The Cross-Cultural Validity of the *Moral Judgment Test*: Findings from 29 Cross-Cultural Studies¹

Georg Lind ²
University of Konstanz, Germany

¹ Paper prepared for the American Psychological Association APA, Aug. 18-22, 2005. Parts of this paper have been already presented on other occasions.

² Contact: Prof. Dr. Georg Lind, Department of Psychology, University of Konstanz, 78462 Konstanz, Germany. Georg.Lind@uni-konstanz.de; Home-page: http://www.uni-konstanz.de/ag-moral/

Abstract

The Moral Judgment Test (MJT) was developed 30 years ago to assess simultaneously moral attitudes and moral judgment competence 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 MJT 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 MJT has been successfully validated in 29 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 MJT is well suited for domestic as well as cross-cultural research into moral development and education.

3

Three decades ago, most measurement in the domain of moral judgment and 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 judgment *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 judgment competence.

Therefore, 30 years ago, Lind and his associated set out to develop a new instrument, the *Moral Judgment Test* (MJT), to assess both aspects of moral judgment behavior simultaneously: moral orientations (the affective aspect) and moral judgment *competence* (the cognitive

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.

aspect) to be used in large scale cross-cultural and longitudinal studies (Lind 1978; 1985a; in press; Lind & 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 MJT 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*

⁴ Note that the MJT 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 MJT is not suited for the latter use, and as the author, I do not approve of it. A copy of the MJT may be obtained from the author: http://www.uni-konstanz.de/ag-moral/.

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).

describes it. As much research has shown (e.g., Keasey, 1974; Damasio, 1994), it takes high judgment competencies in order to control strong moral and *a*moral emotions.⁶

Pragmatic and Cross-Cultural Validity of Psychological Tests

In an objective test of moral judgment behavior like the MJT, complex moral thoughts had to be represented in only one short sentence 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 *pragmatic*⁷ *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 *semantic* validity of the German master version of the MJT has been checked by carefully re-reading the items and by asking six noted experts in the area of moral

⁶ 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).

⁷ Semantic problems refer to problems of word and sentence meaning in a rather direct sense of "how speakers know that a given utterance represents a given thought or idea. Thus semantics is concerned with a type of translation: the translation from thought into utterance, and vice versa" (Wojcik, 1998).

development research to critically examine each item.⁸ In the process of cross-cultural validation of the MJT, 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 MJT.

Pragmatic 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 judgment 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 MJT was checked in two ways. First, a small sample of subjects was asked to talk aloud when filling out the MJT 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 MJT. Subsequently, the test items were revised

⁸ I wish to thank all experts involved in this: Tino Bargel, Rainer Döbert, Thomas Krämer-Badoni, Gertrud Nunner-Winkler, Gerhard Portele, and Roland Wakenhut.

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 MJT, 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 MJT.

Signs of pragmatic equivalence 9

The pragmatic validity and cross-cultural equivalence of the MJT can be checked by using three well-established facts regarding the nature of moral judgment behavior (Lind 1985 a; 1985 b; 2002; in press; Schillinger, 2006):

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

⁹ In older publications Lind also used correlation of moral judgment 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.

¹⁰ "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).

- 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 Kohlberg (1958) argued, correlate higher the closer they are located on Kohlberg's scale. They should form a *Quasi-Simplex Structure*.¹¹
- 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.'

¹¹ 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.

Findings on the cross-cultural validity of the MJT

The last three criteria have been used as validation criteria in cross-cultural research.¹² 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* shows. Comparing Kohlberg's data with an ideal simplex-structure from fictitious data (*Figure 1*) shows that they fit well though not perfectly.¹³

Studies using the MJT 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: ¹⁴ Moral attitude are defined as the subject's mean acceptability ratings ¹⁵ 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 attitudes toward the six Kohlbergian stages must be ordered according to their stage numbers, with the highest stage 6 preferred the most and stage 1 preferred the least.

¹² 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.

¹³ 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).

¹⁴ Originally, Kohlberg (1958) defined six stages of moral orientations, which he later reduced to five, but afterwards reconfirmed. See Kohlberg, Boyd & Levine, 1990.

¹⁵ 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.

As Figure 1 shows, this is indeed the case for the samples from various countries. In fact, all 29 language-versions of the MJT 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 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 judgment competence on the other.

The parallelism criterion is also very well met by all language-versions of the MJT. 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 MJT'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 judgment 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.¹⁶

¹⁶ 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 judgment competence than they are capable of, or do both, thus blurring the picture we get. While indices of moral attitudes are susceptible to

Again, this holds true for all different language versions of the MJT. As an example, the findings from a Malaysian study are depicted in *Figure* 6.¹⁷

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 Judgment Test is part of this bootstrapping process. Its construction and validation had been based on well-supported theoretical assumptions about moral judgment and development, and the data produced by the MJT 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 MJT. Because the certified versions of the MJT have been successfully submitted to the rigorous validation process outlined by Lind (in press), the MJT

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.

¹⁷ Study by Latif Anwar, Faculty of Education Study, Unversiti Putra Malaysia 43400 Serdang Selangor Malaysia, personal communication.

scores mean the same in all these cultures. Thus, differences found across various cultures truly reflect differences in regard to moral *orientations* and moral judgment *competence* and cannot be discounted as lack of semantic or pragmatic equivalence of the different language versions of the MJT.

The findings from these 29 validation studies do not only support the theoretical validity of the MJT but also corroborate the empirical validity of core assumptions of cognitivedevelopmental 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 functioning, 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 judgment 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 MJT studies. Moral judgment 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 MJT can indeed be used to measure and compare the competence aspect of moral judgment

13

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 judgment 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 judgment 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 (Lerkiat-bundit et al., 2006; Lind, 2003). In some countries, formal education does also contribute considerably to the development of moral judgment 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 judgment 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 judgment

competence. And we will also have to rethink the role of teachers as an authority in the process of moral learning.

References

- Anderson, N.H. (1991). Moral-social development. In: N.H. Anderson, *Information Integration Theory*, pp. 137-187. Hillsdale, NJ: L. Erlbaum.
- Bataglia, P., Agati, M.M., Siva Torres, S., Zanoni Crivelaro, D.B., Oliviera, D.D., & Lencione Quevedo, T. (2002). *The development of moral competence and religious commitment in Brazil*. Paper presented at the Meeting of the Association for Moral Education, Chicago, Nov. 2002.
- Bataglia, P., Schillinger-Agati, M., Lind, G. & , Quevedo, T.L. (2003). *Testing the segmentation hypothesis with an Extended Version of the MJT*. Poster presented at the meeting of the Association for Moral Education, Krakow, July 19, 2003.
- Broughton, J.M. (1978). The cognitive-developmental approach to morality: A reply to Kurtines and Greif. *Journal of Moral Education*, 7, 81-86.
- Colby, A., Kohlberg, L., Abrahami, A., Gibbs, J., Higgins, A., Kauffman, K., Lieberman, M., Nisan, M., Reimer, J., Schrader, D., Snarey, J., & Tappan, M. (1987). *The measurement of moral judgment. Volume I, Theoretical foundations and research validation*. New York: Columbia University Press.
- Culler, J. (1998). Semiotics. In: Grolier Multimedia Encyclopedia. CD-Edition.
- Damasio, A. (1994). *Descartes' error: emotion, reason and the human brain*. New York: G. P. Putnam's Son.
- Edwards, C.P. (1981). *The comparative study of the development of moral judgment and reasoning*. In R.H. Munroe, R.L. Munroe & B.B. Whiting, eds., Handbook of cross-cultural human development, pp. 501-527. New York: Garland Publishing.
- Edwards, C.P. (1986). *Cross-cultural research on Kohlberg's stages. A basis for consensus*. In S. Modgil & C. Modgil, eds., Lawrence Kohlberg: Consensus and controversy. Brighton GB: Palmer Press.
- Emler, N., Renwick, S. & Malone, B. (1983). The relationship between moral reasoning and political orientation. *Journal of Personality and Social Psychology*, 45, 1073-80.
- Festinger, L. (1957). A theory of cognitive dissonance. New York: Harper & Row, Publishers, Inc.
- Gielen, U., Cruckshank, H., Johnston, A., Swanzey, B. & Avellani, J. (1986). The development of moral reasoning in Belize, Trinidad-Tobago, and the U.S.A. *Behaviour Science Research*, 20 (1-4), 178-207.
- Gielen, U.P. & Markoulis, D. (1993). Preferences for principled moral reasoning: A developmental and cross-cultural perspective. In: L.L. Adler & U.P. Gielen, eds., *Cross-Cultural Topics in Psychology*, pp. 73-87. Westport, Connecticut: Praeger.

- Habermas, J. (1981). *Theorie des kommunikativen Handelns*. [Theory of communicative action.] Frankfurt: Suhrkamp.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 4, 814-834.
- Hartshorne, H. & May, M.A. (1928). *Studies in the nature of character*. Vol. I: Studies in deceit, Book one and two. New York: Macmillan.
- Helkama, K., Uutela, A., Pohjanheimo, E., Saliminen, S., Koponen, A., & Rantanen.Vantsi, L. (2003). Moral reasoning and values in medical school: a longitudinal study in Finland. *Scandinavian Journal of Educational Research*, 47, 4, 399-411.
- Higgins, A. (1995). Educating for justice and community: Lawrence Kohlberg's vision of moral education. In: W.M. Kurtines & J.L. Gewirtz, eds., *Moral development: An introduction*, pp. 49-81. Boston: Allyn & Bacon.
- Inhelder, B., Sinclair, H. & Bovet, M. (1974). Learning and the development of cognition. Cambridge, MA: Harvard University Press.
- Keasey, C.B. (1974). The influence of opinion-agreement and qualitative supportive reasoning in the evaluation of moral judgments. *Journal of Personality and Social Psychology, 30*, 477-482.
- Kohlberg, L. (1958). *The development of modes of moral thinking and choice in the years 10 to 16*. University of Chicago: Unpublished doctoral dissertation.
- Kohlberg, L. (1964). Development of moral character and moral ideology. In: M.L. Hoffman & L.W. Hoffman, eds., *Review of Child Development Research, Vol. I*, 381-431. New York: Russel Sage Foundation.
- Kohlberg, L. (1976). Moral stages and moralization: The cognitive-developmental approach. T. Lickona, Ed., *Moral development and behavior: Theory, research and social issues*, pp. 31-53. New York: Holt, Rinehart & Winston.
- Kohlberg, L. (1981). *The meaning and measurement of moral development*. The Heinz Werner Lecture Series, vol. 13. Worcester, MA: Clark University Press.
- Kohlberg, L. (1984). Essays on moral development, Vol. II, The psychology of moral development. Fan Francisco, CA: Harper & Row.
- Kohlberg, L., Boyd, D., & Levine, C. (1990). The return of Stage 6: Its principle and moral point of view. In: T.E. Wren, (Ed.), *The moral domain: Essays in the ongoing discussion between philosophy and the social sciences*, pp. 151-181. Cambridge, MA: MIT Press.
- Krathwohl, D.R., Bloom, B.S. & Masia, B.B. (1964). *Taxonomy of educational objectives*. *Handbook II: Affective domain*. New York: McKay.
- Lerkiatbundit, S., Utaipan, P., Laohawiriyanon, C., & Teo, A. (2006). Randomized controlled study of the impact of the Konstanz method of dilemma discussion on moral judgement. *Journal of Allied Health*, *35*(2), 101-108.
- Lind, G. (1978). Wie misst man moralisches Urteil? [How does one measure moral judgment?] Probleme und alternative Möglichkeiten der Messung eines komplexen Konstrukts. G. Portele, Ed., *Sozialisation und Moral*, pp. 171-201: Weinheim: Beltz.
- Lind, G. (1982). Experimental Questionnaires: A new approach to personality research. In: A. Kossakowski & K. Obuchowski, eds., *Progress in psychology of personality*, pp. 132-144. Amsterdam, NL: North-Holland.
- Lind, G. (1985 a). *Inhalt und Struktur des moralischen Urteilens*. [Content and structure of moral judgment.] University of Konstanz: Unpublished doctoral dissertation.

- Lind, G. (1985 b). The theory of moral-cognitive judgment: A socio-psychological assessment. In: G. Lind, H.A. Hartmann & R. Wakenhut, Eds., *Moral development and the social environment. Studies in the philosophy and psychology of moral judgment and education*, pp. 21-53. Chicago: Precedent Publishing Inc.
- Lind, G. (1986). Cultural differences in moral judgment? A study of West and East European University Students. *Behavioral Science Research*, 20, 208-225.
- Lind, G. (1989). Measuring moral judgment: A review of 'The Measurement of Moral Judgment' by Anne Colby, Lawrence Kohlberg et al. *Human Development*, 32, 388-397.
- Lind, G. (1995). *Cultural fairness and the measurement of morality*. Paper presented at the Conference of the Association for Moral Education (AME), New York, November 16-18, 1995.
- Lind, G. (2000 a). Off limits. A cross-cultural study on possible causes of segmentation of moral judgment competence. Presentations at the AERA Conference. New Orleans.
- Lind, G. (2000 b). Moral regression in medical students and their learning environment. *Revista Brasileira de Educação Médica*, *24*(3), 24-33.
- Lind, G. (2002). *Ist Moral lehrbar? Ergebnisse der modernen moralpsychologischen Forschung* (Can morality be taught? Research findings from modern moral psychology). Berlin: Logos-Verlag.
- Lind, G., 2005. Moral dilemma discussion revisited The Konstanz Method. *European Journal of Psychology, February 2005* http://www.ejop.org.
- Lind, G. (2006). *Moral Cognition or Affect or Both? Test and Educational Implications of Piaget's Parallelism Theory*. Paper presented at the annual meeting of the American Educational Research Association in San Francisco, April 7 11, 2006.
- Lind, G. (in press). The meaning and measurement of moral judgment competence revisited A dual- aspect model. In: D. Fasko & W. Willis, Eds., *Contemporary Philosophical and Psychological Perspectives on Moral Development and Education*. Cresskill. NJ: Hampton Press.
- Lind, G. & Wakenhut, R. (1985). Testing for moral judgment competence. In: Lind, G., Hartmann, H.A. & Wakenhut, R., Eds., *Moral Development and the Social Environment.*Studies in the Philosophy and Psychology of Moral Judgment and Education, pp. 79 105. Chicago: Precedent Publishing Inc.
- Lourenço, O. & Machado, A. (1996). In defense of Piaget's theory: a reply to 10 common criticisms. *Psychological Review*, 103, 143-164.
- Messick, S. (1995). Validity of psychological assessment. Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, *50*, 741-749.
- Milgram, S. (1974). Obedience to authority. An experimental view. New York: Tavistock.
- Nagl, W. & Walter, H.G., Eds. (1986). *Konstanzer Statistisches Analyse System KOSTAS. Bericht 37.* Zentrum I Bildungsforschung. University of Konstanz, Germany.
- Narvaez, D. (1998). The influence of moral schemas on the reconstruction of moral narratives in eighth graders and college students. *Journal of Educational Psychology*, 90, 13-24.
- Piaget, J. (1965). The moral judgment of the child (Original 1932). New York: The Free Press.
- Piaget, J. (1951). Play, dreams and imitation in childhood. New York: Norton.
- Piaget, J. (1976). The affective unconscious and the cognitive unconscious. In: B. Inhelder & H.H. Chipman, Eds., *Piaget and his school*, pp. 63-71. New York: Springer.

- Piaget, J. (1981). *Intelligence and affectivity: Their relation during child development*. Palo Alto, CA: Annual Reviews.
- Piaget, J. & Inhelder, B. (1969). The psychology of the child. Basic Books (Original 1966).
- Pittel, S.M. & Mendelsohn, G.A. (1966). Measurement of moral values: a review and critique. *Psychological Bulletin*, 66, 22-35.
- Power, F.C., Higgins, C. & Kohlberg, L. (1989). *Lawrence Kohlberg's approach to moral education*. New York: Columbia University Press.
- Rest, J.R. (1969). Level of moral development as a determinant of preference and comprehension of moral judgments made by others. *Journal of Personality*, 37(1), 220-228.
- Schillinger-Agati, M. & Lind, G. (2003). *Moral judgment competence in Brazilian and German university students*. Paper presented at the AERA conference in Chicago, April 21st 25th, 2003.
- Schillinger, M. (2006). Learning environments and moral development: How university education fosters moral judgment competence in Brazil and two German-speaking countries. Aachen: Shaker Verlag.
- Snarey, J. (1985). The cross-cultural universality of social-moral development: A critical review of Kohlbergian research, *Psychological Bulletin*, *97*, 202-232).
- Wakenhut, R. (1982). Lebensweltliche Moral und moralische Segmentierung bei Unteroffizieren der Bundeswehr. [Life-world morality and moral segmentation by German
 soldiers.] In: P. Klein, Hg., *Das strapazierte Rückgrat. Unteroffiziere der Bundeswehr*,
 pp. 309-327. Baden-Baden: Nomos Verlagsgesellschaft.
- Walker, L.J. (1995). Sexism in Kohlberg's moral psychology? W.M. Kurtines & J.L. Gewirtz, eds., *Moral development: An introduction*, pp. 83-107. Needham, MA: Allyn & Bacon.
- Wasel, W. (1994). Simulation moralischer Urteilsfähigkeit. Moralentwicklung: eine kognitivstrukturelle Veränderung oder ein affektives Phänomen? Konstanz: Unveröffentlichte Diplomarbeit, Fachgruppe Psychologie, Universität Konstanz.
- Wittgenstein, L. (1971). *Philosophical investigations*. Blackwell Publishers (Originally published 1952)
- Wojcik, (1998). Semantics. In: Grolier Multimedia Encyclopedia. CD-Edition.

Appendix: Validated and Certified Foreign Language Versions of the MJT

Language (Co-)Authors

Dr. Georg Lind; Item-Reviewers: Tino Bargel, Dr. Rainer Döbert, Dr.

1 Deutsch (Master copy) 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)

Dr. Bart Duriez & Pieter-Jan De Marez, Catholic University Leuven,

Belgium

9 Flemisch (Netherlands) Dr. Michael Gross (1992)

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)

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)

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)

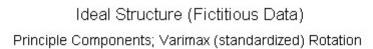
²⁶ Spanish Dr. José Luis Trechera (1996), Cristina Moreno, R. Hernández (1999)

²⁷ Tamil (Sri Lanka) Sanjee Perera, M.A. (2002)

²⁸ Thai Prof. Sanguan Lerkiatbundit (2003)

²⁹ Turkish Dr. Nermin Ciftci (1996)

Criterion #1: Quasi-Simplex Structure



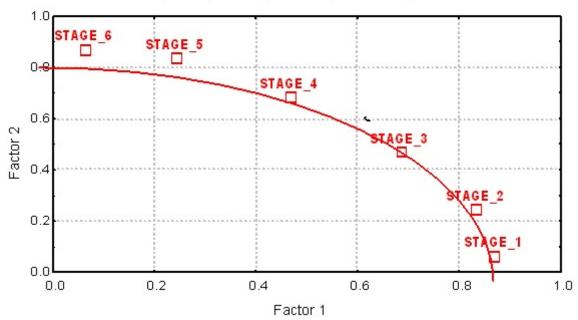


Figure 2

Moral Judgment Interview (MJI) Kohlberg 1958 Study; Boys age 10 to 16; N= 83 Principle Component; Varimax Rotation (standardized)

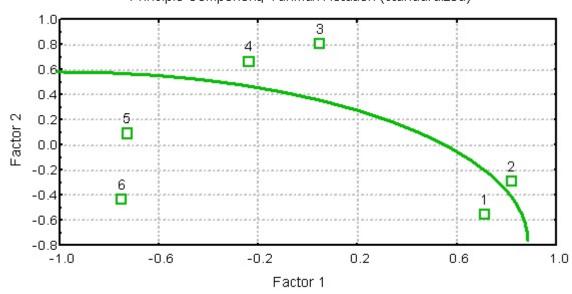
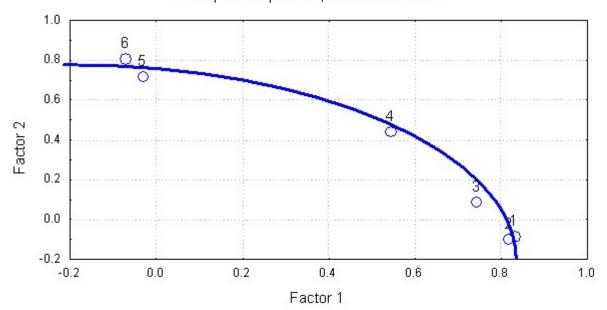


Figure 1

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

Moral Judgment Test (MJT, German)
German University Students, 1st Semester, N=746
Principle Components; Varimax Rotation



Source: Lind, 2002

Criterion #2: Preference Hierarchy of Moral Orientation (Kohlberg's Stages)

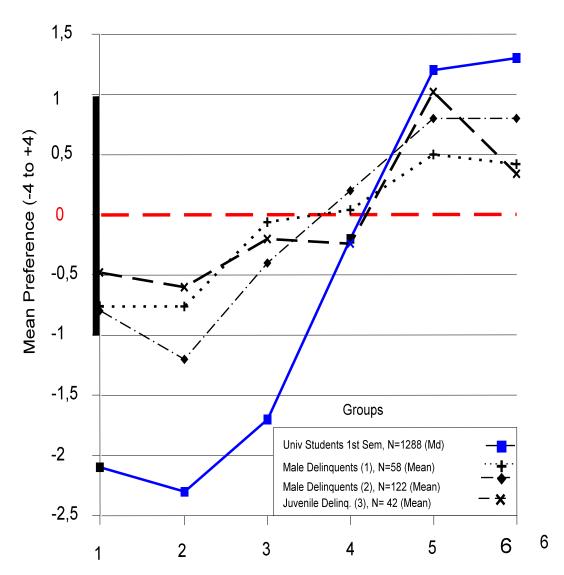


Figure 4 The preference hierarchy of moral orientations of university students and young male delinquents

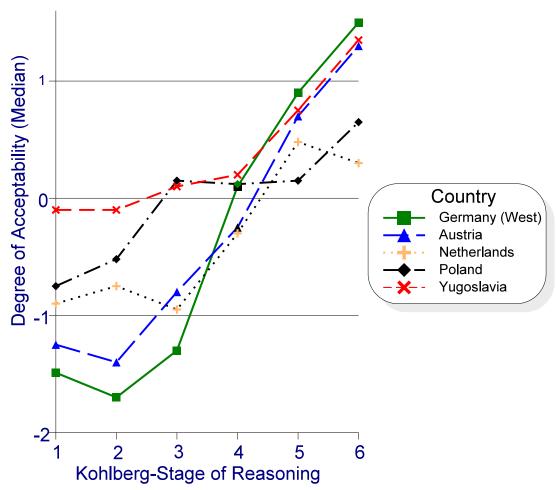


Figure 5 The preference hierarchy of first semester university students in five European countries (FORM-project 1977-1984)

Criterion #3: Affective-Cognitive Parallelism

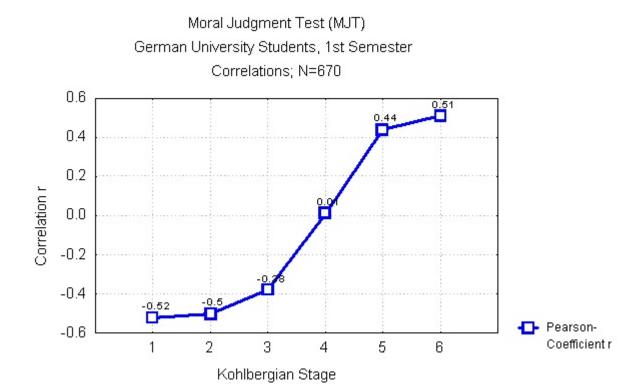
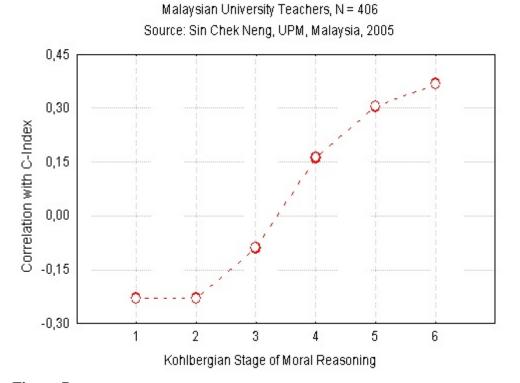


Figure 6



Affective-Cognitive Parallelism

Figure 7