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Components of Morality

A Professional Ethics Perspective on Moral Motivation, Moral Sensitivity, Moral Reasoning and Related Constructs Among University Students

Acknowledgements

I first became interested in professional ethics when I was serving as a project secretary in a work group the aim of which was to develop professional ethics education at the universities in the Helsinki metropolitan area. The work group was launched by the Rev Heikki Lindfors, whom I want to thank for giving me the opportunity to get involved with the project.

My warmest thanks go to my supervisor Professor Klaus Helkama for his advice, encouragement, and patience. Moreover, I want to acknowledge my gratitude to the anonymous reviewers of the separate articles and the pre-examiners of the present thesis, Professor Muriel Bebeau (University of Minnesota) and Professor Michael W. Pratt (Wilfrid Laurier University), whose comments and suggestions helped me to improve this report considerably.

I am grateful to the Department of Social Psychology at the University of Helsinki, which first under the leadership of Professor emerita Rauni Myllyniemi and then Professor Klaus Helkama has provided me the facilities and friendly work environment to complete this work. Many ex and present colleagues at the department also deserve my thanks. My special thanks are due to Professor Anna-Maija Pirttilä-Backman for her longtime friendship and readiness to answer my questions concerning scientific work, to Eeva Honkanummi for tireless support and inspiring company, and Jukka Lipponen for helpfulness and practical advice.

I was privileged to do my study within a research group. The members of the "Values, moral identity and emotions" project, Ritva Horppu, Merja Ikonen-Varila, Soile Juujärvi, Esa Pohjanheimo, Annukka Vainio and Markku Verkasalo created

warm and encouraging atmosphere for enjoyable discussions. I want to thank Soile in particular for her contribution to the elaboration of the moral sensitivity test and for scoring the protocols for reliability. Moreover, I am thankful to Saana Manninen and Alina Nikitenkova for serving as scorers in my studies.

This study would not has been possible without those students from the University of Helsinki, Helsinki School of Economics and Helsinki University of Technology who took their time and put their effort to fill in my sometimes demanding questionnaires, and without help of the teachers who gave me access to their classes. I warmly thank them all.

I am grateful to Ari Hyvönen for sharing the parenthood, Inger Hyvönen for her interest and help in childcare, and to my friends Hanna Ahokas, Anna Laurikainen and Kirsi Tolonen for their compassionate company at difficult moments. I thank my father Emil Myyry, and my siblings, Jukka Tuominen, Arja Muhin, and Leena Myyry, and their families for being there and keeping me anchored in everyday life. Finally, I thank my nearest and dearest, Elmeri and Ella for their questions, curiosity, and bringing joy to my days.

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LIST OF ORIGINAL PUBLICATIONS

I   Myyry, L. & Helkama, K. (2001).University students' value priorities and emotional empathy. Educational Psychology, 1, 25-40.

II   Myyry, L. & Helkama, K. (2002). The role of value priorities and professional ethics training in moral sensitivity. Journal of Moral Education, 1, 35-50.

III   Myyry, L. (2002). Everyday value conflicts and integrative complexity of thought. Scandinavian Journal of Psychology, 5, 385-395.

IV   Myyry, L. & Helkama, K. (2002). Moral reasoning and the use of procedural justice rules in hypothetical and real-life dilemmas. Social Justice Research, 4, 373-391.

X

INTRODUCTION

Universities prepare students for different kinds of professions. In professional life the professionals have to make - sometimes quite hard - decisions which affect other people. Professionals should have, beside the technical knowledge of their profession, also the ability to see the ethical dimensions of their work. Professional ethics is one of the cornerstones of professional functioning because it maintains the trust of clients and society. From a wider perspective as well ethics can be considered essential to societies. Markova (1990, p. 115) has argued that "it is ethics that to a large extent determines the very nature of the relationship between individual and society". The conception of ethics at different times has determined how the relationship between individual and society has been understood.

In recent years, ethics, and professional ethics in particular, has been a widely discussed topic in Finland. Several unfortunate incidents in Finnish academic life, where professionals have failed to behave according to the ethical standards of their profession have raised concern for the morality and values of professionals. This interest in ethical matters has given an impetus to seminars and publications (see e.g., Myyry, 1999), as well as formal resolutions. For instance, Finland's National Advisory Broad on Research Ethics has published instructions for handling misconduct and fraud in science (2002). Ethics is also a prominent part of the University of Helsinki's strategic plan for the years 2004-2005.

The studies to be reported in the current thesis are all concerned with different aspects of deliberate or spontaneous professional socialization that takes place at universities. Consequently, the view point of the report is the ethics of professionals.

It is widely agreed that to be moral, an action should have at least some certain characteristics. Firstly, it should be intentional, not accidentally or unconsciously produced. Secondly, the reasons to act must be moral and related to what is morally good or bad in the agent's understanding. (Blasi, 1999.) It has been claimed (Blasi, 1980) that without a judgment even a beneficial action would not be moral. This prerequisite of consciousness is presented also by Markova (1990) who distinguishes reflexive and nonreflexive (customary) ethics. Reflexive ethics is characterized by consciousness: people make ethical judgments deliberately, based on the knowledge and critical evaluation of the matter. Nonreflexive ethics, in contrast, refers to obeying rules and applying them without individual thought. She further argues that basically human ethical thought is reflexive. However, much of it turns into routines and unthinking practices when it becomes part of established tradition and custom, like ethical customs of a profession.

Professions could be distinguished from other occupations in terms of the authority and power which they hold to a larger extent than other occupations. The professionals are relatively free to make their own decisions and often they have power over their clients. On the other hand, greater autonomy brings with it greater responsibility, thus professionals are more responsible for their professional behaviour than are individuals working in occupations with a more limited amount of autonomy. In the (sociological) literature a professional is usually defined "as a member of an exclusive group of individuals who possess a value-based service ideal, and an abstract knowledge on their own field" (Airaksinen, 1998; see also Johnson, 1972; Larson, 1979 and Kivinen, 1984). As other characteristics of professions are usually regarded long formal (academic) education, stable career (Häyry, 2002) and collegiality (Järvinen, 1987). Based on their autonomous possession and expertise knowledge, professionals are expected to behave according to the ethical code of their profession (Airaksinen, 1991; Häyry & Häyry, 1994). While the classical professions (e.g.,

doctors, lawyers etc.) have over centuries controlled the ethical conduct of their members, in recent years more and more occupational groups in Finland have published their own ethical codes. Professional ethics is also part of the lay conceptions of professions (Myyry, 1992).

What then, one might ask, construct moral behaviour or morality in general? Do ethical codes mark the way to moral functioning for a beginning professional? Blasi (1980) and Markova (1990) for instance, have both stressed the intricacy of moral behaviour. Blasi (1980) proposed that moral behaviour could be derived from understanding and reasons concerning both the fundamental goals of human beings and the means to pursue them. There are several processes by which these goals can influence behaviour, for instance, categorizing personal and social reality, comparing values and organizing value hierarchies, constructing criteria and rules for evaluations and decisions, and assessing and reasoning. In Markova's (1990) opinion reflexive ethics is characterized by the evaluation of one's own and of others various mental processes and actions in making moral decisions. Hence, it is obvious that the complexity of moral behaviour is not completely captured by the ethical codes.

One of the leading philosophers in the field of professional ethics, Timo Airaksinen, has argued (2003) that one way to approach professional ethics is to perceive it - at least in some extent - as conscious codes of values and norms which actually guide professionals' decision-making in particular situations. The research on this matter, Airaksinen continued, belongs to social psychology.

The aim of this thesis is to map the domain of morality of future professionals from different fields of study. The main tool for this work is James Rest's (1986) four component model of moral behaviour, which draws together various features of morality: interpreting moral problems, making moral judgments, preferring moral values over non-moral ones, and implementing moral actions. Relationships between these elements - excluding only the implementation skills - are examined through four studies. Some additional ingredients are also considered, namely empathy as a motivational factor in moral behaviour, and integrative complexity

as representing the complexity and structure of thinking used in resolving conflicts between values. One focus in this work is on the association of values with the other components of morality. One interventional, one experimental and two correlational studies were conducted.

2 LITERATURE REVIEW

2.1 The four component model of moral behaviour

The cognitive-developmental stage theory, initiated by Lawrence Kohlberg in late 1950s, dominated the research of moral psychology over two decades. The insufficiency of the cognitive-developmental approach to explain moral behaviour was critized for instance by Hoffman (1984) who claimed that in the cognitive approach the role of conflict, motivation and affect is minimized. Likewise, Blasi (1980) - in the conclusions of his review of moral cognition and moral action - considered the reasons for the existence of the gap between moral judgment and actual moral behaviour. For instance, he asked, are there differences in people's readiness to interpret situations in moral terms? Do some people consider only a few situations as moral whereas other see many? Moreover, what motivates individuals to behave according their judgments? Why were some high-scoring respondents able to resist temptation and some were not? Finally, it could be asked what kinds of defensive or coping strategies people use to avoid an unpleasant decision that follows from one's moral judgment, or what kinds of strategies they use to act consistently with their

judgment? The dissatisfaction induced James Rest, a student of Lawrence Kohlberg's, to develop a four component model of moral behaviour. Rest (1986) considered the psychological processes that are involved when people behave morally and ended up with four major psychological processes that must have occurred in order for moral behaviour to take place. The model was originally formulated when Rest did a literature review of morality and used it to classify the various studies carried out in the domain of moral development with different starting points (Rest, 1983).

Firstly, in moral behaviour, there must be some sort of interpretation of the particular situation. The first component, later called moral sensitivity, includes consideration of which actions are possible in the situation, who are the parties concerned, and how they would be affected by the consequences of each action. Secondly, one must be able to make a judgment about which course of action is morally right or fair, thus choosing one possible line of action as what one ought to do in that situation. Thirdly, one ought to give priority to moral values above other personal values such that an intention to do what is morally right is formed. The third component is called moral motivation in the sense that values motivate individuals to achieve goals and guide their behaviour. Finally, the fourth component - moral character - involves having courage and implementing skills to carry out a line of action even under pressure. (Rest, 1986, 1994.)

Rest (1986) stressed that the order of the components in the model is logical rather than chronological. Although it logically makes sense that for instance component 1 (sensitivity to the moral issues of the situation) precedes component 3 (motivation to behave morally), one's value priorities might affect the interpretation of situations as morally relevant and which aspects of the situation are considered important. The basic assumption is that the underlying psychological processes of moral behaviour are distinct from each other, although they might interact and influence one another. For instance, a person might be capable of making adequate moral judgments but be insensitive to different moral aspects of the situation, or vice versa. Rest did not divide morality into cognitive, affective and behavioural components - as had traditionally been done - which each have their separate

developmental paths. Instead he claimed that these three components are always interconnected, and that cognition, affect and behaviour are incorporated in his model's components. Cognition and affect could be linked by several ways, there is not just one connection.

Moreover, Rest (1986) emphasized the fact that the four components represent processes involved in the production of a moral act, not general traits of people. For instance, a person highly sensitive in one situation might be relatively insensitive in another. Thus, the model is situation-specific in a way that different situations promote different kinds of interpretations and moral judgments, heighten the importance of some values compared to others, and encourage an individual to implement a moral act or discourage her or him from doing so.

One of the goals Rest and his associates had in developing the four component model was to have a theory and methodology for studying morality of everyday life, not only reasoning on hypothetical dilemmas. Rest and his colleagues at the University of Minnesota have conducted research on the components of morality mostly in the context of professional decision-making. According to Rest (1986, pp. 20-21) the target groups have been professionals partly because the professionals' experience to justify their decisions makes them easier to study, and partly because in professional decision-making situations the professionals' self-interest and justice are not so often in conflict with each other as might be the case in other real-life dilemmas.

Although Kohlberg's theory has not lost its importance in understanding people's constructions of moral issues, the four component model broadened the scope of moral psychology by taking into account the other processes of moral behaviour as well or emphasizing that the components influence each other in complicated ways. This four component model of moral behaviour serves as a theoretical framework of my thesis. Through different samples and research questions I explore the relationships between the different components, excluding only the moral character component.

Of the Rest components moral implementation skills are probably the most difficult ones to capture by research designs. How to validly operationalize moral character, which may include dimensions like personality traits and diverse situational factors? Rest (1986) named some studies on ego-strength and self-regulation[1] which make contribution to the fourth component. As Rest noted, however, for instance ego-strength is useful in a variety of actions and may be used for ill or good. Thus, the vagueness of the moral character component makes it difficult study, and despite its apparent importance to moral behaviour in general (after all, the implementing skills might prove to be the most essential factor to carry out a moral action), I have decided to exclude it from my design.

I now proceed to scrutinize more closely the three components, moral sensitivity, moral judgment, moral motivation, and other theoretical conceptions relating to my thesis.

2.1.1 Component I: Moral sensitivity

It could be claimed that usually a moral issue arises when the goals, plans, desires, and expectations of people are in conflict. Based on this assumption Hoffman (1984) has proposed that crucial to the moral domain is the sensitivity to the welfare and rights of others, especially when they conflict with one's own interest, and that this sensitivity may be reflected in one's concerns about the consequences of one's actions for others.

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[1]

See section 2.1.4 for a review of Darley and Batson's (1973) famous study about the Good Samaritan.

In line with Hoffman's suggestions Rest (1986; 1994) defined moral sensitivity as an awareness of how our actions affect other people. It includes being aware who are the participants in the situation, which lines of action are possible, and what might be the consequences of different behaviours to different parties. Rest assumed that moral sensitivity involves constructing different possible scenarios for the situation and imagining how different actions might impact the participants in the situation. Constructing scenarios could be considered a basic human characteristic: N.K. Humphrey (1976, p. 309) postulated in his article about the social function of intellect that

"social primates are

required by the very nature of the system they create and maintain to be calculating beings; they must be able to calculate the consequences of their own behaviour, to calculate the likely behaviour of others, to calculate the balance of advantage and loss - and all this in a context where the evidence on which their calculations are based is ephemeral, ambiguous and liable to change, not least as a consequence of their own behaviour."

Moral sensitivity is thus to a large extent a conscious process. It has also been suggested (Narváez, 1998) that prior to the conscious interpretation of a situation a more unconscious process takes place: moral perception, which pertains to how hypotheses about the world and information processes organize stimulation into some kind of understandable form that is then consciously interpreted.

Research on bystander reactions to emergencies has revealed considerable developmental, situational and personality differences in interpreting the situations. For instance, Latané, Nida & Wilson (1981) concluded from their review that the number of people present affects the probability to help in emergency situations. As underlying factors there were social psychological processes like audience inhibition and social influence. Staub (1978) summarised

the findings from the bystander interventions by saying that e.g., the ambiguity of the stimulus, the degree to which circumstances require self-initiation rather than mere responsiveness, and the focus of attention (either task, target or self) influence the probability of helping in bystander situations. Researches indicate that social cognitive abilities develop with age from perceiving observable events and behaviour to making inferences about intentions, feelings and causes of behaviour. Also, recognition or recall of information relevant to the situation seems to increase with age (Uhlinger Shantz, 1983).

Besides the impact of cognitive variation, there are substantial differences in persons' emotional sensitivity to the needs of others. The heritability of affective arousal has been observed in several studies (see a review in Davis, 1994). For instance Rushton (1981) in his review found evidence for altruistic personality, who - among other things - is able to see the world from the other's emotional and motivational perspective. More recently, Eisenberg et al. (2002) reported results from a longitudinal study where they found strong evidence for the existence of prosocial personality dispositions which were consistent across time and situations.

Cognition and affect are interconnected in moral sensitivity in role-taking and empathy. Taking the role of the other is a cognitive ability which according to Selman (1980) develops through five stages. Empathy, on the other hand, could be defined as an affective response more appropriate to another's situation than one's own (Hoffman 2000). Hoffman identified five developmental levels of empathy, and individuals who progress through the five stages become capable of a high level of empathic concern.

Hoffman (2000) proposed that there are two, or even three, different types of role-taking: self-focused role-taking, when people imagine how they themselves would feel in the situation; other-focused role-taking, when they imagine how the other is feeling; and the combination of both, when people can shift back and forth between self-focused and other-focused role-taking or experience them as co-occurring processes. Hoffman further hypothesized that other-focused role-taking is a more cognitively demanding process. Cognitive development enables humans to form representations of people and events, and consequently, as Hoffman pointed out,

victims need not to be present for empathy to be aroused in observers. Similarly, moral sensitivity could be aroused even if the people who are affected by the situation are distant and not present (Rest, 1983). Feeling empathy is not only a positive characteristics, for sometimes empathic arousal can lead the actor not to recognize all the relevant issues in the situation or neglect the viewpoints of other participants. An individual's tendency to spontaneously empathize with someone or dislike her/him definitely affects the interpretation of the situation. Rest (1986) suggested that besides the cognitive decoding of the situation moral sensitivity also involves identifying and trying to understand our own "gut" feelings on the matter. The topic of empathic bias will be discussed again in section 2.1.3.2.

Rest's collaborator Muriel Bebeau developed with Rest and Yamoor (1985) an advanced moral sensitivity test for dental profession (the Dental Ethical Sensitivity Test, hereafter DEST). They use the term ethical sensitivity rather than moral sensitivity because they measure individuals' ability to interpret factors in the care setting that could be derived directly from the dentist's code of ethics. The test consists of audiotaped real-life situations, and respondents have to take the role of the professional in the drama and respond on audiotape as though they were the professional involved. Measuring moral sensitivity differs from assessing moral reasoning by e.g., Kohlberg's Moral Judgment Interview in such a way that in the DEST situations are not pre-interpreted for the respondents and no alternative courses of action are presented. Additionally, the purpose of the measure is not to evoke a solution to the situation but rather an interpretation of what is going on (Rest, 1986).

Researchers found, in assessing dental students' and practitioners' moral sensitivity, that individuals varied greatly in their ability to recognize the ethical problems in their profession. Sensitivity is not usually viewed as a general personality trait but rather a process which may vary from situation to situation. Although Cronbach alpha of the DEST was relatively high, the variability of sensitivity scores among stories indicated that moral sensitivity as defined by the test was affected by the context of the story (Bebeau, Rest & Yamoor, 1985). Furthermore, moral

sensitivity scores correlated only moderately with moral judgment measured by Rest's Defining Issues Test (DIT), which suggested that ability to recognize moral issues and reasoning skills are distinct competences even though they might interact with each other (Bebeau, 1994). On the other hand, if moral reasoning is regarded as a relatively consistent cognitive capacity from situation to situation, as some cognitive-developmentalists have argued (see section 1.2.1.2), there should not be any stable correlation between these two abilities.

As a relatively new topic, moral sensitivity does not have a broad research tradition. Besides studies carried out by Rest and his colleagues at the University of Minnesota - the Minnesota group - moral sensitivity from the starting point of Rest's model has been examined for instance among college students (McNeel, 1994), in the domain of accounting (Karcher, 1996), media (Lind, Rarick & Swenson-Lepper, 1997; Lind & Swenson-Lepper, 1998; Lind & Rarick, 1999), and science (Clarkeburn, 2002). In the current study moral sensitivity and its development are assessed among social psychology students during professional ethics training.

2.1.2 Component II: Moral judgment

The second component in Rest's model - moral judgment - is the most studied component of morality. It refers to what course of action from the possible alternatives ought to be chosen in the situation. In this phase, the situation is already interpreted and the needs and welfare of different participants should be considered (Rest, 1983). The cognitive-developmental approach has made the most convincing contribution to this area. It is based on the ideas of Piaget (1932) who claimed that there are qualitative differences in children's thinking according to their age and that one can find a developmental path from egocentricity to equilibration in children's reasoning about moral dilemmas. The concept of equilibration

involves an assumption that a child's thought forms a structure in which new experiences are assimilated and which is then reformed or accommodated to a more complex structure. Consequently, the cognitive-developmental theory distinguishes structure and content of thought. Different strictures can reflect the same content, and vice versa. The structure of moral reasoning is most often assessed in terms of Kohlberg's theory of the development of moral judgments. Like Piaget, Kohlberg elaborated a stage model representing the developmental path of individuals' reasoning. The underlying concept of Kohlberg's stages is justice. Each stage of moral judgment is characterised by a certain concept of justice and with the development of moral judgments one's conception of justice changes (e.g., Kohlberg, 1984; Rest, 1979). Thus, justice considerations may reflect the content of moral thought. Since especially the concept of procedural justice is regarded as having a central role in moral reasoning (see section 2.1.2.3), in this study moral judgments and procedural justice considerations are assessed from responses to a hypothetical non-Kohlbergian moral problem and from a self-reported real-life dilemma.

2.1.2.1 Kohlberg's theory of moral judgment

Making moral judgments is crucial for moral behaviour; Blasi (1980) for instance, claimed in his review that "without judgment, an action, no matter how beneficial, would not be moral". Lawrence Kohlberg's theory of moral judgment is the background of the second component. From the 1920s to the 1950s behaviourism was the dominant paradigm in psychology and it was assumed that teaching children moral virtues and social norms of their culture makes them moral. It was not until Lawrence Kohlberg first published results from his follow-up study of the development of moral judgments that it was more widely acknowledged that even children have their own morality and they make moral judgments which are not internalized from parents, teachers, or

peers. Consequently, according to Kohlberg morality is constructed by the person her/himself. Kohlberg supposed that moral judgment develops through six (in empirical reality five) stages, and these stages represent the cognitive structure of moral thought (e.g Kohlberg, 1984). The moral judgment stages form three levels of moral reasoning: preconventional level (Stages 1 and 2); conventional level (Stages 3 and 4); and postconventional or principal level (Stage 5).

The cognitive-developmental approach is characterized by four general criteria: (1) stages imply distinct or qualitative stage differences in thinking; (2) stages form a invariant sequence, or order in individual development. While cultural factors might speed up, slow down or stop development, they do not change the sequence. (3) Each of the stages forms a "structured whole", i.e., the same principle is applied across situations; and (4) cognitive stages are hierarchical integrations, higher stages are more differentiated and integrated than lower stages, and they reintegrate the structures found at lower stages. (Kohlberg, 1984.) The empirical evidence on Kohlberg's stages (for review, see, e.g., Snarey, 1985; Eckensberger & Zimba, 1997) clearly supports (1) and (2) whereas the evidence for (3) and (4) is more ambiguous. However, Kohlberg's stages of moral reasoning are regarded as measuring the development of moral judgment competence even by those who take a critical stand to the theory (e.g., Krebs & Laird, 1998).

Two basic assumptions in the structuralist point of view to moral reasoning have been challenged by empirical studies. The first is that individuals demonstrate consistency in their moral reasoning across all dilemmas (Colby & Kohlberg, 1987). According to Kohlberg (1981) a person is "in" a particular stage of moral judgment which dominates her/his reasoning across situations. However, this notion of stages as holistic structures (criterion 3) has not been unambiguously supported by the empirical evidence (e.g., Carpendale, 2000; Carpendale & Krebs, 1995; Krebs et al. 1991). Respondents have showed lower stages of moral judgment on business dilemmas than on Kohlberg's standard dilemmas (Carpendale & Krebs, 1992; Carpendale & Krebs, 1995), for instance. Furthermore, in most studies moral reasoning in

spontaneously reported real-life dilemmas has been at lower stages than in hypothetical ones (e.g., Walker et al. 1987; Armon, 1996; Wark & Krebs, 1996). Krebs and his colleagues suggested in their interactional model of moral reasoning (e.g., Krebs et al. 1991) that level of moral judgment varies in accordance with the individual's goals and other aspects of situations. Armon (1995) for instance, proposed that because personal dilemmas do not usually pertain to highly complex social relations, it may not be necessary to use high levels of moral reasoning to solve them.

Carpendale (2000) suggested that from a Piagetian perspective, moral reasoning is viewed as a process of coordinating all perspectives involved in a moral dilemma. Following Piaget, Kohlberg often emphasized the importance of role-taking in moral reasoning. However, Carpendale argued that this view is incompatible with Kohlberg's conception of stages, which - he continued - entails a view of moral reasoning as the application of a moral principle or rule to a dilemma in order to generate a solution. Once an individual has internalised a moral principle or rule she or he would be expected to apply it to all moral conflicts encountered. If reasoning consists of understanding and coordinating conflicting perspectives in a moral dilemma, consistency in reasoning across different situations should not be expected.

The inconsistency across situations, as observed in case of the business dilemmas (Carpendale & Krebs, 1992; Carpendale & Krebs, 1995), would be explained by the non-structuralist ethogenic approach as a function of moral orders. (Harré, 1983). Moral orders are different social contexts where different behaviour and judgments are expected. Thus, the Carpendale & Krebs findings would reflect the predominant Stage 2 moral order of business.

Another questionable basic assumption in the structuralist approach to moral development has been the independence of content and structure. Thus, in principle both choices in moral dilemma could be justified by the same level of arguments. However, there is growing evidence that the content of moral choices may also affect the structure of moral justification. In deVries and Walker's study (1986), respondents used higher stages of moral reasoning to oppose capital punishment than to support it. Carpendale & Krebs (1992) found a significant positive correlation

in a business dilemma between choosing to act in the social interest and the moral maturity score, and in their 1995 article Carpendale & Krebs observed that respondents justified the choice to conceal defects in the merchandise with significantly lower stage moral judgments than they used in support of the decision to disclose its defects.

Kohlberg's method to assess the development of moral judgment is a semi-structured interview (MJI) with several hypothetical dilemmas. The respondents are asked to produce a solution as to what should be done in the situation. The interviews are scored according to a scoring manual (Colby & Kohlberg, 1987) and the attention is focused on the justifications the respondents have used. James Rest established a moral judgment measure of his own, the Defining Issues Test (DIT) in the beginning of 1970's. The DIT is a multiple-choice test with 12 items representing different stages and respondents are asked to rate the relative importance of each item on a 5-point scale, and then to rank the four most important items. The most often used score from the DIT is the P-score which is based on the relative importance that a respondent gives to items representing the postconventional moral reasoning.

Along with the DIT the Minnesota group adopted a somewhat different conception of the stages of moral reasoning than Kohlberg. For Rest, stages were not holistic structures; rather stage acquisition can be described as a gradual increase in the probability of occurrence of a certain stage. He noted that cognitive development can not be described only in qualitative terms (different logical organizations of thinking) or in quantitative terms (the degree to which different structures are operating psychologically in a particular person) but they are both needed to characterize development. While Kohlberg claimed that individuals' reasoning is in a stage or in transition between two adjacent stages, Rest (1979) assumed response variability across stages and overlapping stage use, as well as inconsistency in the use of stage structure form across content domains (a phenomenon called décalage). Rest presumed that people vary in their reasoning from across time and situations within their developmental range.

Rest (1979) called his model a complex stage model compared to the Kohlberg's simple one.

Furthermore, Rest (1979) suggested that different assessment methods provided different indications of moral competences. While the Moral Judgment Interview measures conscious verbal understanding of moral dilemmas, the DIT is claimed to measure tacit knowledge, nonverbal and intuitive understanding of moral issues (Narváez & Bock, 2002). It is shown that the DIT as a recognition measure provided higher estimates of respondents' competency than did production of moral arguments in the MJI. However, the Minnesota group emphasized that each measure has it advantages and which is more suitable for each situation depends on the purposes of the study (e.g., Thoma, 2002).

From Rest's (1986, 1994) viewpoint the levels of moral reasoning are different ways to organize cooperation between individuals. For example, at Stage 2 the child realizes that everyone has her or his own interests and the best way to cooperate with other self-centred individuals is to make short-term deals, exchanging favour for favour. On the other hand, at Stage 4 individuals recognize the need to establish some scheme of cooperation for society in general, including also the strangers, and resolve this through the concept of law. Law applies to everyone: everyone in society is obligated to and protected by the law. Moreover, the neo-Kohlbergian perspective to moral development elaborated by the Minnesota group - the Minnesota approach - suggests that moral development is better described by the concept of schemas than stages (Rest et al., 1999). Schemas are general knowledge structures that exist to help individuals understand new information based on previous experiences. Thus, schemas are not defined in terms of cognitive operations. They represent tacit moral understanding, are more contextual than stages and not necessarily universal. Narváez and Bock (2002) for instance, claimed that the DIT is especially suitable for measuring this type of moral knowledge as it requires no verbal justification of choices, and provides information that only hints at an underlying logic, thus requiring the individual to fill in the missing information. Items of the DIT can serve as stimuli that might activate the schema. The schemas that the DIT measures are a personal interest schema (combine elements of stages 2 and 3),

a maintaining norms schema (derived from Kohlberg's stage 4) and a postconventional schema, which represents a somewhat broader notion of postconventional morality than Kohlberg's, exemplified by four criteria: primacy of moral criteria, appeal to an ideal, shareable ideals, and full reciprocity (Rest et al. 1999).[2]

Cognitively understanding a particular form of social organization carries with it a feeling that the participants have moral responsibilities to reciprocate and to do their respective shares. Rest (1986) argued that in the component II the interconnection of cognition and affect is seen as feelings of unfairness when one breaks against the reciprocity of responsibilities. Empathy might be linked to justice in terms of empathic feelings of injustice and a motivation to rectify the injustice when a person observes someone else is treated unjustly. Hoffman (2000, 228-229) suggests that "while empathy may not make a structural contribution to justice, it may provide the motive to rectify violations of justice to others".

Moral reasoning ability as measured by the DIT progresses with age, i.e. with increasing age individuals' judgments move to higher stages of moral reasoning (Gielen & Markoulis, 2001). Formal education is also one of the factors that promote moral judgment. The upward trends of age and education can account for 40 to 50 % of the variance in moral reasoning, at least as measured by the DIT. (Rest, 1986.) Gilligan (1982) maintained that Kohlberg's theory was biased against females. She assumed that females obtain lower scores in moral judgment tests because females make more care-oriented judgments which are classified at lower stages than justice-oriented judgments which are more often used by males. However, this claim has not been supported empirically. For instance, Walker (1991) found no evidence of gender differences in moral judgment favouring males in his review. In studies carried out by the DIT gender differences among

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[2]

Walker (2002) has contended, however, that the DIT was originally developed to measure postconventional moral reasoning. Consequently, it is insensitive to lower stages and measures the maintaining norms schema and the postconventional schema better than the personal interest schema.

student and other more general samples have usually been small and, if significant, females have obtained higher scores than males (see e.g., Gielen & Markoulis, 2001). However, Bebeau (2002) found in her review that among professionals there have been significantly larger gender differences favouring females in the DIT than in other type of samples.

Although the level of moral judgment has often related positively to behaviour, their link seems to be relatively weak. Blasi's (1980) review revealed a positive correlation between moral reasoning and behaviour which is generally considered as moral, e.g., honesty, resistance to temptation, and altruism. However, the moral stage accounted for less than 1% of the variance in moral behaviour. Greenberg (2002) found in his study about employee theft that employees on the conventional level of moral reasoning, measured by Kohlberg's MJI, were less likely to steal from their employers - especially when they worked in an office with an ethics program - than employees on preconventional level. Similarly, for studies carried out with the DIT, Rest (1986) reported a fairly moderate relation between Kohlberg's postconventional moral reasoning and moral behaviour; approximately as much of the variance was explicable by the DIT score as by the moral judgment stage in the Blasi's review. King & Mayhew's (2002) review of the relationship between moral judgment and behaviour among college students revealed that many behaviours were positively related to the level of moral reasoning. Respondents obtaining higher P-scores in the DIT were more willing to blow the whistle by calling the potential error to the attention of the investigator in an experimental design and less likely to cheat, for instance.

The hypothetical dilemmas presented to respondents in the Moral Judgment Interview and the DIT are, however, relatively distant from peoples' everyday life. They are abstract and not emotionally charged in particular. Although the MJI and the DIT can measure the best competence in moral understanding, assessed in peaceful, academic atmosphere, people frequently have to make judgments about moral issues in their everyday life where interests, emotions and goals may struggle with each other. Respondents' judgments in self-reported professional moral dilemmas are one focus of interest in the current study.

2.1.2.2 Real-life morality

In recent years studying real-life moral dilemmas has become a more popular topic in the area of moral psychology (e.g., Keller, 1984; Ford & Lowery, 1986; Walker, deVries & Treventhan, 1987; Armon, 1995; Armon, 1998; Wark & Krebs, 1996; Wark & Krebs, 2000; Wark, 2000). The growing interest in real-life morality has emerged from a desire to understand peoples' own moral encounters and from the realization that abstract moral reasoning does not necessarily explain individuals' moral behaviour (e.g., Armon, 1995).

The real-life moral problems the respondents have reported have been classified slightly differently by the different researchers. However, the quality of the relationships described in the real-life dilemmas has often been one of the criteria in categorization. Walker et al. (1987) for instance, used two kinds of relationships to classify the dilemmas: personal (dilemmas which involved a specific person or group of people with whom the respondent had a significant relationship, e.g., family members or friends) and impersonal (dilemmas which involved strangers or acquaintances or generalized group of people, e.g. students or clients). Armon (1995) categorized the real-life dilemmas according to the social context to personal/interpersonal (involving self or significant other) and societal (involving self and social institution or society at large) dilemmas. Wark & Krebs (1996) generated a somewhat more advanced method to classify the real-life dilemmas. They first asked respondents to report one personal and one impersonal real-life dilemma according to Walker et al.'s (1987) distinction. Further, they classified the reported dilemmas into four categories: (1) philosophical dilemmas (abstract dilemmas that dot not directly involve the respondent or his or her friends but have been discussed by the respondent in their everyday lives; all

impersonal); (2) antisocial dilemmas (dilemmas where one should react to transgressions or temptation); (3) social pressure dilemmas (dilemmas where one experiences social pressure which violates one's values or identity; and (4) prosocial dilemmas (dilemmas where one should react to conflicting demands or needs of others). Thus, all other dilemmas than philosophical ones could be personal or impersonal.

Following Gilligan's (1982) claim that females are more care-oriented than males and males more justice-oriented than females in their moral reasoning, many of the studies have focused on gender differences in real-life moral judgment. Although the found differences on moral orientations between genders have been small (see e.g., Walker, 1991; Jaffee & Hyde, 2000 for reviews), females and males seemed to be inclined to report different kind of real-life moral dilemmas (Walker et al., 1987; Armon, 1995; Wark & Krebs, 1996). Females have often been found to report more personally significant dilemmas than males whereas males have been more inclined to report impersonal or societal dilemmas (Walker et al., 1987; Armon 1995). In Wark & Krebs' (1996) study females report prosocial types of dilemmas more often than males, and males reported antisocial types of dilemmas more often than females. This gender difference in tendency to report different kinds of moral dilemmas has been explained reflecting differences in experience in everyday life between genders, and also the socialization process which has stressed self-sacrifice and concern for the welfare for others for females (Walker et al. 1987; Wark & Krebs, 1996; Gilligan, 1982).

Although moral judgments in hypothetical and real-life dilemmas usually are positively related (Walker, deVries & Trevethan, 1987; Ikonen-Varila, 1994; Wark & Krebs, 1996; Krebs, Denton & Wark, 1997; Armon, 1998), as mentioned earlier, people often obtain lower stages of moral judgment in real life dilemmas than in hypothetical ones (e.g., Walker et al. 1987; Armon, 1996; Wark & Krebs, 1996). Moreover, type of the real-life dilemma seems to influence the moral reasoning level. For instance, Wark & Krebs (1996) observed that the antisocial type of dilemmas pulled for stage 2/3 whereas the prosocial dilemmas evoked stage 3. Krebs, Denton & Wark (1997) suggested that when making real-life moral

decisions people consider the consequences of possible courses of actions to themselves and to others, and the value they place on the possible consequences may affect their moral decisions, which may influence the forms of moral judgment they invoke to justify them.

2.1.2.3 Procedural justice

As noted above, developing through the Kohlberg stages is partly maturing to make more just decisions. Thus, the content of moral reasoning can be studied by examining what kind of justice rules people use in their reasoning. Both Kohlberg (1981) and Rest (1999) maintained that justice forms the core of morality and this claim is illustrated in a suggestion that every level of moral judgment represents a different kind of conception of justice (Kohlberg, 1984; Rest, 1979). Furthermore, the importance of justice to moral judgment is expressed in Rest's (1986) assumption that justice considerations may serve as an affective component of moral judgment. People may experience feelings of unfairness if someone breaks the rules of justice.

The developmental psychologists have so far paid little attention to the social psychology of justice. In social psychology, the concept of justice is usually separated into distributive justice, which refers to distribution of rewards and resources, and to procedural justice, which refers to the fairness of the procedures used in distribution (e.g., Leventhal, 1980; Byrne & Cropanzano, 2001). Although Leventhal (1980) in his theory of procedural justice assumed that procedures were of less importance than outcomes in determining overall fairness judgments, Lind & Tyler (1988) found that procedural justice was at least as important, or sometimes even more important, than distributive justice in different kinds of social relationships. If the procedures are seen as fair, individuals are likely to accept the final distribution as fair

even though it may be unfavourable to them. Leventhal (1980) identified six justice rules for procedural fairness:

1) Consistency: The procedure should be applied consistently across persons and across time. When applied across persons, the consistency rule requires equal treatment for all affected by the procedure. Consistency across time dictates that the procedure follow the same rule each time it is used, and that the procedural changes are made carefully and with full notification of all who might be affected by the procedure.

2)Bias suppression: The decision-maker should not be influenced by his or her vested interest in the decision or by prior beliefs so that all points of view do not get equal or adequate consideration.

3) Accuracy of information: Decisions should be based on accurate information and on well-informed or expert opinion.

4) Correctability: A procedure should contain some provision for correcting bad decisions.

5) Representativeness: Those affected by the decision should have influence on the process, and the opportunity to express their opinion.

6) Ethicality: The procedure should conform to standards of ethics (which excludes, for instance, use of deception, bribery, invasion of privacy and spying).

Leventhal postulated that the relative weight of procedural rules depends on the situation. For example, he assumed that people give more importance to procedural rules that favour their own interests.[3] Several studies suggest that consistency, accuracy of information and ethicality are the most important criteria of a fair procedure (e.g., Barrett-Howard & Tyler, 1986; Lind & Tyler, 1988). Currently, the concept of procedural justice has made a significant contribution to the domain of organizational psychology

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[3]

Nonetheless, as van den Bos & Lind's (2001) study showed, concerns about procedural justice may not be solely self-oriented but can also involve other-oriented considerations.

(for reviews see e.g., Cropanzano & Greenberg, 1997; Byrne & Cropanzano, 2001).

It is assumed that concern about fairness motivates perception and behaviour, albeit according to Leventhal (1980, p. 47), it should be viewed "only as one component within the larger framework of the total pattern of social behaviour". Nevertheless, he concluded that there may be occasions when concern for justice is more salient and has a stronger motivational force. It is also plausible that some people are in general more concerned about justice regardless of context.

However, if the importance of fairness varies from situation to situation, some situational factors that might activate an individual's concern for procedural fairness or cause the indifference to it could be identified (Leventhal, 1980). The first is the individual's role, because some social roles involve maintaining fairness to a larger extent than some other roles, e.g., judge, ombudsman etc. The second is the importance of other goals in a specific situation: concerns about fairness are likely to be reduced when there are more important goals to attain, for example willingness to control the behaviour of people who are considered to be threatening to social order. Thirdly, when there is a suspicion that justice rules have been violated, the concern for fairness tends to increase. For instance, large or sudden changes in the distribution of reward may generate a suspicion that also the procedural justice rules have been violated. Fourthly, the extent of uniformity or plurality of the social system: when the social system has consistent, stable rules of fair procedure and distribution, the justice judgment sequence will be activated infrequently but when there exist competing standards of fairness, questions of distributive and procedural fairness will be more salient.

It is plausible that the activation of fairness concern does not ensure fair behaviour, and on the other hand, behaviour that maintains fairness may emerge from other motivational forces than justice concerns. Leventhal (1980) suggested the distinction of fair behaviour, arising from moral and ethical concerns, and quasi-fair behaviour, arising from other motivational bases. He claimed that since it has an instrumental base, quasi-fair behaviour can be abandoned easily if proved to be ineffective, whereas fair behaviour

will tend to endure even when more pragmatic goals are not achieved.

According to Kohlberg (1984) procedural justice has a special role in morality: considerations of procedural fairness operate as validity checks on moral reasoning. It entails concern for balancing perspectives or making judgments reversible (i.e., is the action fair from the other person's point of view) and for making one's judgments universalizable (i.e., is the action right if everyone were to do it). Concern for procedural justice is claimed to be more distinguishable in higher moral stage judgments than lower ones. (Kohlberg, 1984.) The higher stages are characterized by the moral point of view, which refers to "equal consideration of the claims or points of view of each person affected by the moral decision to be made" (Colby & Kohlberg, 1987, p. 30). This is ensured for instance by the procedure of "moral musical chairs", which by Kohlberg's (1981, p. 199) definition means "going around the circle of perspectives involved in a moral dilemma to test one's claims of right or duty until only the equilibrated or reversible claims survive".

Lourenço (1990; see Lourenço [2002, 144-145]) carried out a systematic analysis of the 708 criterion judgments of the Colby & Kohlberg (1987) manual in terms of their distribution into different elements. He found that fairness elements occurred predominantly at stages higher than 3, and were very infrequent at lower stages. The link between moral judgment measured by the MJI and procedural fairness was explored by Ikonen-Varila (1994) and Helkama & Ikonen-Varila (1996) with samples of shop stewards and physicians. These studies showed that bias suppression and ethicality rules were positively associated with higher stages of moral judgment and that high-scoring respondents used simultaneously more justice rules in their reasoning. Wendorf, Alexander & Firestone (2002) conducted a study with the DIT where they examined the relationship between justice concerns and the schemas of moral reasoning. In line with previous findings their analyses revealed that the personal interest schema was best predicted by outcome favourability whereas the postconventional schema was significantly predicted by procedural justice concerns.

2.1.3 Component III: Moral motivation

It has been maintained (Blasi, 1999) that the motivation to behave morally must be an intentional, conscious process. Reasons to act morally should be moral as well, i.e. the reasons must be related to what is morally good or bad in the agent's understanding. Usually people want to perceive themselves as moral and just individuals, thus, moral identity may be an important part of self-conception (Blasi, 1984). Damon (1984) suggested that integration of self and morality leads to moral identity which promotes moral behaviour. However, Nucci (2002) claimed that from this premise morality is reduced to instrumentalism and ethical egoism, i.e., people are behaving morally just to hold on their self-concept. According to Nucci, this approach neglects the idea of morality being concern for one's obligations to others. Additionally, Nucci critized the viewpoint illustrated for instance by Bergman (2002) that people vary in terms of the degree of centrality morality has for their personal identity. Nucci (2002) stressed that being an important part of human interaction, morality maintains a relatively central aspect of the sense in self of most people.

Rest (1986) defined moral motivation as pertaining to individuals' value priorities, and more specifically, the importance they give to moral values in contrast to other values. Rest (1984, 27) stated the major functions of moral motivation as "to select competing value outcomes of ideals, to one to act on; deciding weather or not to try to fulfill one's moral ideal". Moral motivation refers hence to a commitment to taking the moral course of action and taking personal responsibility for moral outcomes (Rest et al., 1999). In studies carried out at the University of Minnesota moral motivation is linked to professional identity and role concept (Bebeau, Born & Ozar, 1991, 1993; Thoma, Bebeau & Born, 1998). The professional role orientation is assumed to vary along dimensions of authority, responsibility, agency, and autonomy. In the current study moral motivation is approached from the point of

view of value priorities, defined in terms of Schwartz's (1992) model of the universal content and structure of values and, additionally, since empathy is considered to be a strong motivational factor of moral behaviour as well (Hoffman, 2002), the concept of empathy. These factors are examined among university students from different fields of study.

2.1.3.1 Value priorities

There is wide agreement that peoples' value priorities have an important role in understanding and predicting their attitudinal and behavioural decisions. Gordon Allport (1961) for example, suggested that value priorities were the "dominating force in life". According to his view, all of a person's activity is directed toward the realization of her/his values. Rokeach (1973, 3) postulated in his definition of values "that the consequences of human values will be manifested in virtually all phenomena that social scientists might consider worth investigating and understanding." As the level of moral judgment may be insufficient per se to provoke moral behaviour (see e.g., Blasi, 1980 and Rest, 1986), Kristiansen & Hotte (1996) for instance, claimed that values may, at least for some people, provide such transsituational ideals regulating their beliefs about what they ought to do, and thereby their attitudes and behaviour.

Human values can be defined as enduring beliefs that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence (Rokeach, 1973). In his value model Schwartz (1992) defines values as goals and motivations which serve as guiding principles in people's lives. Schwartz and Schwartz and Bilsky (1987, 1990) derive values from three types of universal basic human needs (biological needs, requirements of interpersonal coordination, and the social and institutional demands of group welfare and survival). The value survey designed by Schwartz

(1992) contains 56 single values that can be divided to 11 distinct motivational types that serve different interest or motivational goals. Value types and their contents are as follows (single values included in each value type are in parentheses):

Power: societal prestige and controlling others (social power, wealth, authority).

Achievement: personal success and competence according to social norms (successful, capable, ambitious, influential).

Hedonism: pleasure and satisfaction of sensual needs (pleasure, enjoying life).

Stimulation: excitement, novelty and challenge in life (daring, a varied life, an exciting life).

Self-direction: independent action and thought, making one's own choices (creative, freedom, curious, independent, choosing one's own goals).

Universalism: understanding, tolerance and protection for the welfare of all people and for nature (social justice, broadminded, world at peace, wisdom, a world of beauty, unity with nature, protecting the environment, equality).

Benevolence: protecting the welfare of close others in everyday interaction (helpful, forgiving, honest, loyal, responsible).

Tradition: respect, commitment, and acceptance of the customs and ideas that one's culture or religion impose on the individual (accepting my portion of life, devout, respect of tradition, humble, moderate).

Conformity: restraint of actions, inclinations and impulses likely to upset or harm others, or violate social expectations or norms (obedient, self-discipline, politeness, honouring parents and elders).

Security: safety, harmony, and stability of society, of relationships and of self (family security, national security, social order, clean, reciprocation of favours).
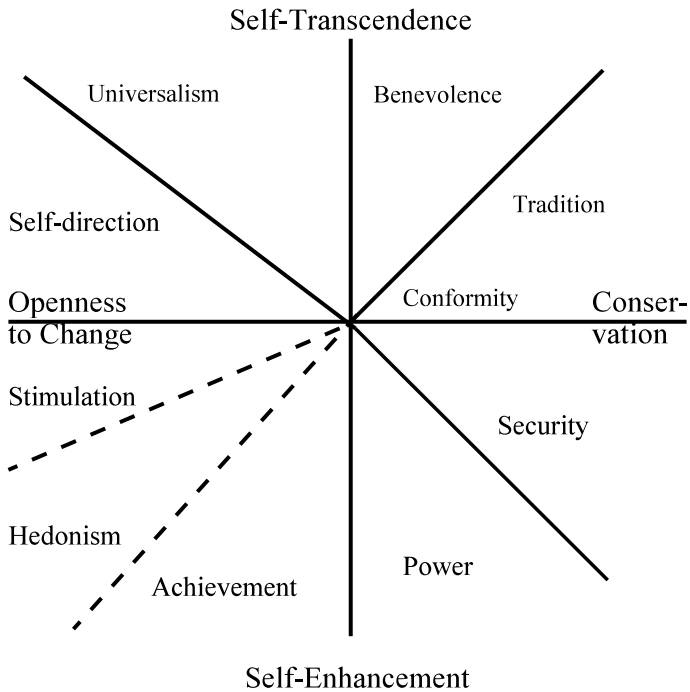
Spirituality: searching for purpose of life and for inner harmony (inner harmony, a spiritual life, meaning in life).

Value types form a special structure on two levels. Firstly, value types can be divided into two categories according to whether they serve individual or collective interests. Power, achievement, hedonism, stimulation, and self-direction are value types that serve

individual interests; and benevolence, tradition, and conformity serve collective interests. Universalism and security are value types which serve both of these interests and are situated in the boundaries between these two. (Schwartz, 1992.)

Secondly, goals and interests that value types serve can be either compatible with or conflicting to each other. The value types form a two-dimensional continuum, in which the first dimension is Openness to Change versus Conservation. People can either show the motivation to follow their own intellectual and emotional interests (value types self-direction, stimulation and hedonism), or they can prefer the status quo and the certainty provided by relationships with close others, institutions and traditions (value types tradition, conformity and security). The second dimension is called Self-Transcendence versus Self-Enhancement. The former shows the extent to which people are motivated to transcend selfish concerns and promote the welfare of others (including value types benevolence and universalism). To the other end belong values which motivate people to enhance their own personal interests even at the expense of others (value types power and achievement). (Schwartz, 1992.) The value types are thought to represent a two-dimensional circle from power to security. The eleventh value type, spirituality, is not included in Schwartz's original list of universal value types because it is not universal in character.

Based on the compatibilies and conflicts among value types, correlations between value types and other variables should form a sinusoid curve (Schwartz, 1992). If for example variable x correlates positively with achievement it should correlate negatively with benevolence, and the correlation should decrease monotonically as one moves around the circular structure of value types in both directions from achievement to benevolence.

Self-Transcendence

Universalism   Benevolence

Tradition

Self-direction

Openness   Conformity   Conser-
to Change   vation

Stimulation

Security

Hedonism

Power

Achievement

Self-Enhancement

Figure I. Schwartz's model of motivational type of values
(Schwartz, 1992).

If compared with other typologies of values (see Helkama, Uutela & Schwartz, 1992), the Schwartz model appears fairly comprehensive in the sense that the other typologies seem to correspond, conceptually and/or empirically to certain types of values in the model. However, as pointed out by Helkama (1999), the Schwartz model lacks work-related values, such as hard-

working, orderly, systematic, punctual etc., which would correspond to the uncertainty avoidance dimension in the Hofstede (1980, 1991) value typology. Conceptually, these work-related values seem close to the conformity/tradition value type in that they refer to self-restraint and self-discipline. They also seem related to the security value type, as they deal with order. Hence, five work-related values (hard-working, conscientious, orderly, punctual, and long-term planning) were added to the standard value survey and one purpose of this study is to examine the location of work values in the Schwartz model.

In moral motivation, affect and cognition could be interconnected by imagining a desired goal or outcome which implies that one has some kind of cognitive representation of the outcome, and desiring indicates that one has a positive affect towards it (Rest, 1986). Values, as conscious goals and guiding principles, could be seen as a part of self presentation, which informs others of the quality of the individual. Values are claimed to be "intimately bound up with a person's sense of self" (Feather, 1992, p. 112) and be "a type of personality disposition" (Bilsky & Schwartz, 1994, p. 178). Thus, values' connection to one's identity, both personal and professional, should give value preferences motivational force effecting behaviour.

Numerous attempts have been made to clarify the link between values and action. Feather (1990) found in series of studies that value preferences predicted behaviour in three divergent contexts (participating in social movements, job seeking, and course enrollment). Furthermore, there is evidence that Self-Transcendence values are related to preferences for cooperation in social dilemmas (e.g., Schwartz, 1996; Gärling, 1999). Values have also predicted attitudes toward nuclear weapons (Kristiansen & Matheson, 1990), readiness to contact out-group minorities (Sagiv & Schwartz, 1995), fear of war (Boenhnke & Schwartz, 1997), environmental attitudes (Raudsepp, 2001), trust in institutions, political orientation and religious affiliation (Devos, Spini & Schwartz, 2002), as well as the fairness judgments in an industrial conflict (Feather, 2002), and attitude towards red meat (Allen & Ng, 2003).

The differences in value preferences according to group membership (e.g., education or occupation) are assumed by Schwartz (1992) in his elaborating of the value model. Considerable evidence exists that people from different groups hold different value preferences (e.g., Verkasalo, Daun & Niit, 1994; Verkasalo, Tuomivaara & Lindeman, 1996; Feather, 1998; Giacomino & Akers, 1998). Value priorities of university students' from different fields of study (business, technology and humanities) have been investigated by Verkasalo, Daun & Niit (1994), for instance. In their study they found out that the field of study had a major effect for most value types, it was a more powerful explanatory variable than country. The results showed that business students valued power and achievement more than did technology students and humanists, and humanists valued universalism and spiritualism more than others. Technology students did not stand out in any of the value types.

The structure of the value types and the location of single values to value types have been found to be highly similar for both genders in variety of cultures (Prince-Gibson & Schwartz, 1998; Struch, Schwartz & van der Kloot, 2002). Concerning the value preferences, females have generally valued benevolence and universalism more than have males, and males power and achievement more than females (e.g., Feather, 1987; Verkasalo, Daun & Niit, 1994; Pohjanheimo, 1997; Smith & Schwartz, 1997).

As Rest (1986) emphasized the priority of moral values in moral behaviour, one might ask what are the moral values in the Schwartz value model. If moral values should somehow refer to concern for others, benevolence (e.g., helpfulness and responsible) and universalism values (e.g., social justice and equality) could be regarded as moral values in the Schwartz model since they refer to concerns for the welfare of the other people and justice. However, it could be claimed that also conformity values (e.g., politeness, honouring parents and elders) are moral by nature since they pertain to restraint of actions which are likely to upset or harm others. Consequently, if work-related values have motivational goals compatible with conformity values, they could also be regarded as moral values since they refer to the commitment to one's work performance.

In the present study value priorities are investigated in relation to other components of morality with a special interest in the role of moral values in the interactions.

2.1.3.2 Empathy

Several other factors have also been shown to motivate moral behaviour, modelling moral exemplars (Bandura, 1977), feelings like gratitude (McCullough, Kilpatrick, Emmons & Larson, 2001), guilt (Tangney & Dearing, 2002), and empathy (Hoffman 2000)[4], for instance. It has been proposed (Stotland, 1969) that all moral or altruistic behaviour is based on empathy. In Davis' organizational model of empathy (1994), the interpersonal outcomes of empathy are defined as behaviours directed toward a target which result from prior exposure to that target, eg. helping behaviour, aggression and social behaviour. Empathy can be seen as one of the basic human characteristics, and the ability to feel empathy for fellow human beings is an important aspect of positive social exchanges (Mehrabian & O'Reilly, 1980).

The term empathy has been defined in several ways. One definition highlights the cognitive component of empathy, because it views empathy as the willingness and ability to put oneself in another's place (role-taking) (e.g., Hogan, 1969). Other researchers

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[4] *Also shame has been proposed to as a motivating force in moral behaviour (Hoffman, 2000), but studies by Tangney & Dearing (2002) indicate that shame when separated clearly from guilt is rather negatively linked to morality.*

have used a definition of empathy stressing its emotional aspects (e.g., Stotland, 1969; Mehrabian & Epstein, 1972; Hoffman, 1977). They defined empathy as a vicarious emotional response to the perceived emotional experience of others.

According to Hoffman (2000) empathy is "an affective response more appropriate to another's situation than one's own". Originally, Hoffman's (e.g., 1981, 1987) developmental model of empathy had four stages, but his current model contains five levels from newborn reactive cry, found in 2- or 3-days old infants (Simner, 1971), to empathic distress beyond the situation. At this highest level, children recognize that others have feelings beyond the immediate situation and this mental representation of other's plight leads them to feel empathic distress for others (Hoffman, 2000).

Hoffman (1981, 2000) proposed that empathic distress includes both an affective component and a cognitive one that is derived from the observer's cognitive sense of the other. Once people are aware of the other as distinct from the self, their own empathic distress, which is a parallel response - a more or less exact replication of the victim's actual feelings or distress - may be transformed at least in part into a more reciprocal feeling of concern for the victim. The observers also experience a feeling of compassion or what Hoffman calls sympathic distress for the victim, along with the conscious desire to help because they feel sorry for him or her and not just in order to relieve their own empathic distress.

However, Eisenberg & Morris (2001) pointed out that empathy as a vicarious experience of other's emotions and sympathy - defined as an other-oriented emotional response to the other's state or condition, such as concern or sorrow (Eisenberg & Okun, 1996) - are two distinct phenomena. One can experience an emotion appropriate for another's situation (e.g., distress) without feeling sympathy or concern for them. They also highlighted the fact that although empathy or sympathy could result from cognitive processes of role-taking (putting oneself in the other's place and imagining how she or he feels), empathy-related reactions are distinct from perspective taking because they involve an emotional reaction. Thus, according to Eisenberg & Morris (2001), the

definitional confusion surrounding empathy derives from the use of the term "empathy" as parallel to cognitive perspective taking or related processes.

Davis (1983,1994) advanced a broader approach to the definition of empathy. According to his view, empathy is "a set of constructs having to do with the responses of one individual to the experiences of another." He identified four constructs of empathy which are related to each other: **Antecedents** involve the characteristics of the observer, target or situation, including for instance the person's capacity to empathy, strength of the situation and degree of similarity between the observer and the target. **Processes** refer to the particular mechanisms by which empathic outcomes are produced. These may be non-cognitive as newborn's reactive cry, simple cognitive (as labelling), and advanced cognitive like role-taking. **Intrapersonal outcomes** apply to cognitive and affective responses produced in the observer which are not displayed in visible behaviour toward the target, like observer's emotional reactions and empathic concern, or sympathy as Eisenberg & Morris (2001) called it. Finally, there are **interpersonal outcomes**, which involve the behavioural responses directed toward the target, e.g., helping behaviour. Consequently, Davis' definition seems parallel to Rest's (1986) model involving not only the decoding of the situation but also judgment and action.

Empathy has been found to be a gender-related phenomenon since females have frequently obtained higher empathy scores than males (e.g., Mehrabian & Epstein, 1972; Bohlmeyer, Burke & Helmstadter, 1985; Van Ornum et al., 1981; Eisenberg et al., 1988; Riggio, Tucker&Coffaro, 1989; Eisenberg & Morris, 1996). The reasons for this could be twofold. On the one had, females' higher empathy in the early years of life can appear as a biologically based tendency that prepares females for the care giving role (Zahn-Waxler et al., 1992). On the other hand, socialization processes direct females to be emotional and empathic to the needs of others. In terms of Eagly's (1987) social role theory of gender differences empathy could be seen as part of the stereotypical female role, and is perhaps therefore viewed a more positive quality for females than for males, as Eisenberg & Lennon (1983) suggested. Females are often expected to be communal; i.e., socially sensitive, selfless and

being concerned for others' welfare, while males are viewed as agentic; that is exhibiting mastery, control, and independence from other people (Eagly, 1987). Hence, as Davis (1994) proposed, empathy may be seen as a form of self-presentation which is activated especially in contexts where emotionality is being assessed.

Relatively few studies have assessed the differences in emotional empathy according to group membership, for instance educational orientation. Bohlemeyer, Burke & Helmstadter (1985) compared students of education and business in emotional empathy. Because the goal of education is to help others to learn, and the goal of business is monetary success, the researchers expected and found students of education to score higher in emotional empathy than business students.

Empathy could be - and has been - measured in several ways. For review purposes Eisenberg and Lennon (1983) as well as later Eisenberg and Miller (1987) classified methods to assess empathy into seven categories. They identified three types of self-report measures: self-reports of emotional state after hearing stories or viewing pictures of hypothetical other in distress; responses to self-report scales designed to assess the trait of empathy or sympathy; and self-report of emotional responsiveness in experimentally simulated distress situations in which the needy other is allegedly real. Empathy has also been assessed by observing an individual's facial, gestural and/or vocal reactions to another's emotional state; by measuring individual's physiological responsivity to another's distress situation; collecting reports by others of an individual's empathy; and by use of the experimental induction procedures or manipulations designed to induce empathic responding.

These categories vary also according to the definition of empathy; some of them seeing empathy mainly as the matching of one's own emotional responses with those of other (especially story/picture assessment procedure); in others, empathy is defined, at least to some extent, as sympathetic concern for others. Further, different methods have been mainly used for divergent age groups. Procedures involving stories or pictures of hypothetical others or facial/gestural indices have been used mostly with children aged 4 to 9 years, whereas self-reports of emotions in experimental studies,

physiological indices, and the various experimental induction procedures have been used primarily with adults. (Eisenberg & Miller, 1987.)

The positive relationship between empathy, or empathy-related constructs, and helping or prosocial behaviour seems to be a relatively robust phenomenon (Mehrabian&Epstein, 1972; Eisenberg-Berg & Mussen, 1978; Barnett et al., 1981; Batson & Coke, 1981; Van Ornum & al., 1981; Eisenberg et al., 1991; Eisenberg et al., 1995; Davis et al., 1999), albeit the strength of the association may differ according to the method assessing empathy. A positive relationship between empathy and prosocial behaviour was found by most of the methods analysed in Eisenberg and Miller's (1987) review. However, the self-report of emotional state in story/picture assessment procedures showed no relation, and results of studies using facial, gestural and vocal indices and physiological indices were mixed some having positive, some negative and some no relationship between empathy and prosocial behaviour.

Furthermore, empathy or empathy related constructs have proved to be positively linked to prosocial moral reasoning, at least for males (Eisenberg-Berg & Mussen, 1978; Eisenberg et al., 1991; Eisenberg et al., 1995). The lack of significant associations in case of females might be due to a ceiling effect, given the higher empathy level for females than males obtained in most of the studies (e.g., Mehrabian & Epstein, 1972; Bohlmeyer, Burke & Helmstadter, 1985; Van Ornum et al., 1981; Eisenberg et al., 1988; Riggio, Tucker & Coffaro, 1989; Eisenberg et al., 1991; Eisenberg & Morris, 1996). As mentioned above, also the social role theory of gender differences (Eagly, 1987) may explain the results; if empathy is an essential part of the traditional female role it does not perhaps affect moral reasoning of females (because all females are relatively empathic) but will affect the moral reasoning levels of males. Batson et al. (1995) proposed that level of empathy can be used to infer how much one values the welfare of a person in need. When a person experiences strong empathic feeling while perceiving another in distress, one can infer that she or he values the other's welfare more than a person not moved in a situation. Batson et al. assumed also that once evoked this valuing is a relatively

stable disposition, as it remained the same even after empathy declined.

It could be argued that the motivational base provided by empathy for prosocial moral behaviour is limited due to empathic overarousal and bias, also pointed out by Rest (1986) in his definition of moral sensitivity. In empathic overarousal the level of empathic distress becomes so high that it turns into personal distress, which inhibits people from acting on behalf of the victim. Studies reported by Stotland et al. (1979), Houston (1990), and Strayer (1993), for example, confirmed the overarousal hypothesis. However, activation of cognitive moral principles may moderate the level of empathy, as described shortly. In addition, empathic distress might be biased in favour of one's ingroup, family or friends (Hoffman, 2000). Although studies of Batson et al. (1995) indicated that perceived similarity of observer and target increased the level of empathy and valuing the target's welfare, later research (Batson et al., 1997) has shown that shared group membership did not necessarily affect the empathy-helping relationship.

As noted above (in section 2.1.2.1) empathy is also theoretically linked to cognitive moral principles. Hoffman (2000) suggested that the activation of moral principles helps to adjust the level of empathic distress. If the empathic distress is very intense, it will be lowered, and intensified if very low. The contribution of empathy to moral principles is, according to Hoffman, to transform them into prosocial hot cognition, which has strong motivational force. In this sense the role of empathy is considered important, since Hoffman claims that abstract moral principles, often learned in a "cool" didactic context, do not motivate behaviour at all. It might also be hypothesised that when empathy is embedded in moral principles its limitations can be decreased since moral principles control empathic bias and overarousal. In addition, Blasi (1999) claimed that moral emotions per se - such as empathy and guilt - can not motivate moral behaviour because they lack intentionality. Therefore, they need to be reconstructed in their moral meaning.

Hoffman (2000) discussed further the relationship of empathy and cognition. He suggested that the situation determines which comes first, empathic affect or cognitive moral principle. In

situations where the victim's distress is salient, affect comes first, but when the situation is more cognitively focused (e.g., answering Kohlberg's dilemmas) the cognition is the first to come. This could be the reason for the results that usually in real-life moral decision-making people first make the decision what to do and afterwards justify it whereas in hypothetical dilemmas people first make the judgments from which they derive the act (Krebs, Denton & Wark, 1997).

2.1.4 Interaction among the components

As mentioned earlier, the four components of Rest's model are theoretically largely seen as distinct processes (Rest, 1986), and also the studies carried out by Bebeau (1994) implied that individuals who are for instance highly sensitive to moral aspects of the situations might make relatively inadequate moral judgments. Nevertheless, the basic idea behind the four component model is that several inner psychological processes together create outwardly observable moral behaviour. It is also presumed that the components have complex interactions and thus affect each other. Rest and his collaborators suggested that by combining information from all four components the prediction of behaviour becomes more reliable (Rest et al. 1999), and that moral development involves development in all four processes (Rest, 1983).

In order to demonstrate the interconnection of the components Rest (1986) referred to Darley and Batson (1973) who manipulated the ease with which a task could be carried out (time pressure in preparing and giving a talk). They found that subjects under great time pressure were less likely to notice someone in need. Rest interpreted the results in terms of the subjects' involvement on component 4 (to complete their duty of give a speech), making them insensitive to the new situation (ignoring component 1 processing).

Thus, deep involvement on one component decreased performance in another component.

In terms of moral judgment and moral motivation, there is some evidence that moral reasoning is at least moderately related to human values. Higher moral stages have emerged to be positively related to universalism values and negatively to self-enhancement values (Helkama et al., 1992; Helkama et al., 2003). In line with these results, Ostini and Ellerman (1997) found a negative relationship between value type of universalism and Stage 2 reasoning measured by the DIT. In addition, some studies have found a positive relation between moral reasoning and empathy at least in adolescence (Eisenberg-Berg & Mussen, 1978; Eisenberg, Miller, McNalley & Shea, 1991; Palevaara, 1997).

One of the aims of this study is to explore the interactions among the components of Rest's four component model. However, components of morality may involve other elements as well. For instance, one could study what decision-making strategies people use when they have to resolve a conflict between one's own interest and the interest of another or a conflict between a moral value and a non-moral one. Resolving conflicts between their interests and the interests of others is often said to be the most regular type of dilemma in real-life situations (Hoffman, 1984; Krebs et al., 1991). One way to assess this kind of problem-solving strategy is to examine peoples' level of integrative complexity. The construct of integrative complexity represents individuals' cognitive style and different ways of processing information. It has its origin in Kelly's (1955) personal construct theory, and the emphasis is on the structure of thought rather than its content as in the cognitive-developmental approach. Integrative complexity of thought will be another related construct of morality in my thesis.

2.2 Integrative complexity of thought

The construct of integrative complexity is defined in terms of two cognitive structural properties: differentiation and integration. Differentiation refers to the number of characteristics or dimensions of a problem that an individual takes into account. Integration refers to the development of complex connections among differentiated characteristics. (Schroder, 1971; Suedfeld, Tetlock & Streufert, 1992.) People process information in terms of the number of different ways the same dimensional scale values of information can be combined and interrelated (Schroder, 1971). At the lowest level a given stimulus is perceived only from one viewpoint or it can be characterized by simple black and white, good or bad thought where other viewpoints are categorically rejected and no ambiguity is tolerated. At the moderate level the stimulus is perceived at least in two distinct ways which are all considered as being relevant and justifiable. Developing connectedness between the perspectives represents integrated information processing. Consequently, at the highest level the alternative perspectives or dimensions are not only held in focus simultaneously but they are combined to produce a result that none of them could have produced alone and, beyond this point, generating an overarching principle or perspective pertaining to the nature of the relationship or connectedness between alternatives. (Baker-Brown et al., 1992.)

The method of integrative complexity coding was originally developed for scoring responses to a semi-projective test designed to measure individual differences in cognitive style (Schroder, 1971; Schroder, Driver & Streufert, 1967). Recently, a variety of written materials are used (paragraph and sentence completion,

archival materials like letters, newspapers, speeches etc.). The basic scoring unit refers to a section of material that focuses on one idea (Baker-Brown et al., 1992). Higher complexity scores are usually found in studies where there were no or little time constraint and respondents could think or plan their answers, while lower complexity scores are more general in studies with strict time-limiting conditions and responses produced with little prior thought. (Baker-Brown et al. 1992.) Studies pertaining to problem solving have revealed that individuals have an optimal level of complexity which is reached in an optimally diverse environment. If the information load is extremely low, or, on the other hand, extremely high, complexity of thought decreases and the individual differences in the complexity level tend to disappear. Thus, the interactive effect of situational and dispositional factors of information processing could be presented as an inverted "U" curve. (Schroder, 1971.)

It is not clear whether complexity of thought is to be seen as a trait or a state variable. Previously integrative complexity - then called conceptual complexity - was considered to be a relatively stable personality characteristic or ability. Later versions of the theory, especially the integrative complexity viewpoint, have tended to view complexity more as a state variable, a joint outcome of trait and environmental mediators, and the trait view has been in abeyance. However, one of the interesting questions, demonstrated by e.g., Suedfeld, Tetlock and Streufert (1992), is whether some people are more flexible in changing their complexity level to fit a given situation (consciously or not). Suedfeld (1988) for example, argued that "good decision makers are those who have intuitive understanding of the level of complexity appropriate to the occasion". Thus, in some situations it may be appropriate to use simple decision-making strategies, and on some occasions more complex ones. The growing evidence that the level of complexity can be modified e.g., by discussions, information gathering, and certain experiences (e.g., Gruenfeld & Hollingshead, 1993; Pancer & Hunsberger, 2000) indicates that complexity might, at least to some extent, be a trait that is more changeable than previously thought.

Although integrative complexity is theoretically seen, and several studies have shown it to be, at least to some extent, a domain specific variable (e.g., Hunsberger et al., 1992; Pratt & Hunsberger, 1992; Feist, 1994; Hunsberger & Pratt, 1994), it has been found to correlate significantly with moral judgment (deVries & Walker, 1986; Pratt et al.,1990; Pratt et al., 1991) and with ethic of care (Skoe et al., 1996). In addition, education has also positively related to the complexity level (Pratt et al., 1991). In personality measures integratively complex individuals have been found to be higher on openness and creativity than less complex ones (Tetlock, Peterson & Berry, 1993). The evidence for age and gender differences for cognitive complexity is mixed. It seems, however, that integrative complexity is basically unrelated to age (e.g., Pratt et al., 1991) and gender (Suedfeld, Tetlock & Streufert, 1992).

The strength of the values that people hold is obviously linked to their decision-making strategies in value conflict situations (Tetlock, 1984, 1986; Tetlock et al.1994; Kristiansen & Kimberly, 1990). Tetlock's value pluralism model proposes that people are likely to think about an issue domain in integratively complex ways - i.e. use more differentiated and more integrated forms of thinking - to the degree that the issue domain activates conflicting values that people perceive a) as important and b) as approximately equally important. He has tested his model in the domain of politics (Tetlock, 1981, 1983b, 1984) and for explaining the ideological reasoning of university students (Tetlock, 1986). The results indicate, for instance, that simple decision-making is usual for advocates of monistic ideologies and that advocates for pluralistic ideologies are more inclined to use complex modes of decision-making. (Tetlock, 1981, 1983b, 1984; Tetlock, Hannum & Micheletti, 1984). It should be noted, however, that integrative complexity scoring per se is not biased for or against any particular ideology (Tetlock & Suedfeld, 1988).

Furthermore, psychological distance and emotionality have been shown to have effects on complexity of thought. Suedfeld, Bluck and Ballard (1994) found that, contrary to their expectations, low psychological distance between the decision-maker and those who are directly affected by the decision was associated with lower

levels of complexity than high or medium psychological distance. Emotional involvement of the decision-maker in the situation, on the other hand, was positively related to integrative complexity. Pratt & Hunsberger's (1992) study also showed that people obtained higher levels of complexity in personally meaningful dilemmas. These results corroborate the cognitive manager model (Suedfeld, 1992), which suggests that a topic that engages one's emotions, even if it leads to some stress, should motivate a more labourious decision-making and that it should also result in a more differentiated and integrated set of solutions. Suedfeld and his associates (1994) used as a low psychological condition a treatment where respondents had to write an essay about a situation where they had had some disagreement (argument or misunderstanding etc.) with a close friend. They admitted that this type of setting may have led to unidimensionality and decline on the level of complexity.

Although the current version of the integrative complexity theory has abandoned the idea of developmental path of complexity, viewing it mostly as a situational variable, as a joint effect of structure and environment (e.g., Suedfeld, Tetlock & Streufert, 1992), integrative complexity of thought can be seen as parallel - although not synonymous - to Kohlbergian moral judgment. They both are focusing on the structure of thought and are based on underlying constructs of differentiation and integration. The positive association of integrative complexity scores with moral judgment stages, albeit only moderate, implies that these two constructs are overlapping (see e.g., Pratt et al., 1991). Moreover, the recent empirical evidence obtained from the moral judgment research indicates that also moral judgment is more flexible than Kohlberg's model of moral development implies. As Krebs et al. (1991, p. 1021) suggest "moral judgment results from an interaction among the interpretive structures available to people, the interpretability of the information individuals process in terms of these structures, and individuals' motivation to interpret information in particular ways".

In the present study university students' decision-making strategies in value conflict situations are investigated applying the integrative complexity coding system.

2.3 Professional ethics education

The incidents of ethical misconduct which have taken place in Finnish academic life have also aroused a necessity of specific professional ethics education. Universities in the Helsinki area had a project to develop the professional ethics education in the years 1995-1999. The project conducted a survey delivered to the units (departments, chairs etc.) of University of Helsinki, Helsinki School of Economics and Helsinki University of Technology concerning their professional ethics education. From the 105 units who returned the survey, 80% reported some ethics in their undergraduate curriculum, most often in the context of other courses. However, only 10% of the departments had special ethics training. In most cases the ethics was included in some method and practical courses. Nevertheless, approximately 60% of the units regarded the existing ethics training as insufficient, and they were, at least to some extent, willing to take more ethics education in their curriculum. (Myyry, 1997.)

A national e-mail survey carried out by Myyry (1998) showed that most advanced ethic programs were in the educational sciences. There were several specific ethic courses, distributed over the whole undergraduate curriculum. Clarkeburn, Downie & Matthew (2002) administered a similar kind of survey to the British universities offering degrees in life sciences. They found out that from the thirty-seven universities only 27% (10) reported some ethics education in their undergraduate science curriculum.

Rest's four component model of moral behaviour has been used as a framework in professional ethics education programs, for instance by Bebeau (1994) for dental students and by Duckett & Ryden (1994) for nursing students. To promote students abilities in

all of the four components has been seen as an important target of an ethic program: the components represent the four processes where a professional can fail to behave morally. Numerous educational interventions in the domain of professional ethics have demonstrated positive effects. The recognition of moral issues has repeatedly found to be higher after ethics education (Bebeau & Brabeck, 1987; Baab & Bebeau, 1990; Clarkeburn, 2002), which suggests that moral sensitivity is an ability that can develop and that can be deliberately enhanced through instruction. Bebeau et al. (1985) observed that moral sensitivity increased during dental education even without special ethics curriculum.

Even if the structure of moral judgment is constructed by the person her/himself and it can't be learned straight from others or the environment, studies carried out by Rest (1994) and Bebeau (1994) illustrated that professional ethics courses can enhance moral reasoning. As professional curriculum seems not to promote progress in moral reasoning per se (see e.g., Bebeau, 2002 for review), educational interventions in professional ethics showed positive effects on moral reasoning skills. Rest and Thoma's (1986) meta-analyses and Bebeau's (2002) review of several intervention studies revealed that especially professional ethics programs which lasted longer than a few weeks and emphasized dilemma discussions were effective in promoting students' moral reasoning skills. Duckett and Ryden's (1994) study showed that ethics curriculum increased nursing students' moral reasoning skills as measured by the DIT, and that the DIT score was a strong predictor of clinical performance, i.e., students with high DIT scores performed better in clinical settings than students scoring low on the DIT.

Furthermore, Bebeau and her colleagues (1994) noticed that senior dental students from the University of Minnesota, who had completed the professional ethics curriculum and for instance had instructions on professional role concept, were more willing to treat patients infected with Hepatitis B-virus or HIV compared to a national sample of senior dental students. It seems plausible that higher awareness of one's professional responsibilities and other factors of role concept affect the results.

Consequently, professional ethics education programs have been shown to positively influence the processes that comprise students' moral decision-making. One aim of this study is to investigate the influence of professional ethics training on moral sensitivity.

2.4 Conclusions

As mentioned in the introduction, it has been postulated that moral behaviour could be derived from understanding both the fundamental goals of human beings and the means to pursue them (Blasi, 1980). Component 3 of the Rest model represents the fundamental goals of humans. Values by definition are goals which serve as guiding principles in peoples' lives and motivate them to act (Schwartz, 1992). The other components from Rest's model: sensitivity to moral issues, moral judgment and moral implementation skills could be considered means for pursuing these goals. Additionally, of the other theoretical conceptions of my thesis, empathy, procedural justice rules, and the integrative complexity level represent the means to reach the goals important to people.

Although Rest (1986) emphasized the interdependency of the components in his model, practically all of the studies conducted at the University of Minnesota about the connection of the components have explored the association of moral judgment with the other components. The relationship between moral sensitivity and moral motivation for instance, is a largely neglected area. In all,

moral motivation is considered a dimension of professional identity, and peoples' value priorities have not been the focus of research. Moreover, the moral values which should be prioritized instead of other values are not identified by the Minnesota group. On the other hand, despite the large range of study of values, relatively few studies have explored the association between people's value preferences and morality. Thus, one aim of the current study is to examine the relationship between moral sensitivity and value priorities, defined in terms of the Schwartz value model.

Walker (2002) claimed that research done by the Minnesota group is mainly concentrated on the cognitive aspects of the components and the affective elements have not been explicated or investigated. From Rest's and his colleagues' viewpoint the interconnection of cognition and affect is so tight that you can not assess them separately. However, it could be argued that the links between cognition and affect can be tested. As mentioned above, concern of fairness forms the affective component of moral judgment (Rest, 1986). However, the role of justice considerations - in the sense they have been studied in social psychology - in moral reasoning is relatively unknown. One purpose of this study is to investigate the association of moral judgment stages with the use of procedural justice rules. This association is examined in a hypothetical and a self-reported real-life dilemma in a professional context.

Furthermore, although empathy is seen as underlying moral sensitivity, the level of empathy has not been measured and the relation of empathic concern to other dimensions is not examined, albeit empathy's contribution to prosocial and moral behaviour has been confirmed frequently (e.g., Mehrabian & Epstein, 1972; Eisenberg et al., 1995). Consequently, in this study the relation of value priorities to emotional empathy, moral judgment and procedural fairness considerations are examined.

Nevertheless, Rest's model is definitely an adequate framework to assess morality from different viewpoints. Given that moral behaviour is a multidimensional process which is affected by various situational factors helps to understand the diversity in peoples' moral action. This thesis is an attempt to empirically test

some of the theoretically expected connections between the components.

Integrative complexity of thought is not originally involved in the four component model. Although moral judgment and integrative complexity both focus on cognitive processes, the presumption of the development through stages makes moral judgment divergent from complexity of thought. However, in this study I attempt to broaden the scope of component II, moral judgment, to include also complexity of thought, as I argued above.

The integrative complexity in value conflict situations has usually been assessed in the domain of ideological reasoning (e.g., Tetlock, 1983b, 1986). Because in everyday life people regularly have to make choices between values the degree of complexity in these situations might be essential for successful moral conduct. Although highly complex thinking can sometimes be more harmful than simple one, for instance in emergency situations (Schroder et al., 1967), it could be argued that especially in situations where people have to overcome their own interest at the expense of others (for instance, resolving a conflict between a moral value and a non-moral one) the more integratively complex decision-making strategies may be more adequate. For example, there is evidence that in international crises higher complexity is related to peaceful conflict resolution and lower to more aggressive decision-making strategy (Suedfeld & Tetlock, 1977). Suefeld (1988) emphasized that complexity should be treated as a continuous variable, not a dichotomous one, and he was even willing to posit that there is a positive correlation between decision quality and the level of complexity that leads to that decision. However, researchers have later stressed that integratively complex thinking should not be considered inherently cognitively or morally superior to integrative simplicity (Tetlock, Armor & Peterson, 1994). The link of complexity of thought to moral reasoning has been observed previously, as mentioned above. Likewise for the emotional involvement of the decision-maker in the topic at hand (Suedfeld, Bluck & Ballard, 1994). Nonetheless, the link of dispositional emotionality, like empathy, to complexity level is a less examined issue. Moreover, albeit complexity's connections to personality have been studied (Tetlock, Peterson, Berry, 1993; Feist, 1994), the

relationship between an individual's value priorities and complexity of thought has not been investigated. Therefore, one aim of this study is to investigate the connection of complexity of thought to emotional empathy and value priorities.

Cognitive manager model (Suedfeld, 1992) suggests that a topic which engages one's emotions, should motivate a more labourious decision-making because personally relevant problems will justify investing in more information search and processing. Sueldfeld et al. (1994) assessed the level of complexity from essays about disagreement situations with a friend or a stranger. The distance of the other person from oneself served as a psychological distance treatment. However, the actual contexts where the disagreements took place were not manipulated. Nevertheless, one might ask what is the impact of the issue context on integrative complexity. This is one further purpose of this study.

3 Aims of the study

The main aim of this thesis is to examine interactions among the components of Rest's model and the associations between components and other related constructs. The special focus is on the relation of moral motivation to other components of morality. These questions were addressed in four studies with five different samples. I now describe the studies and hypotheses tested in them in more detail.

1. Study I: Value priorities and emotional empathy

Because the overarching issue of this thesis is the relationship of moral motivation to other components of morality, the first study pertains to the interaction of two motivational factors of moral behaviour: value preferences and emotional empathy among university students in three different fields of study (social science, business and technology). Furthermore, a new additional value type was formed representing the work-related values which are missing from the Schwartz value model. Thus, the first issue addressed in this study is the location of work values in the Schwartz model. Based on the considerations above, the following hypotheses were formed:

1a) work-related values form a psychometrically homogeneous value type, which is located between the value types of tradition/conformity and security, i.e. shows the highest correlations with these two value types. It would also be possible to see them as part of the conformity value domain. According to the sinusoid curve hypothesis, we expect that work values show the highest negative correlations with stimulation, hedonism, and self-direction, located at the opposite side of the circle.

Another issue addressed in the Study I were the differences in value priorities among students from different fields of study according to the Schwartz value model. To summarize the hypothesis concerning this aim, derived from findings of Verkasalo, Daun & Niit (1994), it was expected that

1 b) business students will value power and achievement more than do the other groups, and that social science students will stand out on universalism, benevolence, and spirituality and have lower regard than the other groups for conformity, and if students of technology score higher than other groups on a value type, it will be security.

The third aim of Study I was to investigate the differences in emotional empathy score according to the field of study and gender. In line with previous results (Bohlmeyer & al., 1985; Mehrabian & Epstein, 1972), the following expectations were made:

1 c) students of social sciences obtain higher scores on emotional empathy than students of business or technology, and since students of business are often trained for tasks which essentially require contact with other people (selling, marketing etc.) while training in technology prepares essentially for tasks dealing with things, students of business score higher on empathy than students of technology

1 d)　females score higher in emotional empathy than males.

Finally, the relationship between value priorities and the emotional empathy score was examined. Because emotional empathy is related to helping behaviour (e.g., Mehrabian & Epstein, 1972), and it involves also the ability to be empathically aroused by the plight of entire group or class of people (Hoffman, 1977), it was hypothesized that:

1e)　emotional empathy correlates positively with the value types benevolence and universalism.

If empathy score is positively related to the value types benevolence and universalism, based on the sinusoid curve hypothesis it is further anticipated that:

1 f)　the negative correlations will emerge with power and work values.

2.　Study II: Professional ethics training and moral sensitivity

Study II focuses on the first component of the Rest's model, moral sensitivity, and its association with moral motivation. An attempt was made to assess social psychology students' moral sensitivity during professional ethics training. In regard to the impact of ethics education on moral sensitivity, it was expected in accordance with the previous findings (Bebeau & Brabeck, 1987; Baab & Bebeau, 1990; Clarkeburn, 2000) that

2 a)　professional ethics course with discussion groups would raise the respondents' moral sensitivity.

Secondly, the interaction of moral sensitivity and component III, value priorities, was investigated. As noted above, moral sensitivity requires the ability to take the role of the other and to feel compassion for others. It is also plausible that moral sensitivity would relate positively to moral values in the Schwartz model because they concern the welfare of other people. Thus, it was hypothesized that

    2 b)   benevolence and universalism values would be positively associated with moral sensitivity, and based on the compatibilities and conflicts among the value types, moral sensitivity should therefore correlate negatively with Self-Enhancement values (power and achievement).

3. Study III: Everyday value conflicts and integrative complexity of thought

Study III deals with the decision-making component of morality, integrative complexity of thought, and its relation to moral motivation. The complexity level was assessed in value conflict situations in three different contexts (professional, personal, general) among university students from three different fields of study (social science, business and technology). The first issue addressed in this study was whether the value pluralism model predicts complexity of thought in everyday value conflicts. Based on Tetlock's (1986) results the hypothesis concerning this issue was:

    3 a)   respondents would use more integratively complex thinking when the conflicting values are high in the respondent's value hierarchy and when they are relatively equally important.

The second issue addressed in Study III was the impact of issue context on the level of integrative complexity. In accordance with Suedfeld, Bluck and Ballard's (1994) suggestions the following hypotheses were formed:

3 b) respondents would think about an issue in a more integrative complex way in the personal context when the psychological distance is low, because personally relevant problems will justify investing in more information search and processing

3 c) respondents in the professional condition would identify themselves at least to some extent with their becoming profession (the professional in the situation), and for that reason would have higher scores in integrative complexity (medium psychological distance) than respondents in the general condition (high psychological distance).

Thirdly, the association of integrative complexity with value priorities was examined. In line with the results obtained from Tetlock, Peterson & Berry's (1993) study it was expected that:

3 d) respondents high on integrative complexity would value more the Openness to Change dimension, and respondents on lower levels of complexity would score higher on the Conservation dimension.

Finally, the interaction of integrative complexity level and emotional empathy score was investigated. As in Tetlock, Peterson & Berry's (1993) study more complex respondents saw themselves high in empathy, the hypothesis concerning this issue was:

3 e) emotional empathy would relate positively to integrative complexity.

4. Study IV: Moral judgment and use of procedural justice rules

Study IV pertains to the interaction of the cognitive and the affective element of component II, moral judgment and the relationship between component II and moral motivation. Stages of moral reasoning and the use of procedural justice rules were examined among university students from several fields of study. Since the study was conducted in a professional ethics course the respondents were addressed one hypothetical non-Kohlbergian dilemma in professional context and asked to report one real-life dilemma that they have encountered at work. As far as the moral judgment stages and use of procedural justice rules were concerned, two main questions were made. Firstly, the relationship between the level of moral judgment and the use of procedural justice rules was investigated. As mentioned above, procedural justice has a special role in moral judgment. Kohlberg (1984) sees justice mainly in terms of justice operations, which are based on role-taking. While all of Leventhal's justice rules may be said to involve some role-taking, it could be argued that bias suppression, with its explicit reference to the disinterested moral point of view, is the one which is conceptually most closely linked to role-taking, and therefore also to the moral judgment stages. Consequently, the hypothesis concerning this issue was:

4 a) given its closeness to role-taking, bias suppression will show the strongest association with the stages of moral reasoning.

Secondly, the differences in the use of procedural justice rules according to the dilemma type was investigated. In line with the earlier findings (Ikonen-Varila, 1994; Helkama & Ikonen-Varila, 1996) where respondents used more procedural justice rules in real-life dilemmas than in hypothetical ones, it was expected that

4 b)   more procedural justice rules are used simultaneously in solving real-life moral problems than in hypothetical dilemmas.

Thirdly, as additional analyses (not included in the article based on Study IV), the interaction between component II and component III, connection of value priorities to moral judgment stages and use of procedural justice rules, were investigated. Based on the previous observations (e.g., Helkama & al.,2003), Leventhal's (1980) assumptions, and on the compatibilities and conflicts among value types, the following hypotheses were formed:

4 c)   moral reasoning is positively related to The Self-Transcendence values, especially to universalism, and negatively to Self-Enhancement

4 d)   respondents with high regard for Self-Transcendence emphasize different justice rules (e.g. bias suppression, ethicality) than respondents with high regard for Self-Enhancement values (consistency, representativeness).

To summarise the aims of my thesis I present the main aims and the designs of the studies in Table I.

Table I. Summary of the aims and the designs of the study.

	Component I	Component II content	structure		Component III			
	sensitivity	PJ	KS	IC	values	empathy	sample	design
Study I					+	+	1	Correlational
Study II	+				+		2& 3	Teaching experiment
Study III				+	+	+	1	Experimental
Study IV		+	+		+		4&5	Correlational

Note: PJ=procedural justice rules; KS=Kohlberg's stages; IC=integrative complexity

4 METHODS

4.1 Respondents and procedure

The data for my thesis was collected from four different samples of university students. Additionally, one literature sample was used. *The first sample* consisted of 138 university students from three universities: social science students from University of Helsinki (N=41), students from Helsinki School of Economics (N=46) and students from Helsinki University of Technology (N=51). In the whole sample there were 74 females (53%), mean age was 25 (SD= 5.6, range 21-54). The respondents were on the average in their third year in the university (SD= 2.1).

For business and technology students the survey was delivered in class. They were asked to fill it out at home and return it for the next class. For social science students part of the surveys were mailed, part were collected in the same way as in other groups. The questionnaire took about an hour to complete. Participation in the study was voluntary and no compensation was provided.

For purposes of the Study II, to measure integrative complexity, six issues of value conflicts were addressed to the respondents. The value conflicts pertained to everyday life situations (interaction with other people, taking care of nature etc.). Issues were presented to respondents in different contexts, even if

the value conflict was always the same. The respondents were randomly assigned to one of the three treatments (personal context-low psychological distance; professional context-medium psychological distance; general context-high psychological distance) conditions. From the original sample of 138 students (see above) the 12 students who answered to only three or fewer issues were discarded from the analyses. The final sample for Study II therefore consisted of 126 respondents, 57% of whom were females.

The *second sample* consisted originally of 70 students in social psychology who participated in ethics education for 20 hours on two separate courses distributed over one semester (81% were females, mean age 32 years). The aim was to enhance their ability to identify and resolve ethical problems and to develop understanding of the professional role of a social psychologist.

At the beginning and at the end of the course a measure of sensitivity to moral issues was addressed to the participants. The respondents were told that the purpose of the study was to investigate whether students' considerations of ethical problems change during the professional ethics education. The pretest also included a background questionnaire and the Schwartz Value Survey, and it took about an hour to fill it. The order of the items in the questionnaire was: demographic questions, measure of moral sensitivity and the Schwartz Value Survey. The post-test consisted only of the sensitivity measure, and respondents had about half an hour for it. Although the questionnaire was delivered in the class the students were told that responding was not a part of the course requirements. There were 50 students (71%) who completed both the pre- and the post-test, 82% were females, mean age 32 years (SD=7.0, range 24-55).

The *third sample* formed a control group to the second sample. It consisted of 11 students of education who participated in a qualitative research methods course (82% were females, mean age 38 years). The students filled out the questionnaire as the experimental group, with the exception that the Schwartz Value Survey was not administered to them. For control group it took about 40 minutes to complete the pretest, and half an hour the post-test. Only six of them (54%) completed both the pre- and the post-

test, 83% were females, mean age 35 years (SD=10.0, range 22-48).

The *fourth sample* consisted of 41 university students who were participating in professional ethics classes in Helsinki. The courses were designed for advanced students interested in professional ethics and drew students from a variety of fields (in addition to social sciences, business, technology, and theology, for instance). There were 26 females (63%) in the sample, and the mean age was 32 (SD=8.3, range 22- 54).

In order to measure moral judgment and use of the procedural justice rules the students were addressed a survey with one hypothetical non-Kohlbergian dilemma in a professional context, and they were asked to report one real-life dilemma encountered at work. The questionnaire included also the Schwartz Value Survey. For most of the respondents the survey was delivered and filled out in class on the first time, for some respondents (N=8) the survey was mailed. The questionnaire took about an hour to complete. Participation in the study was voluntary and no compensation was provided.

The *fifth sample* did not consist of human beings but was composed of written material - instances of procedural justice rules in the Colby & Kohlberg (1987) scoring manual. The search was restricted to match examples (not marginal matches or non-matches or general criterion concept definitions), because the match examples represent moral reasoning that can be unambiguously assigned a certain Kohlberg stage. There were altogether 612 matches in the manual, and they were fairly evenly distributed among the stages and stage levels.

4.2 Measures

In this thesis four validated measures were used and additionally two measures were developed for the purposes of the study.

Values

Value priorities were measured using the Schwartz Value Survey (Schwartz, 1992). The survey contains 56 single values measured on a nine-point scale (-1=opposed to my values; 0=not at all important; 7=of supreme importance). Five work-related values (hard-working, conscientious, orderly, punctual and long-term planning) were added to the standard version.

To control for differential use of the scale, centralised sum variables were used in the analysis: a personal mean of all 61 values was calculated for each subject separately, and the items of the sum variable were summed together and divided by the personal mean multiplied by the number of items included in the sum variable. The Cronbach alpha's of the value types ranged, differing according to the sample, from .45 (tradition) to .79 (work). (See Studies I to III for details).

Empathy

Emotional empathy was measured by Mehrabian and Epstein's Questionnaire Measure of Emotional Empathy (QMEE) (1972). This measure contains 33 items assessed on an 8-point scale (-4=strongly disagree; 4=strongly agree). The scale consists of a number of intercorrelated subscales: 'Susceptibility of emotional

contagion'; 'Appreciation of the feelings of unfamiliar and distant others', 'Extreme emotional responsiveness'; 'Tendency to be moved by others' negative emotional experiences'; 'Sympathetic tendency' and 'Willingness to be in contact with others who have problems'. The total empathy score was calculated through all the items (alpha = .87).

Moral sensitivity

In order to measure moral sensitivity the respondents were administered a story in a professional (social work) context which included several moral issues. The story, taken from Aadland (1993), was shortened for the purposes of the study. This particular story was chosen because it was considered to be possible to interpret without special professional knowledge. After reading the story, the respondents were asked to single out the things that should be considered in resolving the problem. The story, about 500 words long, was titled: Should Victoria be placed in a foster home? The complete story is presented in Appendix.

Bebeau, Rest & Yamoor (1985) reported a development of a scoring system for DEST. The basic criteria they used were: (1) sensitivity to the special characteristics of the patient, and (2) awareness of what actions serve the rights and welfare of others. They ended up with categories which were logically independent of each other (i.e., one could score high on one and low on the other), and consistent with the theoretical definition of moral sensitivity.

Having this scoring system in mind, I read all the issues respondents have listed from the story and developed the initial categories. With another scorer, I generated the final categorization of the issues We ended up with 17 categories, each assessed by a 3-point scale (0=oblivious to the characteristic; 1=some recognition; 2= complete recognition). The issues respondents listed could be classified to three topics: special characteristics of the persons, their rights and their responsibilities in the situation. (See Study II for the categories of the moral issues.) A total sensitivity score was

calculated through all the items. Scores could range from 0-34. A primary scorer scored all the protocols, blind to the data. The second scorer scored ten randomly chosen protocols, and the interrater agreement was 83.5%.

Integrative complexity

Integrative complexity of thought was assessed from the value conflict situations presented to the respondents in Study III. The value conflicts pertained to everyday life situations (interaction with other people, taking care of nature etc.). The six issues used in the final study, and values that were in conflict in them, were: (a=personal, b=professional, c=general issue)

1. (a) Should you help the beginners in your leisure activity although it would constrain your training to competition?; (b) Should social worker/economist/engineer help beginners at their workplace although it would constrain their career development?; (c) Should people help their infirm close ones although it would constrain their success in life? (Conflicting values: helpfulness versus success).

2. (a) Should you comply with your parents' hopes for your career although it would be in conflict with what you want?; (b) Should social worker/economist/engineer accept a task given by the employer although it would be in conflict with her/his values?; (c) Should people comply with the way of life their community wants them to follow although it would be in conflict with what they want? (Conflicting values: obedience versus choosing one's own goals).

3. (a) Should you reveal a secret your friend has told you if it would dispel a suspicion regarding another friend?; (b) Should social worker/economist/engineer reveal the confidential information obtained from a client if it would dispel a suspicion regarding another party?; (c) Should people reveal a secret they have heard if it would dispel a suspicion regarding another group? (Conflicting values: loyalty versus social justice).

4. (a) Should you conform to the way your partner's family is used to celebrate holidays although it would restrict your freedom?; (b) Should social worker/economist/engineer conform to the way their work team is used to operate although it would restrict her/his creativity?; (c) Should people conform to the way their community is used to operate although it would restrict their freedom? (Conflicting values: respecting tradition vs. freedom).

5. (a) Should you conceal your friend's cheating in exam to protect her/him?; (b) Should social worker/economist/engineer conceal a colleague's cheating to protect her/him?; (c) Should people conceal their close one's cheating to protect them? (Conflicting values: honesty versus true friendship).

6. (a) Should you recycle your milkcartons although the nearest recycling center is 1,5 km far away?; (b) Should social worker/economist/engineer always take environment into account in work although she/he would have to make more effort?; (c) Should people always take environment into account (e.g. recycle) although they have to make more effort? (Conflicting values: protecting nature versus enjoying life).

The respondents were asked to write down in five minutes all thoughts that occurred to them relevant to the issue (e.g., Tetlock, 1986). The level of integrative complexity was scored from the protocols. After obtaining a .93 reliability with an expert coder from the University of British Columbia, I scored all protocols according to the integrative complexity scoring manual (Baker-Brown, Ballard, Bluck, De Vries, Suedfeld & Tetlock, 1992), blind to the data. Integrative complexity score ranges from 1 to 7, with score 1 representing absence of differentiation and integration; score 3 represents moderate or high differentiation but no integration; score 5 represents moderate or high differentiation and moderate integration; 7 represents high differentiation and high integration. Scores 2,4, and 6 represent transitional levels of differentiation and integration. A second coder, who was unaware of the hypotheses of the study, scored 33 of the protocols, and the interrater agreement was 87.5%. The disagreements were resolved by discussion. The integrative complexity scores ranged in this study from 1 to 5. Table II presents the examples of the complexity scores.

Table II. Examples of the integrative complexity scoring.

Issue 4. (a) Should you conform to the way your partner's family is used to celebrate holidays although it would restrict your freedom?
Score 1: There are responsibilities and necessities in life. You have to conform at least for your partner's sake.
Score 2: Sometimes you have to put your own needs and desires backwards. Probably celebrating the holidays would be ok. Happily, there are only a few holidays in a year!
Score 3: To a certain degree, yes.. But, if it would restrict your own work or study, then not. It depends also on the type of the relationship: is the partner a life-companion or some temporary one.
Score 4: It depends on the holiday (religious/secular). Concerning the religious holidays you have to value/respect others' choices. Concerning the secular holidays it probably does not matter how you celebrate them. You must make compromises (e.g. by taking a part in some of them), depends on the pressure.
Score 5: Not completely. In an intimate relationship you have to take into account families of both spouses and understand that certain habits are inevitably changing when you live together with someone. You have to create some joint traditions of your own. It does not benefit anyone to abandon completely some traditions or conventions. You must try to create a suitable combination, a consensus.

Moral judgment

To measure moral judgment, the respondents were addressed one hypothetical dilemma in a professional context, and they were asked to report one real-life dilemma encountered in work. The hypothetical dilemma was taken from McNiven (1993) and it pertained to affirmative action at the workplace (see the story in Appendix IV). The respondents were asked to consider whether the protagonist of the story did the right thing. In view of the problems of the paper and pencil version of the Kohlberg measure, the respondents were asked to write down as detailed as possible their arguments about the matter. For the real-life dilemma we asked respondents to discuss in detail following questions: "What happened in the situation?" "Who were the parties concerned?" "What was your own position in the situation?" "How was the situation resolved?" "How it should has been resolved?"

Moral judgment stages were scored from the protocols according to the Colby and Kohlberg (1987) manual using the 9-point moral judgment Global Stage Scale (GSS) (1, ½, 2, 2/3, 3, 3/4, 4, 4/5, 5) by a graduate student. Prescriptive interview judgments to dilemmas used in this study were matched with criterion judgments based on the same structure from the Colby and Kohlberg scoring manual, and scores for the matched judgments were converted into Global Stage Scores and Weighted Average Score (hereafter, WAS). A WAS 200 corresponds to Stage 2, a WAS 300 to Stage 3, and so on. A more experienced scorer (trained by Kohlberg at Harvard, with a Ph. D. in moral judgment development) checked the scoring after blind scoring a random sample of 13 protocols. The interrater agreement (within ½ stage) was 100% for the hypothetical dilemma and 78% for the real-life dilemma. Another set of 8 randomly selected protocols was scored by a second Kohlberg-trained rater (an Ed.D. in moral judgment development), with 94% agreement (87% for the hypothetical and 100% for the real-life dilemmas). Disagreements were resolved by negotiation.

Some examples of the moral judgment scoring are presented in Table III.

Table III. Examples of stage-classified moral judgments.

Interview judgments	Criterion judgments
Real-life "Sometimes, you have had to give so called "white lies" regarding delays in delivery. I feel that sometimes even the customers feel better if they do not know the truth, for instance that we have run out of packing material or something. There is pressure to maintain the customer's trust, shift responsibility to "third parties". Once in a while you feel bad when you lie."	This response exemplifies a Stage 3 focus on shared expectations and norms for good motives and conduct in the context of relationships valued for their own sake and lacks the social system perspective typical of higher stages.
Hypothetical "The company in question has created its own practices on which it should rely in its activity. The company cannot be so strongly responsible for people's private life. However, these people should be approximately equally good in terms of their skills and the chosen one should meet the other requirements and needs of the company. Thus, the choice should be based on other criteria than just the affirmative action.	In its focus on the instrumentality of practices in securing e.g. the rights of minorities, this response reflects the social system perspective of Stage 4.

Table III continues.

Interview judgments	Criterion judgments
Hypothetical "...I think the management was not wrong in hiring Anne-Marie because its task is not, in my opinion, to assess the life situation of the candidates or which one is in greater need of the job but to choose the best candidate. -- affirmative action could be questioned -- but I maintain that because the government has legitimized the practice, the management was not wrong. This all, however, provided that both candidates were equally qualified, for equality, irrespective of any skin color, political conviction, sexual orientation, or religion, is in my opinion the basic human value, the violation of which cannot be legitimized by any government policies. But in the case of two equally qualified candidates, affirmative action, especially if it is legally established, could be used to decide the choice."	This response reflects the prior-to-society perspective characteristic of Stage 5: the legitimacy of affirmative action is considered from a legal point of view but the legal point of view is still seen as subordinate to the basic value of equality.

Procedural justice

The instances of procedural justice rules according to Leventhal (1980) were scored from the same protocols as moral judgment stage. Each rule was assessed on a two-point scale (0=not used; 1=used). An attempt was made to identify only unambiguous instances of procedural justice rules. To this end, two main principles were followed: (a) only statements to the effect that somebody should do something in a given situation (i.e. procedure) counted as instances of a procedural justice rule (e.g. "X should get more information) (accuracy of information), "X should not allow his preferences influence her decision" (bias suppression), "X could establish a precedent" (consistency) etc. By contrast, references to "all people" or reciprocity, even though they formally could be thought as representing consistency (the same for all, the same for you and me) were not scored as consistency, because they lacked the procedural aspect. (b) Explicit references to principles or their conceptual equivalents were scored: (e.g. "consistency"). Ethicality was not scored as all arguments in the manual examples could be construed as ethical (i.e., they are accepted as morally valid by the respondents).

Instances of procedural justice rules were firstly looked for in the Colby & Kohlberg (1987) scoring manual by two raters. The search was restricted to match examples (not marginal matches or non-matches or general criterion concept definitions), because the match examples represent moral reasoning that can be unambiguously assigned a certain Kohlberg stage. There were altogether 612 matches in the manual, and they were fairly evenly distributed among the stages and stage levels. Ten randomly chosen examples were scored by both raters, and the interrater agreement was 90%.

Secondly, the use of procedural justice rules was blind scored by a graduate student from the protocols of one hypothetical dilemma in a professional context, and one real-life dilemma encountered in work. Protocols for ten respondents (altogether 20 dilemmas) were scored by two raters, and the interrater agreement was 80%. Some examples of the procedural justice rule scoring are presented in Table IV.

Table IV. Examples of the procedural justice rule scoring.

Consistency:
"He acted in the right way *because he followed the firm's policy.*" (Hypothetical)

Bias suppression:
"The official and I were not able to work together openly and in a natural manner because of old political quarrels (caused by very complicated conflicts involving other people). --- the official should not have *let his political opinions affect his working*". (Real-life)

Accuracy of information:
"The employee *could of course test* the applicants so he would not have to choose on the basis of social properties or minority policy." (Hypothetical)

Correctability:
"The guardian told the client (old person) not to go any longer to the bank he had used for the last 40 years. The super of the nursing home had taken the client to that bank as long as X had been in the nursing home. I talked to the guardian over phone to find a positive solution. Since I was familiar with the old person, I knew this was really important for him. I did not succeed in my attempt to persuade the guardian. Neither did I know how I could have helped the client. -- A few years later I told of this in the office of the guardianship board of that town. The official in question maintained *that the issue should have been brought to the office and subsequently to the guardianship board."* (Real-life)

Representativeness:
"*Could co-workers participate in the selection?*" (Hypothetical)

Ethicality
"When I worked as a house manager - - - I continuously had to consider professional ethical problems, primarily in the sense of *how honestly to tell the buyers about the house*: the really bad condition of the piping, large asbestos problem etc. Practically the house was in much worse condition than it seemed." (Real-life)

5 RESULTS

The main results are summarized here following the order of the studies and the aims of the thesis. The detailed results are presented in the separate Sudies I-IV.

5.1 Study I: Value priorities and emotional empathy

5.1.1 Location of work values in the Schwartz value model

One of the questions concerned the location of work values in the Schwartz value model and whether their relations with other value types form a sinusoid curve. The location of work values within the structure of values was examined using the matrix of the intercorrelations among the value types. Since n< 200, it was not possible to carry out a multidimensional scaling analysis to determine the structure. Table V shows that work values had the

strongest positive and significant relations with achievement and power, followed by security. The next highest positive correlation was with conformity. However, it was not significant, nor was the correlation with tradition, which was near zero. Thus, the data do not support the hypothesis that work is located between tradition/conformity and security but suggest that their location is between achievement and power. Further, the correlation matrix showed that spirituality is located between benevolence and universalism.

If we place work values between achievement and power, the data in Table V form a pattern that very closely conforms to the sinusoid curve hypothesis. The correlations of spirituality with other value types are also consistent with the sinusoid curve, if we locate spirituality between universalism and benevolence.

Table V. Intercorrelations among 12 the value types

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Power											
2. Work	.22**										
3. Achievement	.56**	.23**									
4. Hedonsim	.12	-.15	-.06								
5. Stimulation	.14	-.20*	.19*	.18*							
6. Self-direction	.04	-.19*	.16	.12	.49**						
7. Universalism	-.59**	-.42**	-.39**	-.08	.01	.11					
8. Spiritualism	-.47**	-.33**	-.29**	-.15	-.15	-.19*	.25*				
9. Benevolence	-.39**	-.05	-.35**	-.06	-.35**	-.39**	.15	.16			
10. Tradition	-.12	.07	-.34**	-.21*	-.23**	-.18*	-.08	-.08	.07		
11. Conformity	.05	.17	-.15	-.06	-.33**	-.37**	-.25*	-.14	.07	.24*	
12. Security	.22*	.20*	.01	.06	-.22**	-.22*	-.33**	-.37**	-.21*	.05	.22*

*:p<.05 **:p<.01

5.1.2 Differences in value priorities among students from different fields of study

To examine the differences in value priorities among the three fields of study, a univariate analysis of variance was calculated with the 12 value types as dependent variables. There were significant differences between different fields of study in the value types work, achievement, universalism, spirituality, benevolence, tradition, conformity and security. The differences were mainly as predicted. Business students had higher regard for work values than both social scientists and technology students. Furthermore, they valued achievement more than did the other groups. Social scientists obtained higher scores in benevolence than technology students, and they had higher regard for universalism and spirituality than other groups. On the other hand, technology students valued tradition, conformity and security to a significantly higher extent than social scientists.

5.1.3 Differences in emotional empathy according to gender and the field of study

Furthermore, the differences in empathy scores according to gender and the field of study were examined. The analysis of variance revealed that as anticipated from earlier studies (e.g., Van Ornum et al. 1981) females had significantly higher empathy scores than males. Also the findings pertaining to the empathy level

according to the field of study supported the hypotheses made on this issue: social scientists obtained highest scores, business students' empathy scores were in the intermediate level, while technology students showed the lowest level of emotional empathy. However, there was a significant interaction of gender and field of study. For males, the scores were in the predicted order but contrary to the expectations, female students of technology had the highest empathy scores, followed by social science students and business students.

5.1.4 Relationship between value priorities and emotional empathy

The correlation coefficients between value priorities and emotional empathy were examined both according to gender and field of study. Females' empathy scores had only one significant - and negative - correlation with the value type achievement ($r=-.26$, $p<.05$). By contrast, males' empathy scores were significantly associated with seven value types. In accordance with the hypotheses, negative correlations were with power ($r=-.40$, $p<.01$), achievement ($r=-.33$, $p<.01$), work ($r=-.40$), and security ($r=-.27$, $p<.05$). The highest positive correlation was with universalism ($r=.40$, $p<.01$), followed by spirituality ($r=.37$, $p<.01$) and benevolence ($r=.31$, $p<.05$). Correlations between the emotional empathy score and value types according to gender are presented in Figure II.

The number of significant correlations was different in the three fields of study. For social science students emotional empathy scores correlated significantly only with tradition. Business students showed three significant negative correlations with value types achievement, self-direction and stimulation, and one positive (spirituality). The technology students showed as many as seven significant correlations, negative ones with power, work,

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achievement and security, and positive with universalism, benevolence and spirituality. The number of significant associations seems to be a function of the proportion of males in the respective groups of students.
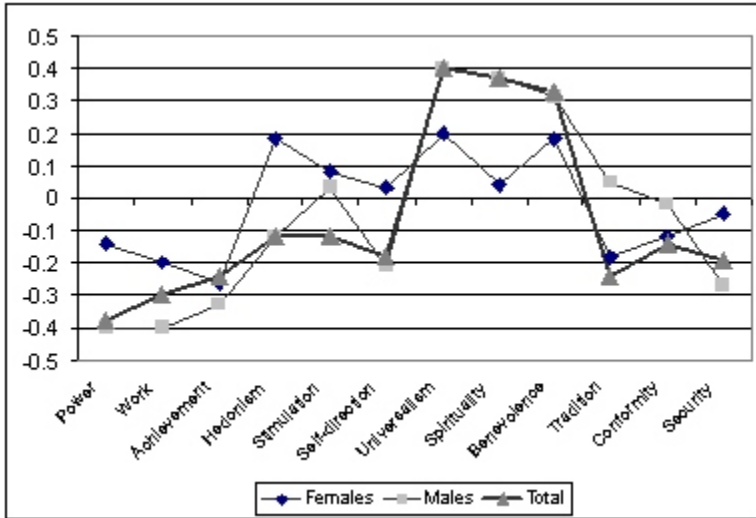

Figure II. Correlations between emotional empathy score and the value types according to gender.
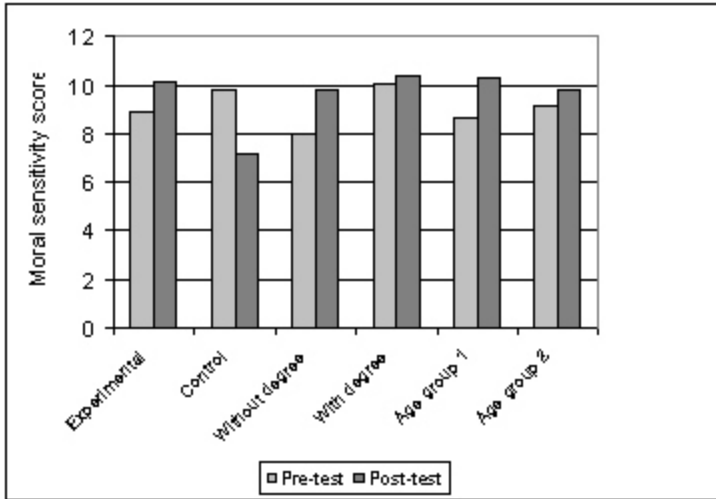
5.2 Study II: Moral sensitivity

5.2.1 The impact of professional ethics education on moral sensitivity

In order to assess the impact of the educational intervention on sensitivity to moral issues the sensitivity scores of the experimental and the control group were compared. The control group had slightly higher scores on the pretest than the experimental group, but the difference was not significant. The rise on the experimental group's mean scores from the pretest to the post-test did not reach significance, whereas there was a significant decline in the control group's moral sensitivity mean scores. A between groups analysis of covariance was conducted on change on the moral sensitivity score with the pretest score as a covariant. This analysis revealed that change on sensitivity score varied markedly between the experimental and the control group, indicating that the experimental group progressed significantly compared to the control group.

Although 22% of the respondents from the experimental group regressed more than one point on moral sensitivity, there were twice as many (46%) who had higher scores on the post-test than on the pretest. About 1/3 of the respondents remained approximately on the same level. From the control group 2/3 (4

respondents) regressed more than one point, and 1/3 (2 respondents) showed no change on the level of sensitivity.

About half of the respondents in the experimental group had a previous degree either from a university or a college. Because the respondents without a previous degree were significantly younger than the respondents with a previous degree (Ms=29.2 vs. 36.0; SDs=4.3 vs. 8.0, respectively, t(30.89)=-3.56, p<.01), two age groups were formed by median split (M=27.5; SD=2.26; range 24-31 in age group 1, and M=38, SD=6.5; range 32-55 in age group 2). For the respondents without a previous degree the moral sensitivity score increased significantly from the pretest to the post-test while for the other subgroups the was no significant change. The ANCOVA failed to reveal an interaction of education and age group. Two ANCOVAs were performed on the change on the moral sensitivity score with the pretest score as a covariant for education and age group separately. These analyses revealed that the respondents without a previous degree progressed significantly in moral sensitivity compared to the respondents with a previous degree, as did the younger respondents compared to the older ones. Means of the moral sensitivity scores in the pre- and the post-test in the experimental and the control group, and in the different subgroups of the experimental group are presented in Figure III.

Figure III. Moral sensitivity scores in the pre- and the post-test and among the subgroups of the experimental group.

5.2.2 Relationship between values and moral sensitivity

In the moral sensitivity sample females' and males' value preferences were highly similar. A significant gender difference was found only for the spiritualism value type, which females valued slightly more than males. Therefore the correlation analyses between Schwartz' value types and moral sensitivity were not conducted for both genders separately. (See details in Study II.)

By and large in line with the expectations, the analyses revealed that the total moral sensitivity score showed significant negative correlations with three value types: power (r=-.29, p<.05), hedonism (r=-.32, p<05) and stimulation (r=-.29, p<-05). It correlated positively with the universalism value type (r=.38, p<.01). Regarding the value dimensions, significant negative correlations were found with Openness to Change (r=-.29, p<.05) and Self-Enhancement (r=-.38, p<.01) and positive with Self-Transcendence (r=.32, p<.05).

5.3 Study III: Integrative complexity

5.3.1 Does the value pluralism model predict complexity of thought in everyday value conflicts?

In order to test the value pluralism model a series of hierarchical regression analyses with integrative complexity on each issue, in turn, as the dependent variable were conducted. As predictors four hypothesized determinants of integrative complexity were used. Following Tetlock et al. (1994), three of the predictors were derived from the value pluralism model: (a) the degree to which respondents gave close to equal importance ratings to the two values in conflict in a given issue (the absolute value of the difference in rating; $DVI =/V_1 - V_2/$); (b) the degree to which respondents gave high importance rating to both values in conflict in a given issue (the average of the two importance ratings; $AVI =/V_1 + V_2/$); (c) the value conflict index which assessed the interactive effect of similarity of value strength and average value

importance on how respondents thought about issues $(VCI=(/V_1+V_2/)/(/V_1-V_2/))$. In those cases where the conflicting values had the same rating (i.e DVI=0), value conflict index was formed from the average value importance (AVI) solely. The fourth predictor was the average integrative complexity of respondents' thoughts on the five other issues (ACOI). It assessed how strongly cross-issue individual differences in ways of reasoning predict integrative complexity in particular issues.

In simultaneous regression equations the average integrative complexity on other issues was a strong predictor in all the six issues (all p*s* <.001). For five issues (Issue I: helpfulness vs. success; Issue III: loyalty vs. social justice; Issue IV: respecting tradition vs. freedom; Issue V: honesty vs. true friendship; Issue VI: protecting nature vs. enjoying life) it was the only significant predictor of complexity of thought. Other predictors made significant contribution to the integrative complexity of respondents' thoughts on only one of the six issues (Issue II: obedience vs. choosing one's own goals). It was possible to explain between 27% and 38% of the total variation in integrative complexity on five of the issues. For one issue (Issue VI: protecting nature vs. enjoying life) the predictors explained only 13% of the total variance.

To scrutinize further the value pluralism model hierarchical regression analyses for each of the three conditions separately were performed, although knowing that it will reduce the predicting power of independent variables because of the reduced number of cases. The analysis revealed that in the personal condition the average complexity on other issues was the only significant predictor in every issue, and it was possible to explain between 8% and 38% of the total variation in integrative complexity. In the professional context average complexity on other issues was the most powerful predictor in all but the last issue (p*s*<.001), and the other predictors reached only moderate significance. In the last issue (Issue VI: protecting nature vs. enjoying life) the average value conflict (AVI) made significant contribution to the integrative complexity of respondents' thoughts. The predictors explained from 33% to 49% of the total variance of the complexity level. In the general condition average complexity on other issues made

significant contribution to complexity in four issues (Issue I: helpfulness vs. success; Issue III: loyalty vs. social justice; Issue IV: respecting tradition vs. freedom; Issue V: honesty vs. true friendship). For the last issue (Issue VI: protecting nature vs. enjoying life) only average value conflict (AVI) made a significant change in R^2. The predictors explained between 7% to 32% from the total variance of the complexity level.

5.3.2 The impact of issue context on the level of complexity

Because complexity scores in all six issues were highly intercorrelated I decided to combine them into a total average complexity score for further analyses. The total average complexity score ranged from 1 to 4.33 (M=2.28, SD=0.69) in the whole sample. A univariate analysis of variance was performed to test the hypothesis concerning the impact of issue context on the complexity scores. It revealed, firstly, a clear gender difference favouring females in the total complexity score. Secondly, a similar pattern was found for interaction of issue context and gender. The post hoc comparisons with Scheffe's adjustment revealed that female's scores in the professional context were significantly higher than in the general context. Males' complexity scores were approximately on the same level in every context. Moreover, females reached higher complexity levels than males both in the professional and in the personal context, whereas in the general context no gender difference was found. Figure IV shows means of the integrative complexity score as a function of gender and issue context.
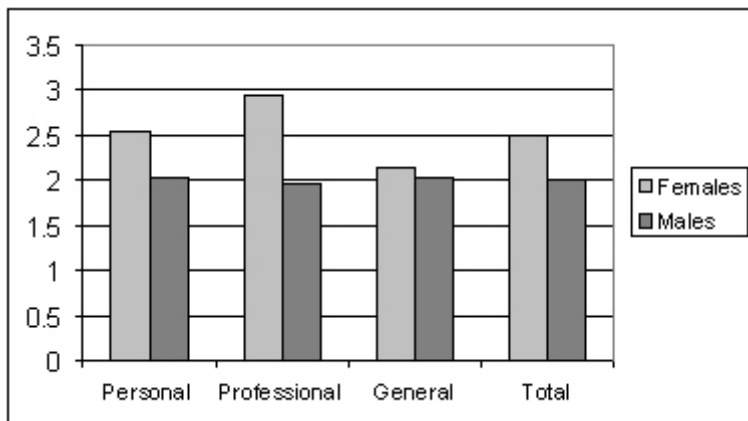
Figure IV. Means of the integrative complexity score as a function of gender and issue context.

5.3.3 Relationship between integrative complexity and value priorities

In order to explore the associations between value priorities and integrative complexity the correlation coefficients were calculated both according to total complexity score and to complexity on special issues. The value types power ($r=-.22$, $p<.05$) and hedonism ($r=-.18$, $p<.05$) had significant negative correlations with the total complexity score. For issue domains, power was related significantly to three issues, and hedonism with one. The value type of benevolence was most strongly associated with integrative complexity. It had significant positive correlations with four issues and with the total complexity score as well ($r=.31$,

p<.01). Regarding the value dimensions, contrary to expectations, Self-Transcendence, and not Openness to Change, showed a significant positive (r=.21, p<.05), and Self-Enhancement a significant negative (r=−.19, p<.05) relationship with the total complexity score.

5.3.4 Relationship between integrative complexity and emotional empathy

The total emotional empathy score was positively related to the level of integrative complexity of respondents (r=.23, p<.05). To scrutinize the relationship, the correlations were calculated for each issue as well. This revealed that emotional empathy was associated positively with those issues where the moral values (benevolence or universalism values) were placed against each other or some other value; issue I (helpfulness vs. success) (r=.21, p<.05); on issue III (loyalty vs. social justice) (r=.26, p<.01); and on issue V (honesty vs. true friendship) (r=.23, p<.01). On the other three issues the correlations were near zero.

5.4 Study IV: Moral judgment and procedural justice

5.4.1 Relationship between the level of moral judgment and the use of procedural justice rules

One of the aims of the Study IV was to clarify the relationship between procedural justice and moral reasoning. The study examined the occurrence of Leventhal's (1980) procedural justice rules in the match examples representing the stages of moral reasoning in the Colby & Kohlberg (1987) scoring manual and in moral judgments regarding hypothetical and real-life professional moral issues. Of the procedural justice rules found from the match examples of the Colby & Kohlberg manual, consistency occurred most often, followed by representativeness, accuracy of information, and bias suppression, as presented in Table VI. As mentioned earlier, ethicality was not scored from the manual.

Further, we explored the instances of procedural justice rules according to the stage levels of the matches. We split the matches into two groups, one representing stage levels lower or equal to Stage 3, the other those higher or equal to Stage 3/4. Due to the small number of the instances found in the manual, the non-parametrical Kolmogorov-Smirnov one-sample test was performed for each justice rule separately to test whether justice rules were distributed differently into these stage levels. A significant difference was found for consistency ($D=0.29$, $p<.05$) and bias suppression ($D=0.5$, $p<.05$) indicating that these justice rules occurred more often on higher stages. In addition, the overall number of instances of the justice rules was greater on the higher developmental levels of moral reasoning ($D=0.23$, $p<.01$).

Table VI. Distribution of procedural justice rules in percentages as a function of moral judgment stage in the Colby & Kohlberg (1987) match examples.

| | Stage | | |
	≥ 3	$3/4 \leq$	n
Justice Rule			
Consistency	21	79	29
Bias suppression	0	100	7
Accuracy of information	22	78	9
Correctability	0	100	1
Representativeness	57	43	14
All rules	27	73	60

As the moral judgment levels of the Study IV respondents on the hypothetical and the real-life dilemmas were significantly related to each other, a combined Weighted Average Score was calculated to represent their average moral reasoning level. To explore the association of the moral reasoning level with the use of procedural justice rules, we formed a new variable for each of the justice rules to indicate the joint use of the rule across dilemmas (0=non-users of the rule; 1=users of the rule).

Table VII. Use of procedural justice rules in percentages as a function of moral reasoning level.

	Moral reasoning level		
	Low scorers	High scorers	Total
N	20	21	41
Justice rules			
Consistency	100	90	95
Bias suppression	60	86	73
Accuracy of information	100	81	90
Correctability	30	29	29
Representativeness	55	76	66
Ethicality	70	86	78

To test the association of moral reasoning and use of the procedural justice rules we split the sample at the median of the total WAS to form two WAS groups (low-scoring respondents: M=335, SD=24, range 300 to 362; high-scoring respondents: M=404, SD=32, range 375 to 500). Table VII reports the use of each justice rule in percentages according to the moral reasoning level. Test for the differences of proportions revealed that the high-scoring respondents used bias suppression more frequently than their low-scoring counterparts, (86% vs. 60%, $z=-1.88$, $p<.05$, one-tailed). On the other hand, accuracy of information was used more often by the low-scoring respondents than the high-scoring ones (100% vs. 81%, $z=2.05$, $p<.05$, two-tailed). The overall number of justice rules used did not differ between low-scorers and high-scorers. Although they used somewhat different justice rules, the moral judgment level per se did not seem to influence the consideration of the fairness matters.

5.4.2 Differences in the use of the procedural justice rules according to the dilemma type

To investigate the use of procedural justice rules in the hypothetical and real-life dilemma, a repeated measures of analysis of variance was performed on the number of procedural justice rules used in each dilemma. This revealed a significant main effect for dilemma, indicating that on the real-life dilemma respondents used more procedural justice rules than on the hypothetical dilemma.

5.4.3 Association of value priorities with moral reasoning and fairness considerations

As additional analyses (not reported in Study IV) the relation of value priorities to moral reasoning and the use of procedural justice rules were examined. The correlation coefficients were calculated between value types and moral maturity score to test hypotheses 4c and 4d in the hypothetical and in the real-life dilemma, as well as the total WAS. For WAS, none of the correlations were significant. Further, the correlation coefficients were calculated between the value types and the use of procedural justice rules across dilemmas. All the significant correlations were negative. Power was associated with the use of consistency rule and with the overall number of justice rules used (r= -.46 and -.33, respeictively). Achievement had also a significant correlation with the use of consistency rule (r=-.40), and work was related to ethicality (r=-.32).

6 DISCUSSION

6.1 Main results

In this thesis the components of morality were assessed in the framework of James Rest's (1986) four component model of moral behaviour. The main focus was on the interaction between component III (moral motivation, measured as value preferences) and the other components. An educational intervention was used to examine progress in the ability to recognize moral issues in professional education. Further, the cognitive and affective elements of the components was investigated in terms of the between association the level of moral judgment and fairness considerations.

Study I: Values and empathy

The first noteworthy result of Study I was the location of work values in the Schwartz value model. It was expected that the five work- related values, added to the standard version of the

Schwarz Value Survey (hard-working, conscientious, orderly, punctual and planning long-term) would relate to the value types conformity and security in the Schwartz model. Work values were defined as "working with energy, care and prudence" (Verkasalo et al., submitted). Nevertheless, in the sample of university students used, work values had the highest positive correlations with power and achievement. The lowest negative correlations were with universalism, followed by spiritualism. Hence, the correlations closely follow the sinusoid curve.

The reason why university students associated work with power and achievement more strongly than was expected may be its conceptual link with economic issues - work may be seen as a prerequisite for wealth (power value) and success (achievement value) rather than as means of finding security or exercising self-discipline (conformity value). The fact that business students and technology students gave the highest priority to work is also consistent with its being associated with economic values.

With regard to gender differences, the study replicated earlier findings on females' higher empathy level. There was also considerable variation in empathy scores according to the field of study. As predicted, the social scientists obtained the highest scores in emotional empathy and the technology students the lowest. However, the gender X field-of-study interaction showed that female technology students were most empathic, followed by female social scientists, while for males the order of the means was in the predicted direction.

The associations between the two motivational factors of moral behaviour, values and empathy, were largely as predicted, except that universalism rather than benevolence showed the highest correlation with the empathy score, albeit only for males, and benevolence only the third highest, after spirituality. Self-Enhancement values (particularly power) were negatively related to the empathy score for both genders, although the associations were clearer for the male respondents. This could have been due to the restricted range of females' responses (the mean for empathy was 52.6 out of a range of -132 - 132 for females; for males, M=16.9). However, the standard deviations of the females' and males' empathy scores were not markedly different, and the ceiling effect

was not evident either. In terms of value types, the standard deviations of the females' scores were lower than those of the males' for benevolence (SDs=.19 vs. .24, respectively) and achievement (SDs=.24 vs. .30, respectively). The females had higher regard for benevolence than the males, but value type achievement was valued approximately as much by both genders. The reason why emotional empathy in males was better explainable by values than female empathy could have been to do with the traditional female gender role, which emphasizes emotionality (e.g., Eisengerg & Lennon, 1983), and the social role theory of gender differences, which suggests that social behaviour is gender-stereotypic, at least in situations in which gender roles are salient (Eagly, 1987).

The finding that these two motivating factors co-occurred, and that universalism value type in particular was significantly positively related to the empathy score, was also obtained by Kallionpää (2000) among high- school students. In sum, the pattern of correlations of value types with empathy was more or less consistent with the sinusoid curve hypothesis, and furthermore, provided additional support for locating the new value type, work, between power and achievement, and the spirituality values between universalism and benevolence.

Study II: Moral sensitivity

One aim of this thesis was to measure moral sensitivity in a professional ethics setting, and to assess the impact of professional ethics training on sensitivity to moral issues. An educational intervention was conducted for students of social psychology on two separate ethics courses. The results indicated that moral sensitivity can be measured, and that sensitivity to moral issues can be promoted by professional ethics training. In particular, students who did not have any previous degree seemed to benefit from ethics education. This finding may be explained by the lack of general life experience obtained in previous studies or work. The types of previous degree varied from business to health care, and the type of

former education was not related to the level of moral sensitivity. This corroborates previous findings (Bebeau et al., 1985; Harvan, 1989, ref. Bebeau, 1994) that technical knowledge of the profession is not related to moral sensitivity, and that former education in general might increase sensitivity to moral issues. The decline in the moral sensitivity score, which was evident especially in the case of the control group, might have been due to the generally decreased motivation to take the same test twice. Regression has also been found in other parallel studies on the development of moral sensitivity (Baab & Bebeau, 1990; Clarkeburn, 2000). In sum, the results are in line with those of previous studies indicating that ethics training involving dilemma discussion in particular may enhance moral judgment (Rest, 1986, Bebeau, 2002).

Further, the study revealed that individuals with a high regard for Self-Transcendence values (benevolence and universalism) are more inclined to recognize moral issues in situations involving moral elements. On the other hand, those with higher regard for Self-Enhancement values (power and achievement) seem to recognize moral issues less. The correlation pattern of value types with the moral sensitivity score confirms the sinusoid curve hypothesis (Schwartz 1992). The associations make sense conceptually, given that Self-Transcendence values refer to concern for other peoples' welfare, and Self-Enhancement values refer to enhancing one's own interest even at the expense of others. Moral sensitivity, involving cognitive aspects such as role-taking and affective aspects such as feelings of empathy, also pertains to concern for others. Moreover, Duckett & Ryden (1994) postulated that individuals who care for others - even for people who are quite different from them - might show high levels of moral sensitivity. This may explain the finding that universalism displayed the highest positive correlation with the moral sensitivity score. Universalism by definition, refers to the welfare of all people and of nature, while benevolence pertains to protecting the welfare of close others in everyday interaction. Consequently, Study II provides further evidence of the interaction between moral sensitivity and moral motivation, and indicates that moral values motivate people to interpret situations in more morally sensitive ways than values referring to self-interest.

Study III: Integrative complexity of thought

The first issue addressed in Study III was whether Tetlock's (1986) value pluralism model would predict complexity of thought in everyday value conflicts. The data in general did not support the value pluralism model. The analysis revealed the average complexity on other issues to be the most powerful predictor on every issue. When the contribution of the predictors to the complexity level was examined in each of the conditions separately, the average complexity on other issues also appeared to be the most powerful predictor on most of the issues in every context. However, in the professional context it was possible to explain a greater amount of the variation of complexity of thought on every issue than in the other two contexts, sometimes twice as much as in the personal context, and even four times as much as in the general context. It could be argued that the failure to confirm the value pluralism model could have been due to the inadequate statistical ranges of the conflicting values. However, investigation of the variances of these values shows that all of them ranged sufficiently from five to eight points within the value measure. Moreover, given the fact that the complexity scores among the issues were highly intercorrelated, it appears that our respondents were inclined to be fairly consistent in their level of complexity across issues. These results indicate that the predictive validity of the value pluralism model for integrative complexity could be more limited than previous studies suggest.

The other main findings pertaining to this study of integrative complexity were, firstly, that the females' level of integrative complexity was significantly higher than that of the males, and secondly, that professional issues promoted more complex thinking than in the general context. This was also true especially for females. The revised value pluralism model (Tetlock et al. 1996) suggests that social contexts in which individuals feel accountable for their decisions to audiences that enhance motives for accuracy and vigilance will lead to integratively complex thinking. The results suggest, then, that the professional context might be one of high

value conflict and accountability for females but not for males. Tetlock postulated in his 1986 article on political ideologies that the points of maximum value conflict might be different among leftists than among rightists. Moreover, in the domain of moral reasoning it has been observed that the social context in which the dilemma is set and the audience to which the responses are directed, affect the level of moral judgment (e.g., Carpendale & Krebs, 1991). This phenomenon is discussed in terms of moral orders (Harré, 1983) that prompt people to use different types of moral reasoning. Consequently, it is possible that the same determinants affect the decision-making processes in both cases.

In addition, females may be more used to or willing to deal with and discuss these kinds of value conflict situations. Pratt et al. (2000) speculated in their study on the transition to parenthood that females' higher complexity might be due to their greater experience and familiarity with parenting issues. These notions are in line with those put forward in other studies indicating that familiarity with the issue or topic may increase the level of complexity (Hunsberger & Pratt, 1994; Pancer & Hunsberg, 2000).

Rest (1986), in arguing why the four components of his model had mostly been studied in the professional context, maintained that the professionals' self-interest and justice are not as often in conflict in professional decision-making situations as they might be in other real-life dilemmas. It is plausible that, in the professional context respondents could more easily overcome their own interest than in the personal context, which might lower the complexity level in the latter. On the other hand, the general context may not have been challenging enough to encourage the respondents to find more complex solutions to the problems.

The correlation analysis revealed that the respondents who had higher regard for Self-Transcendence values tended to use more complex thinking, and that Self-Enhancement values were negatively associated with integrative complexity. Of the Self-Transcendence values, benevolence in particular was clearly related to complexity of thought. Complementing to the total average complexity score, it had significant correlations with four issues. A corresponding pattern of negative correlations for power was observed in the data. Power, which serves a motivational goal

conflicting with benevolence in the Schwartz model, and belongs to the Self-Enhancement dimension, had significant negative correlations with three issues, and with the total average complexity scores. According to Sheldon and Johnson (1993), people high in intimacy motivation and nurture need make more frequent use of other's perspectives in viewing other's experiences, whereas power motivated persons tend to retain their own perspectives on other's experiences. Although in Tetlock, Peterson and Berry's (1993) study complex persons achieved higher scores on power motivation, it is plausible that benevolence values, which refer to concern for the welfare of close others in everyday interaction (e.g., helpfulness, honesty, loyalty), motivate respondents to search for more complex modes of decision-making, and that a high regard for power would lead to more simple solutions. These results are in line with the finding that the emotional empathy score was positively related to the complexity level, especially on issues in which moral values were in conflict with each other or with some other value.

The revised version of the value pluralism model (Tetlock, 1996) suggests further that, when the conflicting values are highly important or sacred to the individual, the value conflict produces moral outrage and unidimensionality of thought rather than more integratively complex thinking. Tetlock et al. (2000) defined sacred values "as any value that a moral community implicitly or explicitly treats as possessing infinite or transcendental significance that precludes comparisons, trade-offs, or indeed any other mingling with bounded or secular values". Although values such as love and justice could be considered as sacred values (Tetlock et al. 2000), it is quite unlikely that the values used in this study would have been considered more sacred by the respondents giving higher priority to Self-Enhancement than to Self-Transcendence, or by the males rather than by the females, and thus would have reduced the level of complexity of the former. Schwartz (1992) defined values as guiding principles of people's lives, and it is assumed that they can motivate people and guide their behaviour and evaluation. For instance, there is evidence that Self-Transcendence values are related to preferences for cooperation in social dilemmas (e.g., Schwartz, 1996; Gärling, 1999). Thus, it is plausible that respondents who give high priority to Self-Transcendence values respond to conflicts in a more

flexible, complex and integrative way because their value priorities motivate them to consider different perspectives and to compare alternatives.

Study IV: Moral judgment and procedural justice

The main result concerning component 2 in Rest's model is the positive association between the use of the bias suppression rule and the level of moral judgment. This relationship was found in two studies; one assessing the incidence of procedural justice rules in the Colby & Kohlberg (1987) scoring manual, and the other analysing the use of procedural justice rules in the responses given to a hypothetical and a real-life dilemma. These two studies support the hypothesis, derived from earlier findings (Helkama & Ikonen-Varila, 1996), that of the procedural justice rules, bias suppression in particular is linked to the higher levels of moral judgment. This link makes sense theoretically. According to Leventhal (1980), the bias suppression rule involves overcoming personal self-interest and prior beliefs so that all points of view are given equal or adequate consideration, i.e, it requires role-taking. On the other hand, Carpendale (2000) concluded that, from a Piagetian perspective, moral reasoning is the process of coordinating all perspectives involved in a moral dilemma. Moreover, Rest et al. (1999) proposed that one of the crucial elements of postconventional thinking is full reciprocity, which refers to the awareness that social norms themselves might be biased in favour of some at the expense of others. Thus, the ability to perceive situations from the viewpoints of all participants also involves, conceptually, the rule of bias suppression. According to Rest (1986), the affective aspect of moral judgment could be expressed in terms of fairness concerns. Likewise, Folger (1998) implied that people may be moved by recognizing injustice even though they themselves are not directly affected. However, as Walker (2002) remarked, the affective elements of the four components have not been studied before. In

this sense, this finding is important, thus it supports the assumption that the relationship exists.

As far as overall fairness considerations were concerned, this study replicated - at least partially - previous findings that people tend to use more procedural justice rules in spontaneously reported real-life dilemmas than in hypothetical dilemmas. However, the relationship was not restricted to the higher stages of moral reasoning. This could indicate that the role of justice is more important in personally more meaningful dilemmas than in hypothetical ones. This is in line with Leventhal's (1980) proposal that individuals employ procedural justice rules selectively, and follow different rules at different times.

The hypotheses regarding the association of developmental stages of moral judgment with values were not supported by the data. The link between values and the use of procedural justice rules was also found to be weak. However, the value types power and achievement were unexpectedly negatively connected to the use of the consistency rule. Although it was assumed that consistency refers to self-interest, its negative association with power and achievement might indicate that the respondents assessed it mainly from the perspective of other people. These findings are in accordance with those of van den Bos & Lind (2001), who suggested that considerations of procedural justice rules also entail concern for others beyond the self-interest.

6.2 Methodological concerns

6.2.1 The samples

The data was collected from four different samples of university students. Additionally, one literature sample was used. The *first sample* consisted of students of the social sciences, business and technology. The questionnaire was delivered mainly in class, but it was filled in at home. The number of respondents representing each field of study varied a little, and the proportion of females in each subgroup was different, 93%, 54% and 22% in social science, business and technology, respectively. It is obvious that, for instance, the tiny group of males in the social science group (n=3) restricted the power of the results and lead to the need for caution in interpretation. Nevertheless, the gender ratios in the subsamples represent approximately the numbers of females and males in these fields of study in Finland. For example, in recent years about six percent of first-year students in social psychology at the University of Helsinki have been males.

The respondents were, on average, in their third year of study at the university (M=3, SD=2.1) Business students were the most advanced student group, the mean years of study being 3.6 and the SD 2.6. The longer time that some students had been at the university may have influenced their value priorities. The socialization impact of university education may be notable, as observed by Nevgi (1998), for instance. However, Westman (1994) and Helkama et al. (2003) have observed that students' value priorities do not change much during their university studies, and it is likely that value preferences guide their selection of the field of study before they enter university. Pascarella and Terenzini (1991)

also concluded in their review that within- college effects on social and political attitudes and values might be better explainable by the selection than the field itself.

The *second sample,* consisting of social psychology students, was more balanced in regard to the gender ratio (81% females), and the size (n=50) was adequate for the purpose of measuring moral sensitivity. Although the data was collected in class, at the beginning and the end of the ethics course, participation in the study was voluntary. The students' performance was not assessed in terms of grades, and their responses to the sensitivity task could not be attributed to theirs desire to obtain higher marks. The *control group (the third sample)* for moral sensitivity testing was more problematic. An effort was made to find a corresponding group in respect of status (at least some of the students should have already been in working-life) and age (the mean age for the experimental group was 32 years, ranging from 24 to 55). The control group comprised students of education who were on a qualitative research methods course at the Open University of the University of Helsinki. The procedure was similar to that with the experimental group, with the exception that the Schwartz Value Survey was not administered to them. Eleven students completed the survey, but only six of these took both the pre- and the post-test. The proportion of females was the same as in the experimental group (82%). The mean age in the control group was somewhat higher than in the experimental group (Ms=35 vs. 32, respectively), but the difference was not statistically significant (t(54)=-3.05, ns.). Consequently, it could be argued that the size of the control group was too small. However, the results are unambiguous, and show clearly that the experimental group progressed more in moral sensitivity than the control group.

The *fourth sample* consisted of students from various ethics classes in the University of Helsinki. The respondents were taking courses in professional ethics on a voluntary basis and were thus presumably more highly motivated to reflect upon moral problems than "ordinary" university students, who have typically served as participants in this kind of research. The respondents were also somewhat older and more advanced in their studies than those in earlier research. Thus, they formed a relatively select sample, which could have been the reason for their high moral maturity scores in

both the hypothetical dilemma (M=388, SD=61) and in the real-life dilemma (M=354, SD=47). The modal stage in the hypothetical dilemma was Stage 4, and in the real-life dilemma Stage 3/4 (albeit almost as many respondents obtained Stages 3 and 4 in the real-life dilemma). Considerably lower moral reasoning levels have been found in other studies pertaining to real-life moral decision-making. For instance, in Wark & Krebs' (1997) study, Kohlberg's dilemmas evoked Stages 3 and 3/4 and self-reported dilemmas evoked predominately Stage 3 (prosocial types of dilemma) and Stage 2/3 (antisocial dilemmas) moral judgments. Thus, the failure to replicate previous findings could also have been due to the higher-than-average motivation and maturity of the sample.

The *fifth sample* consisted of instances of procedural justice rules in the Colby & Kohlberg (1987) scoring manual. The search was restricted to matching examples (not marginal matches or non-matches, or general criterion concept definitions), because such examples represent moral reasoning that can be unambiguously assigned a certain Kohlberg stage.

6.2.2 Validity

Value measure

One basic assumption in Schwartz's theory is that values mean at least approximately the same to different people in different cultures and languages. However, as Menezes and Campos' (1997) study showed, the Schwarz Value Survey included ten single values, the meaning of which was relatively unclear, and which emerged on

a motivational type other than postulated (although the location was always at least in an adjacent value type). Some problems with value meanings also arose in this study. For example, the single value humble (modest, self-effacing) was translated into Finnish as nöyrä (vaatimaton, syrjäänvetäytyvä). Some respondents indicated that they meant the first mentioned word in the brackets and not the last, which, in fact, means unsociable.

Since the sample sizes were small, it was not possible to conduct a multidimensional scaling analysis to determine the value structure. The value types were formed from the core values as ordinary sum variables. Because of the small number of items included in the indexes for each value type, the reliabilities of some of the types were only moderate. However, considerably lower reliabilities have been found in other studies, ranging from .38 to .70 for Sagiv and Schwartz (1995), and from .41 to .78 for Spini (1997), for example. Tradition and self-direction in particular have often shown low reliabilities (e.g., Feather, 1995; Spini, 1997). However, the correlations between the value types and other variables confirm the sinusoid curve hypothesis (Schwartz, 1992). Thus, in spite of the weaknesses in the Cronbach alphas for some value types, the pattern of correlations between them and other variables suggests the reliability of the value measure.

Emotional empathy

The emotional empathy scale (QMEE) consists of a number of intercorrelated subscales: 'Susceptibility of emotional contagion'; 'Appreciation of the feelings of unfamiliar and distant others', 'Extreme emotional responsiveness'; 'Tendency to be moved by others' negative emotional experiences'; 'Sympathetic tendency' and 'Willingness to be in contact with others who have problems'. Although Dillard & Hunter (1989) claimed that Meharabian & Epstein's empathy scale was invalid due to its multidimensionality, and that it should be used only in terms of the subscales, Chlopan et al. (1985) concluded in their review that the QMEE is a well-

validated and unidimensional measure that assesses vicarious emotional arousal. This view is in accordance with Hoffman's (2000) definition of empathy, for instance, and indicates that the QMEE is suitable for measuring the emotional aspects of empathy in particular.

Integrative complexity

In order to assess the integrative complexity of thought, the respondents were presented with six issues in which two values were set against each other. In generating the value conflicts, values from the Schwartz Value Survey were selected that could be easily set in different contexts against each other, and which were both from opposite and adjacent types in the Schwartz model. In order to identify the issues that brought different combinations of values into conflict, six raters performed a value-content analysis of an initial pool of eleven questions. The raters were asked to write down which values were in conflict in each situation. For the final study, six issues were chosen for which there was highest agreement on the conflicting values.

The failure to confirm the value pluralism model could have been due to the values used in the problem-solving situations. Tetlock (1986) claimed that, because people are prone to being cognitive misers (e.g., Abelson & Levi, 1985), they might use more complex reasoning only when they consider it totally crucial, i.e. only when the values to which they give very high priority are in conflict with each other. It is possible that the values that were used were not salient enough to my respondents to activate value conflict, or to push them to apply more complex decision-making strategies. It would, therefore, be interesting to replicate the study with values that are more relevant to the respondents.

In order to investigate the impact of the context on complexity of thought, I randomly addressed to the respondents issues from one of three contexts (personal, professional, general). The considerable consistency of the complexity level across the issues corresponds

more with the trait view of integrative complexity than with the state view. It could perhaps be argued that the treatment manipulation did not work properly because the situational factors remained the same for each respondent (the survey context), and therefore it did not reveal the state characteristic of integrative complexity. Moreover, it is possible that the design offering three conditions with different dilemmas (although involving the same two values) led to the lack of differences between the issue contexts.

The mean complexity levels found in this study in different contexts (M=2.29, ranging from 1 to 3.67 in the personal; M=2.48, ranging from 1.17 to 4.33 in the professional; M=2.11, ranging from 1.17 to 3.33 in the general context), as well as the total average complexity score (M=2.28), were approximately at the same level as the integrative complexity scores found in previous studies among university students (e.g., Hunsberger et al., 1992). However, in Hunsberger et al.'s study, the integrative complexity score ranged from 2.20 to 2.45, whereas in my sample some respondents obtained the lowest possible score on every issue. It is possible be that for these respondents the presented issues were not really conflicts between values, or they were considered too abstract.

Moral sensitivity

The level of moral sensitivity was measured using a story set in a social work context, which included several moral issues. The story was ill-structured in that responses were not restricted to certain alternatives, and could be made without referring to ethical issues. The responses were spontaneous and no probing questions were used. After reading the story, the respondents were asked to single out the things that should be considered in resolving the problem. The recognition of moral issues was coded from the answers according to the theoretical definition of moral sensitivity put forward by Rest (1986), and using Bebeau, Rest & Yarmoor's (1985) moral sensitivity test for dental professionals as a model for developing the scoring system. Bebeau and her colleagues state a

preference for oral responses over written ones in measuring moral sensitivity. In their study (1985), the respondents obtained higher sensitivity scores in the oral test than in the paper and pencil test due to the fact that the written protocols were often more ambiguous than the oral ones. Bebeau et al. also stressed the fact that observing variability across individuals is crucial to the definition of moral sensitivity. The range in scores for oral response to one case was from 6 to 26 (47 points possible), and for written responses from 4 to 19. In the current study, the experimental group's sensitivity score ranged from 3 to 18 (34 points possible). The mean was 8.0 and the SD=3.34 in a slightly positively skewed distribution (median 8.0, mode 8.0, and kurtosis .52). Thus the variability in the sensitivity score was adequate, thus it is apparently possible to obtain relatively high sensitivity scores from written answers too, without reaching the ceiling.

Moreover, acquiring oral data is time-consuming and requires resources to transcribe it. The paper and pencil test is easy to administer to a large group of students at one time, and needs no other resources than time for coding. Developing the coding system for the moral sensitivity measure was a labourious task, but once the categories had been formed it was relatively easy to code the protocols. The interrater agreement between the two scorers was acceptable (83.5 %). Written responses are preferred to oral ones for studying integrative complexity because written protocols are more organised, which makes the assessment more reliable.

Nevertheless, using a single story pinpointed sensitivity to moral issues in this special context. Although the DEST has shown relatively high internal consistency - Cronbach alphas ranging from .70 to .78 in several analyses - Rest (1986) argued that moral sensitivity is, at least to some extent, affected by the special context. There is also evidence that moral reasoning and the perception of real-life moral dilemmas vary according to the dilemma type and context (e.g., Carpendale & Krebs, 1995; Wark & Krebs, 2000). Developing a measure with several (and perhaps simpler) cases would enlarge the picture of respondent ability to interpret ethical problems. However, it could be argued that the relationships between the value types and sensitivity to moral issues indicate the reliability of the measure: values that refer to concern for others

were positively associated with the moral sensitivity score, whereas Self-Enhancement values correlated negatively with the test score.

Moral judgment

Assessing the level of moral judgment from other types of dilemma than Kohlberg's standard ones could be a complicated task. Previous studies (e.g., Walker, 1988; Carpendale & Krebs, 1990; Krebs et al., 1991) have shown that trained scorers can reliably match moral judgments from a variety of dilemmas. Considerable effort was made in Study IV to ensure reliability: two Kohlberg-trained scorers checked the scorings. The interrater reliability was relatively high and good matches were found between the protocol judgments and the criterion judgments in the Colby and Kohlberg (1987) scoring manual (see Study IV for more detail). However, the fact that the respondents were not interviewed but generated the arguments in writing might have affected the validity of the measure. If they had been asked to write down in as much detail as possible their arguments concerning each dilemma, and in the instructions concerning the real-life dilemma had included probing questions, it is likely that more elaborated arguments would have been obtained from interviews.

The results reported by Carpendale & Krebs (1992; 1995) revealed that business dilemmas were largely resolved using Kohlbergian Stage 2 arguments, whereas in this study, the moral reasoning in the hypothetical business dilemma typically represented Stage 4. Whether attributable to the motivational factors just pointed out, to the context (a professional ethics course), or to differences between the American and Finnish cultures, the findings indicate that the business context per se does not necessarily exert a downward pull on the level of moral judgment.

It could, of course, be argued that the hypothetical dilemma used in this study does not present a moral conflict in the classical sense, and therefore is unsuitable for assessing moral competence. Krebs et al. (1991) postulated that the impaired-driving dilemma

they used as a non-Kohlbergian dilemma evoked for stage 2 because that was a sufficient level to justify the moral choice and a socially acceptable solution to the problem. In the present study, 37% of the respondents made the pro choice, 17% made the con choice, but nearly half of them could not choose between the alternatives in the hypothetical business dilemma. This, along with the evidence that the dilemma in question evoked Stage 4 (moral judgment stage ranging from 3 to 5), indicates that the hypothetical dilemma used represented a real moral problem.

Procedural justice

Instances of procedural justice rules were scored from the protocols of the responses to the same dilemmas as those used to assess moral judgment. Relatively few studies have assessed the spontaneous use of justice rules, and fairness concerns are more often measured on scales. An attempt was made to identify only unambiguous instances of procedural justice rules, and the obtained interrater reliability was satisfactory. Moreover, the results of these two studies are consistent, and they were in line with earlier findings.

6.3 Further study

The current study revealed some intriguing results pertaining to the relationships between the components of moral behaviour and other related constructs. At the same time, they raised several issues worth attention in future.

From Rest's (1986) point of view, empathy and moral sensitivity are overlapping constructs, although they are not identical. Moral sensitivity includes empathy because empathic processes (taking the role of the other or feeling compassion for the other) are needed before one can consider the possible consequences of one's actions for others. It would be interesting to examine the connection between empathy and it various aspects (role-taking, personal concern, personal distress as defined by Davis (1994)) and moral sensitivity. The relationship between the two may be different in different situations.

Moreover, as discussed above, the development of an instrument incorporating several dilemmas is needed, and the test-retest reliability as well as the construct validity of such a measure need to be established. Measuring moral sensitivity in everyday life situations would shed more light on this important issue. How would the emotionality of the situation affect sensitivity, for instance? There is also a need to replicate the results of the present study in order to retest the relationship between values and moral sensitivity.

Furthermore, the results of Study II show that moral sensitivity may be enhanced by educational intervention. Education in professional ethics seems to be beneficial at least to younger students with relatively little life experience. The findings support earlier implications that ethics programmes incorporating dilemma discussions are effective in promoting students' moral thought. Devising a professional ethics education programme that would promote the recognition of moral issues, role-taking and empathy skills would require a more accurate measure of moral sensitivity,

and one that would give information about the development of moral considerations.

The results obtained from Study III, indicating the lower complexity level of males compared to females, suggest that the issues or domains used in this study affect females' complexity level but not that of males'. Future studies could explore, for example, the domains and/or issues in which females show higher complexity than males, and vice versa.

The considerable consistency in complexity level across issues corresponds more with the trait view of integrative complexity than with the state view. It could perhaps be argued that the treatment manipulation did not work properly because the situational factors remained the same for each respondent (the survey context), and therefore did not reveal the state characteristic of integrative complexity. Moreover, it is possible that the design incorporating three conditions with different dilemmas (although involving the same two values) led to the lack of differences between the issue contexts. For follow-up work, it might be better to generate fully parallel dilemmas that could be altered only in terms of the protagonist.

In cases of moral judgment, the connection between cognition and affect should also be more in a focus in research. One might ask, for example, how moral emotions such as empathy and guilt co-occur with moral reasoning in hypothetical and real-life dilemmas. The relationship found between moral reasoning and the use of procedural justice rules in this study is noteworthy, although it should be borne in mind that the conclusions from our data are limited due to the small sample size. Nevertheless, the present findings suggest that the scrutiny of procedural justice rules in everyday moral problem solving is a domain deserving further attention. Moreover, the association of moral emotions with fairness considerations would be an intriguing research question.

Component III, moral motivation, was seen in this thesis as people's value preferences that serve as guiding principles in their lives. Value priorities seem to make a considerable contribution to other components. However, the nature of the relationship between value preferences and moral behaviour is still unclear. Additionally, the connections between moral sensitivity and values in other than

professional situations, and between other moral emotions, such as guilt, and value priorities, await further study.

6.4 Concluding remarks

In sum, this study has provided new evidence of complicated links and interactions among the components of Rest's (1986) model. The results are in line with Rest's (1986) assumptions and do not conflict with previous findings. The findings from Studies I to III support the pivotal role of value preferences in individuals' mental processes.

In terms of value dimensions, the Self-Transcendence (benevolence and universalism values) vs. Self-Enhancement (power and achievement values) dimension in particular was significantly linked to the other components of morality. The associations were in line with Schwartz's assumptions about the relationships between value types and corroborated the sinusoid curve hypothesis. The significant correlations between Self-Transcendence values and the other components were all positive. Consequently, high preference for morally loaded values the motivational base of which is to transcend selfish concern and promote the welfare of others, seems to be connected to tendency to perceive moral situations from wider perspectives, to use more complex and flexible decision-making strategies in moral problems, and to feel more concern for others.

On the other hand, all the significant correlations between Self-Enhancement values and the other components of morality were negative. This indicates that motivation to enhance one's personal interests is linked to lower sensitivity to moral issues, inclination to use simple problem solving strategies, and to feel less empathy for others. Of the Self-Enhancement values it was power in particular that had the highest negative correlations. This suggests that although power is usually among the least regarded value types in peoples' value hierarchy (in fact it was the second least or least

valued value type in all my samples), even a relatively low level of power preference may influence moral considerations.

Given these results and the evidence found in previous studies concerning values and moral reasoning, the failure to find any connection between values and moral judgment stages is puzzling. It could be due to the selectivity of the sample in Study IV, and to the relatively high moral judgment stages obtained in that study: all the respondents scored on Stage 3 or higher on both dilemmas. In all, the results of Studies I to III support the view, proposed by Allport (1961), Schwartz (1992) and Kristiansen & Hotte (1996) for example, that values are an important factor in attitudinal decisions.

Rohan (2000) made a distinction between personal and social value systems. As the personal value system refers to the person's own value priorities, the social value system refers to individuals' perceptions of others' value priorities. While it is plausible that people have only one personal value system, they might have several social value systems, although it is likely that the number is limited. Moreover, it is obvious that both value systems affect perception, behaviour and decision-making processes.

According to Rohan's model, one's world view has an influence on one's value priorities and vice versa. Interacting with people who have different personal value priorities may change one's beliefs about world and these changes may cause changes in value priorities. Personal value priorities may guide behaviour effortlessly, with little or no conscious awareness, or through a value system linked to ideology. Similarly, social value priorities can influence behaviour directly or via social value system linked to ideology. Given the results obtained from my studies, I would stress the importance of the social value system which students face at the university. The values that are explicitly or implicitly transmitted to students may foster or inhibit their development toward becoming ethically conscious professionals. If the social value system of the university emphasizes the Self-Transcendence values over the personal interest values, it would give a message to the students that these values are important to the competent professionals in their field. The fact that students often choose a field of study that confirms their existing values gives greater responsibility to the

university teachers: they should be aware of the social value system of their field.

Moreover, in terms of professional functioning, it is obvious that in addition to customary ethical codes professional ethics should contain reflexive ethics. Along with the rapid changes in society and technical development, professionals constantly face new, ill-structured problems which cannot be resolved using customary ethics. Thus, it is evident that the need for reflexive ethics should be taken into account in professional education. As noted above, numerous educational interventions in professional ethics have proved to have a positive impact on students' moral thought and behaviour. Given the problems that have emerged in professional conduct, sensitivity to moral aspects of decision-making situations, the ability to make just judgments by applying ethical principles, and the willingness to act according to moral values are issues that professional ethics programmes should cover. Maintaining professional ethics is essential for a professional, and organizing ethics education is a challenge for universities.

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Appendix: The story to measure moral sensitivity

Should Victoria be placed in a foster home? (Aadland, 1993)

The director of a clinic for alcoholics had contacted Karin, a social worker. It was about a woman who was supposed to go to live on her own. She had a four-year-old daughter, and the director was concerned that she would not manage to live at large. She had difficult conditions at home, with a checkered past, to put it mildly. Drinking, criminality and fighting had been rampant in her home both in childhood and at present.

Karin had promised to go and see this woman, Nina, in spite of the feeling of disgust which the fact of having become the charge of an alcoholic gave to her. Karin was responsible for the child welfare matters of the district, so the least she could do was to offer Nina help and go to see her. She did not get farther than the staircase when she felt sick. It was dark and dirty, and with a smell of an uncleaned WC in her nose Karin rang the doorbell. The woman who came to the door scented trouble. When Karin had spent some time explaining the matter to her, the door opened wide enough for her to push her way in.

Nina did not wait a moment before she started telling her what she thought of this kind of a visit. The should be some limits to suspicion. Couldn't you be allowed to try to manage on your own for just one month? And this director with her nice talk about responsibility and obligation - was this the kind of trust she was supposed to build her life on?

Before leaving, Karin saw Victoria. As she looked at the little girl, Karin found that everything wasn't all right here. She was thin and pale, with staring eyes. She had gone right toward Karin in a way to make her unsure. The hard wooden doll she had in her hand had at first looked like a striking weapon. But without further ado, Victoria had jumped right into Karin's arms, pressing the doll against her chest. She had stayed there until Karin left.

Later Karin had often seen Nina and Victoria. She had been able to gain Nina's trust and been astonished at the effort she put into trying to save her

family. Against all expectations Nina had found an evening job in a laundry. She worked hard, was never sick and had stayed away from alcohol.

As time went on, it turned out that Nina was not alone responsible for Victoria but was married to a friend of her childhood, Karl. Karl had roamed through a variety of institutions in his childhood. He never worked but lived on the money he got from petty crimes with his pals and from welfare. He was a total alcoholic, used drugs, and was violent, beating Nina on occasion. Karl did not live at home but came there to stay with his pals at irregular intervals. Then Nina had to feed and serve them.

Nina had tried to get rid of him without success. At the clinic for alcoholics she had met another man but Karl scared the new love away with violent threats. Karl never wanted to hear a word about divorce.

As a child to alcoholic parents, Nina had been forced to start working at an early age and care for the whole family. She had never received love or been allowed to be a young child. Now she applied the same model to Victoria. The girl sought contact and love from all other people except Nina, and even then in a rather destructive manner, which scared them away. Meanwhile, the relationship between Karl and Victoria was a strange one. While Karl would often turn Victoria down in a rough manner, at times he was very friendly with her. And Victoria adopted more and more some of Karl's words and looked after his things. And in addition to Karl, she started looking after Nina, too.

Nina was very afraid that she would lose Victoria.

What are the issues that should be taken in consideration when resolving this situation?