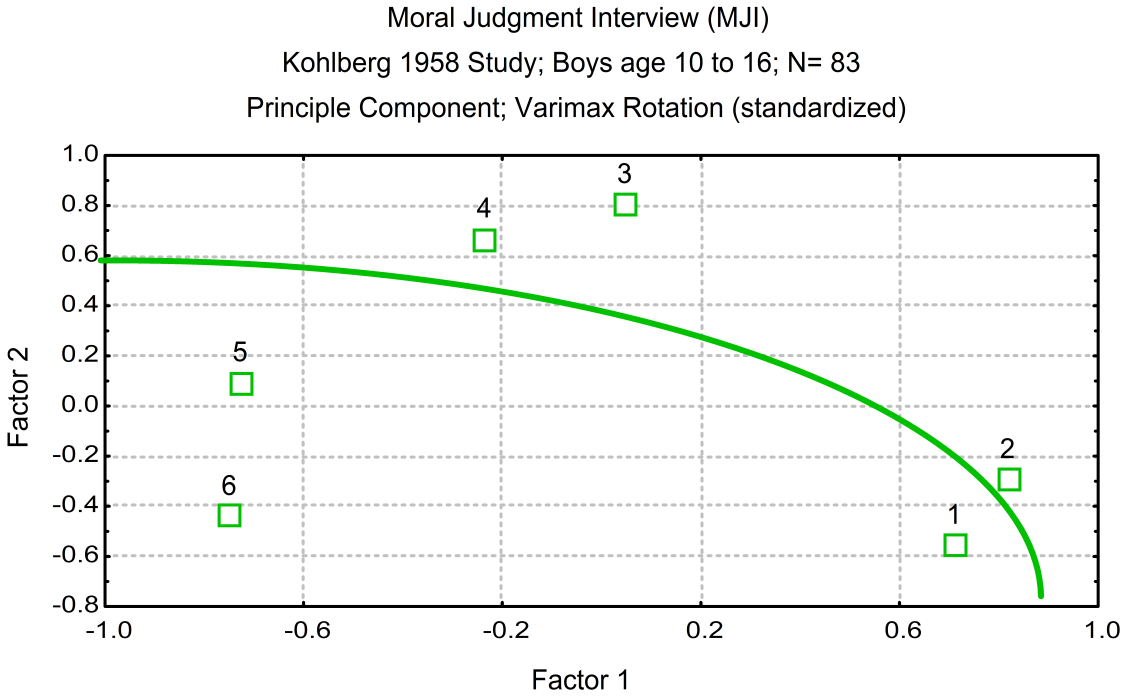


Figure 1

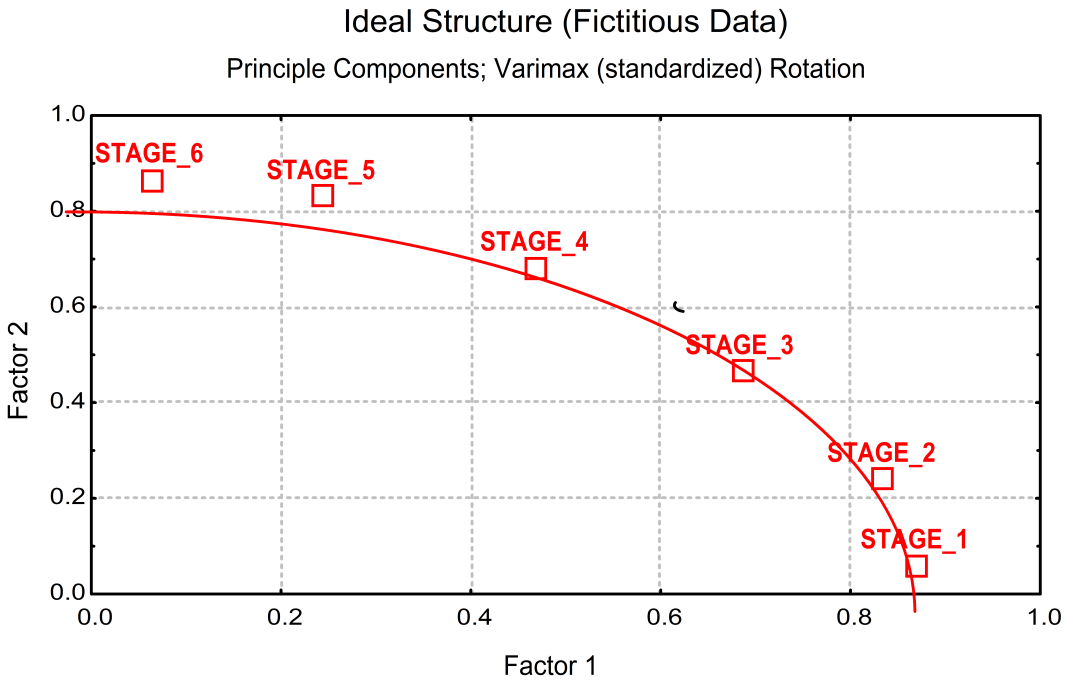
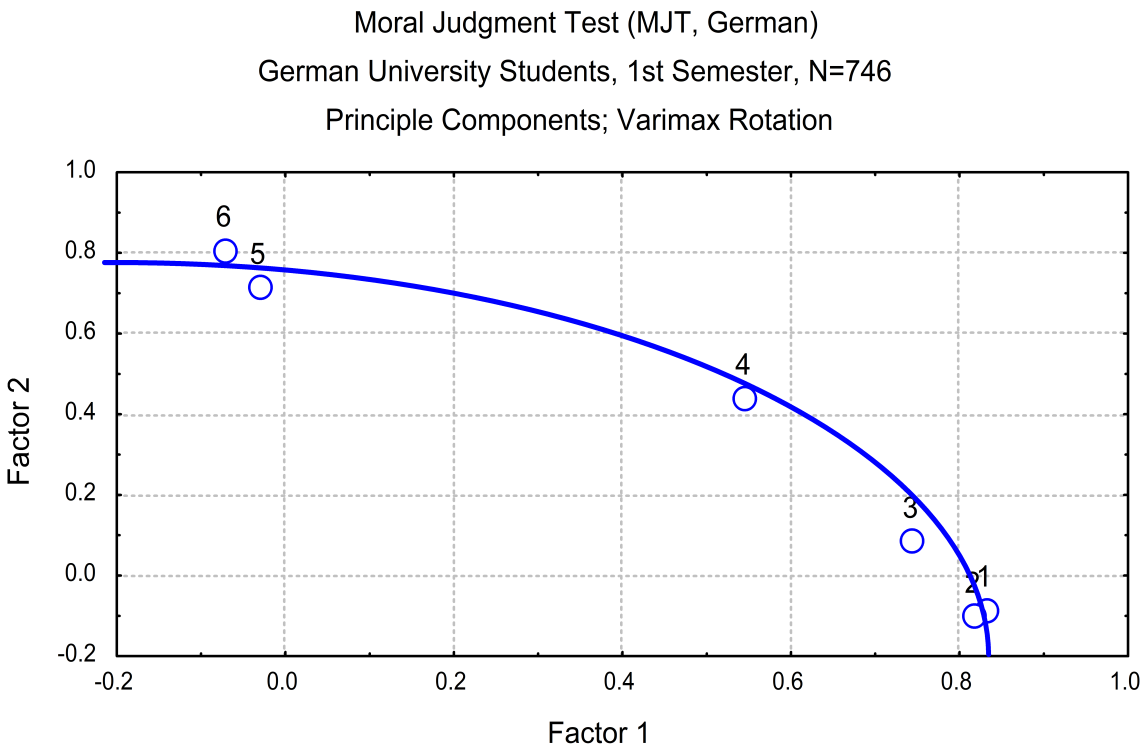


Figure 2

Criterion #1: Quasi-Simplex Structure (cont'd)



Source: Lind, 2002

Criterion #2: Preference Hierarchy of Six Moral Orientation (Kohlberg)

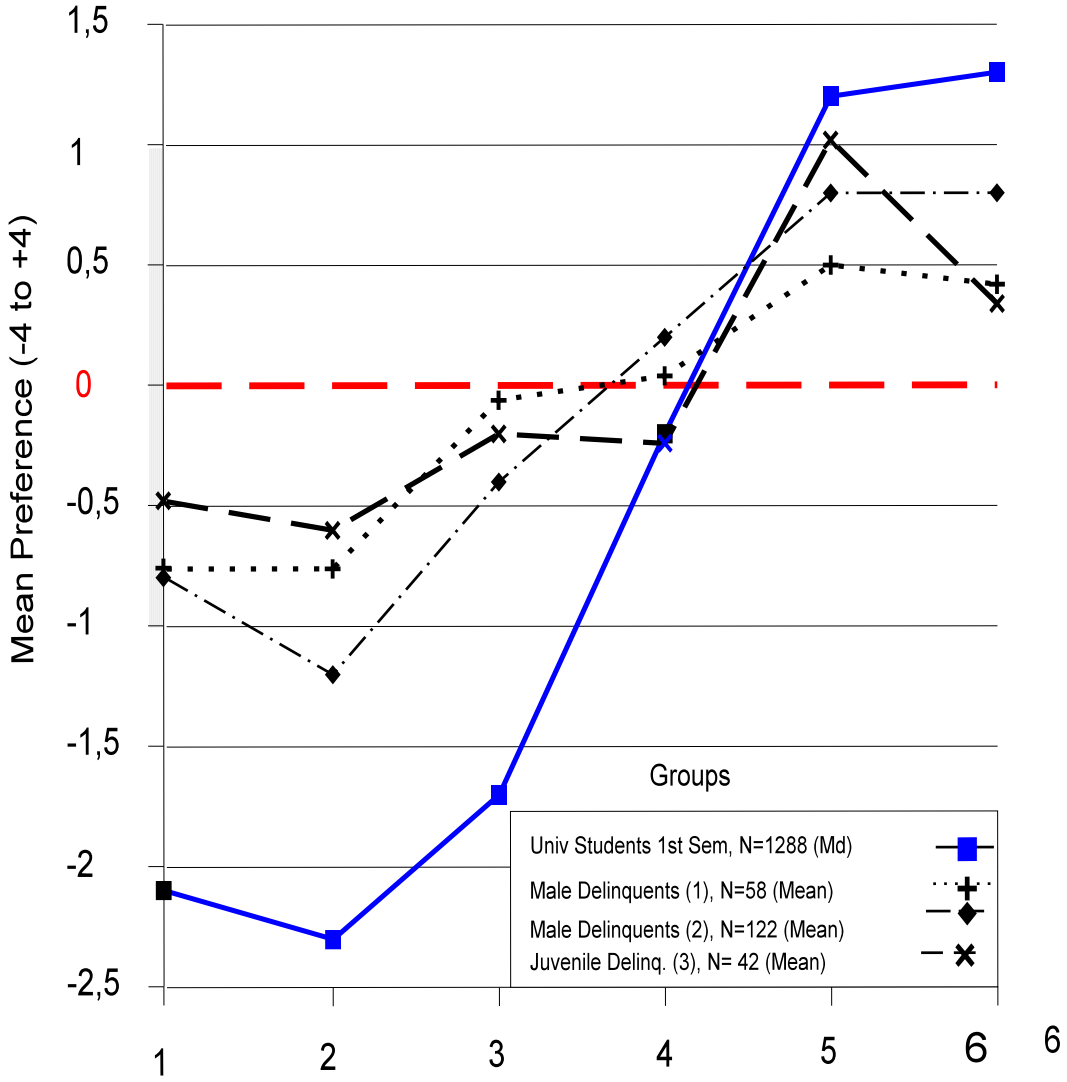


Figure 4 The preference hierarchy of moral orientations of university students and young male delinquents

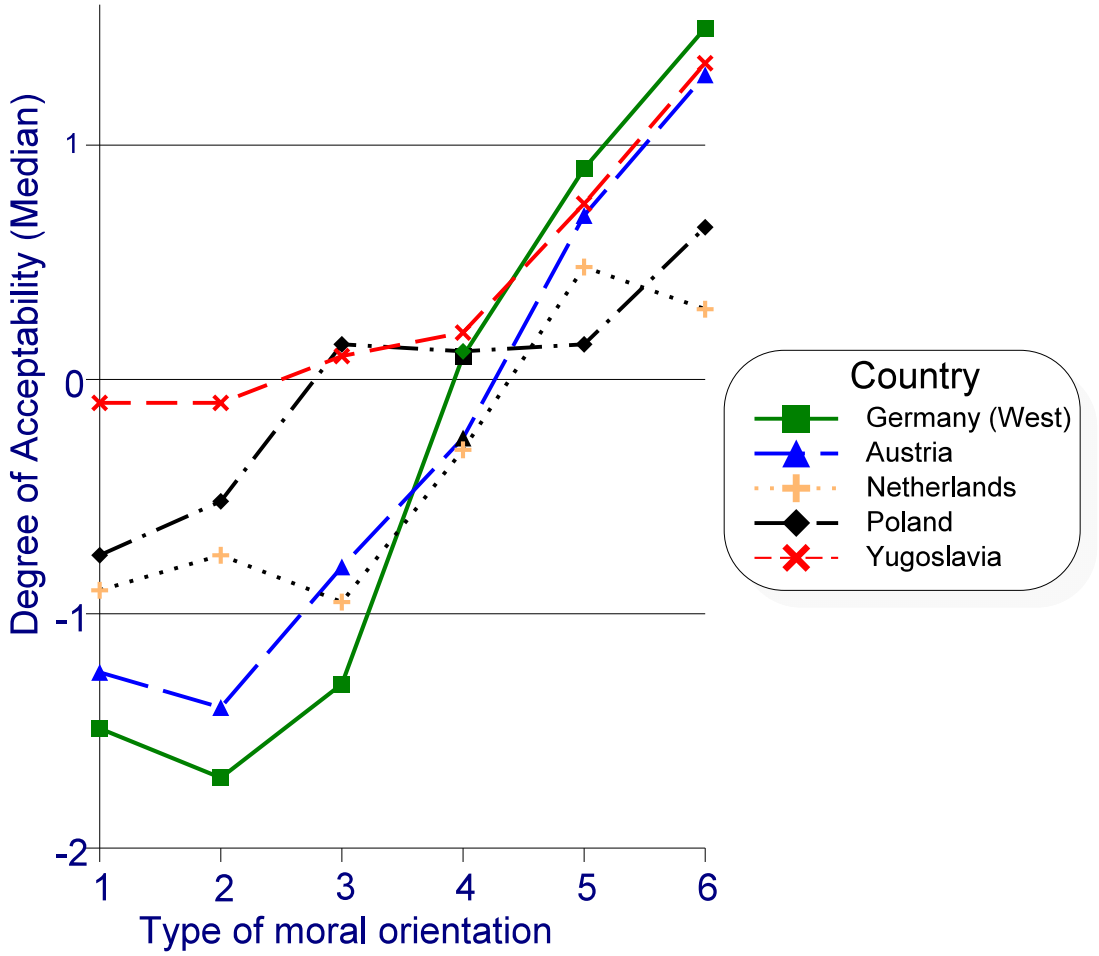


Figure 5 The preference hierarchy of first semester university students in five European countries (FORM-project 1977-1984)

Criterion #3: Affective-Cognitive Parallelism

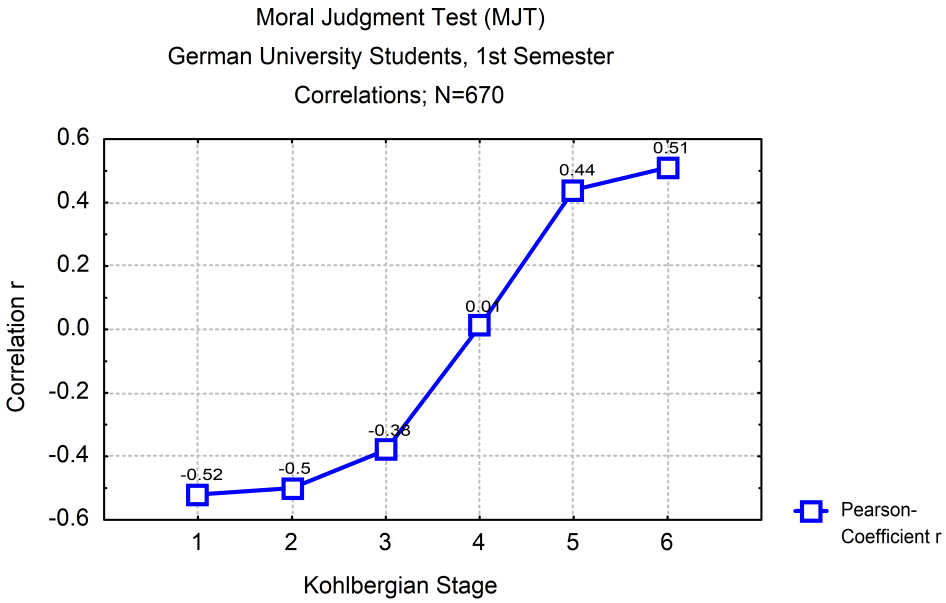


Figure 6 Correlation between six types of moral orientation and moral competence.

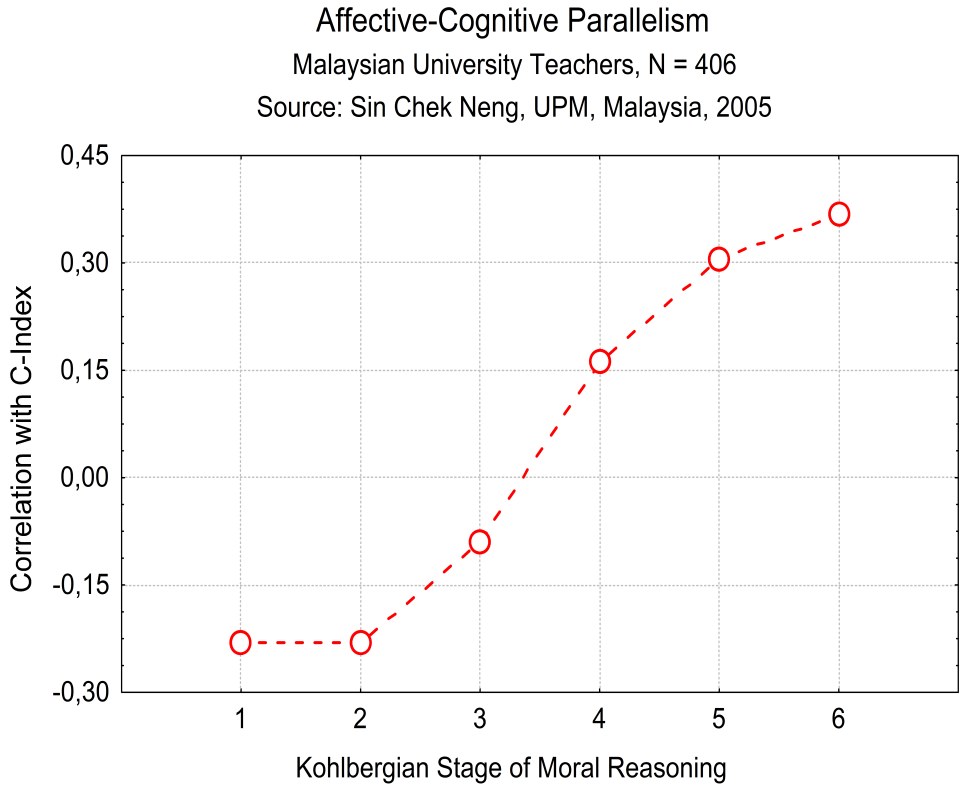


Figure 7