8 Moral Competence

What It Means and How Accountant Education Could Foster It

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1. Accountants as Moral Agents

The title of this section might sound strange in the ears of those who follow the media news: "A major accounting firm has been sued for almost $5.5 million after the Federal Court ruled it attempted to conceal an error that is costing a business client $660.000 annually" (Zuchetti, 2018, para. 1). The CEO of Audi, a major Germany carmaker, has been arrested and is now in custody (Spiegel Online, 2018). Reports like this are only the tip of an iceberg (Costa, 2016; Beasley, Carcello, Hermanson & Committee of Sponsoring Organizations of the Treadway Commission, 1999). Accountants were mostly involved. "A corporate scandal involves alleged or actual unethical behavior by people acting within or on behalf of a corporation. Many recent corporate collapses and scandals have involved false or inappropriate accounting of some sort" (Wikipedia-eng, 2019).

Yet we must not forget that the profession of an accountant is highly demanding, not only intellectually but also morally. Those who are never tempted to transgress the law will hardly ever do so. But dealing daily with business matters is a real moral challenge. Accountants and their superiors often have to try out new ways of business making and take risks in order to make their firm survive and prosper. This is not only an intellectual challenge but also a moral one.

Traditionally accountants' education addresses only the intellectual tasks of accountants. But in response to many business scandals, accountants' education is offering now also business ethics. The aims and methods of business ethics focus on enforcing old legal and new ethical rules for accounting by promoting respective "values, ethics and attitudes" (IFAC, 2019). However, there are hardly any programs for fostering moral competence in its graduates. Can wrongdoing be prevented only by conveying values, ethics and attitudes, or by adding more rules to the ethical code of accountants? How can the skills and competence be fostered that are needed for applying these rules in everyday decision-making and for solving the problems and conflicts that these rules may cause? For example, firms want their accountants to maximize their profits

but also to respect the legal constraints. They want to utilize all tricks for saving revenues but also want to be considered honest. Besides, accountants are confronted with their own dilemmas. They want to make a sufficient income that supports them and their families and protects them against future poverty, but also to stay out of trouble. They need to be loyal to their employers and do a good job, but also to report errors and rule breaking of their firm.

Obviously the increase of legal and ethical rules has also increased the number of possible conflicts as a simple calculation shows: if there are two rules, such as (1) maximizing the firms profit and (2) staying honest, only these two rules can come into conflict with each other and the accountants have to learn only how to handle this type of conflict. This can be hard enough. Of course, this is not the actual number of instances in which this single type of conflict occurs. But once an accountant has learned how to handle this type of conflict, he or she can handle it regardless how often it happens.

Now imagine that there is a third rule added—for example, (3) to report any error of accounting to the compliance officer. Then there can be already three types of conflicts: namely between rules 1 and 2, between rules 2 and 3 and between rules 1 and 3. In general, if 'N' designates the number of existing rules, there are [(N-1) * N] / 2 types of conflicts possible. When we apply this formula to our case, the result confirms our calculation: [(3–1) * 3] / 2 = 3 types of conflicts. You can see that the number of possible conflicts (and troubles!) increases dramatically (not only linearly) with the number of rules with which an accountant must comply. To give an example: if there are ten rules which need to be observed, the number of potential conflicts raises to [(10–1) * 10] / 2 = 45! In other words, if we teach accountants ten legal or ethical standards, they must be prepared to solve 45 different types of moral conflicts in their professional work.

This simple calculation explains why merely increasing the number of rules and enforcing them is a self-defeating strategy. New rules may help to solve certain conflicts, but at the same time they also increase the probability of conflicts. This may also explain why schools that teach business ethics find it hard to increase the moral competence of their students (see later). It may also explain why strict enforcement of compliance rules in firms often hamper the aims and operations of their firms, as Schütz and Beckmann (2019) have observed. When employees fear repercussions by the compliance officer they avoid risky decisions that their company would need in order to succeed.

Therefore, accountants' education must undergo a paradigm shift. Instead of adding more rules and trying to enforce them, it must equip accountants with the level of moral competence that they need to solve their moral dilemmas. Plato stated that "Good people do not need laws to tell them to act responsibly, while bad people will find a way around the laws" (as cited in Costa, 2016, p. 97). Hence, if they are sufficiently trained

to act responsibly, they do not need to find ways around the law. Generally, accountants bring high moral ideals to their profession; yet many lack the ability to solve moral dilemmas in an adequate way. When they feel pressure on the job, they may feel the need to find a way around the rules. Does present accountant education promote moral competence or 'does economics and business ethics wash [it] away?' (Hummel, Pfaff & Rost, 2016). Before we can address this question, we need to clarify what moral competence means and how it can be made visible through scientific methods.

2. The Meaning of Moral Competence

Moral competence must not be confused with ethical competence as "is common in ethical decision-making literature" (Pohling, Brdok, Eigenstetter, Stumpf & Strobel, 2017, p. 450). Moral competence deals with our real behavior, whereas ethical competence means the ability to reflect on moral behavior. As the famous moral philosopher Max Scheler has allegedly responded to an accusation of immoral conduct: Like a street sign, a philosopher does not necessarily go the way that he shows. This may be the reason why business schools with the strongest ethical code often are perceived by their students as having the least ethical culture (Desplaces, Melchar, Beauvais & Bosco, 2007). Moral competence is different from moral orientations, values or motivation and should be clearly distinguished from them although there is a link to be made. However, people hardly differ with regard to central moral orientations like freedom, justice, cooperation and truth. Already the Greek philosopher Socrates, who lived two and half thousand years ago, made this observation: "But if this be affirmed, then the desire of the good is common to all and one man is no better than another in that respect?" (Plato: dialogue with Meno, online Gutenberg project).[1] Surveys have confirmed his observation in modern time (Lind, 2019). Thus, moral orientations do not need to be educated and hence do not concern us here as much as the education of moral competence does.

We define *moral competence* as *the ability to solve problems and conflicts on the grounds of moral principles through thinking and discussion, instead of using force and deceit, or submitting to an authority*. Our definition is not only a rewording of Kohlberg's (1964, p. 425) definition of *moral judgment competence* as "the capacity to make decisions and judgments which are moral (i.e., based on internal principles) and to act in accordance with such judgments". It is an extension as it also includes the dimension of communication. Humans are social beings who depend not only on their own capacity to reason but also on the ability to obtain advice from and discuss problems, with others. Thus, moral reason does not mean only individual reflection but also "the eradication" of those relationships of violence which are inconspicuously embedded in the communication structures and which prevent conscious conflict resolution and consensual

conflict regulation through intrapsychic as well as personal barriers to communication "Habermas, 1976, p. 34; see also Habermas, 1990).

Solving conflicts and problems through deliberation and discourse, in turn, requires the ability *to judge arguments with regard to their shared moral principles instead merely with regard to their opinion agreement*. If participants in a debate have low moral competence, they use any argument, regardless of its moral quality, just to support their stance on a controversial issue and reject all good arguments of their opponents. Yet, if a controversy cannot be settled through the exchange of arguments, they might culminate into a fight in which each side will use deception and violence to subdue the other side. A peaceful agreement can be reached only by participants who have the ability to understand and appreciate the moral quality of their opponent's arguments and support their own cause only with morally good arguments.

3. How to Make Moral Competence Visible

If we want to study the impact of accounting education on its graduates' moral competence, we need to find a way to make this competence visible. In the past, this was only possible with so-called 'qualitative' methods like clinical interviews. But because such methods are very time-consuming and costly and because they lend themselves to subjective biases (Lind, 1989), we have developed a new kind of test, the *Moral Competence Test* (MCT), which is fully objective. It is available in forty languages and used in many research and evaluation projects (Lind, 1978; 1982, 2019).[2]

For making moral competence visible, the MCT is designed as an Experimental Questionnaire (Lind, 1982). It looks like an ordinary questionnaire but actually it is a multivariate behavioral experiment, applied to individual participants (also called a N=1 experiment), with three design- factors: (1) dilemma context, (2) supporting versus rejecting arguments and (3) six types of moral orientation.

The MCT consists of two dilemma stories representing two different dilemma contexts, followed by several questions. One story deals with a case of mercy killing ('doctor's dilemma'), the other one with a case of eavesdropping of workers by their management ('workers' dilemma'). After reading each story, the participants are asked to rate the protagonist's decision on a scale from -3 to 3 (from 'very wrong' to 'very right'). This sets the stage for the *moral task* that the participants have to cope with: they have to rate arguments supporting the protagonist's decision and arguments rejecting it, six on both sides. We know from experience as well as from systematic studies, that it takes moral competence to rate the arguments with regard to their moral quality. People with low moral competence can evaluate arguments only with regard to their opinion agreement or other non-moral criteria (Lind, 2019). In order to make this visible, all arguments are of different moral quality. All were carefully

crafted to represent one of the six types of moral orientation, which, according to Kohlberg's theory, are typical for each stage of moral development (Kohlberg, 1984). The moral quality of the altogether 24 arguments has been checked by several experts.

Because of its special design, the MCT works like an X-ray device. Like X-rays, it is a very valuable instrument for measuring moral competence and the efficacy of educational programs but will also have undesirable side effects if used improperly. It produces valid data only if it used anonymously and without time pressure.

We can literally see a person's competence after sorting the responses by type of moral orientation their arguments have rated. It manifests itself in his or her pattern of ratings. Figure 8.1 shows the response pattern of two fictitious persons, which illustrates this. The response pattern of person 'A' exhibits a very low moral competence. That person rejects all arguments disagreeing with her stance on the issue, even the good ones and accepts all argument supporting her decision, even the bad ones. In contrast, the response pattern of person 'B' exhibits a very high moral competence. That person rates the arguments clearly with regard to their moral quality without paying much attention to their opinion agreement. That is, she rejects bad arguments even though they support her stance on the issue, but accepts arguments even though they are at odds with her decision. We can imagine that people like 'B' are more likely to find a solution for a conflict between opposing courses of action or a conflict with opponents on a controversial issue than people like 'A' who cannot understand the moral quality of the arguments.

Figure 8.1 also teaches us some methodological lessons. It shows that we cannot infer moral competence, or any other trait, from a *single* test item, but that we must always look at the pattern of responses to several test items and that these test items should not merely be in repetitions ('parallel') but should be systematically varied according to the nature of the trait which we want to measure. For example, if the responses of the two persons to the Type-6 argument in favor of the protagonist's decision (encircled) are identical, they mean something different for them. Person 'A' rates this argument very high ('4'), obviously because it supports her stance, but not because it is better than the other arguments. In contrast, person 'B' rates this argument as '4', obviously because she understands and appreciates the different moral qualities of the arguments.

The second lesson that we can learn from Figure 8.1, is that *consistency* is not a trait of the measurement instrument ('reliability') but oft the participants. Moreover, it teaches us that we have to be specific what we mean by 'consistency'. The two persons in Figure 8.1 respond consistently but in completely different ways. Person 'A' consistently defends her stance on the particular issue, whereas person 'B' consistently evaluates arguments with regard to their moral quality. Without saying which kind of consistency we refer to, this term remains meaningless.
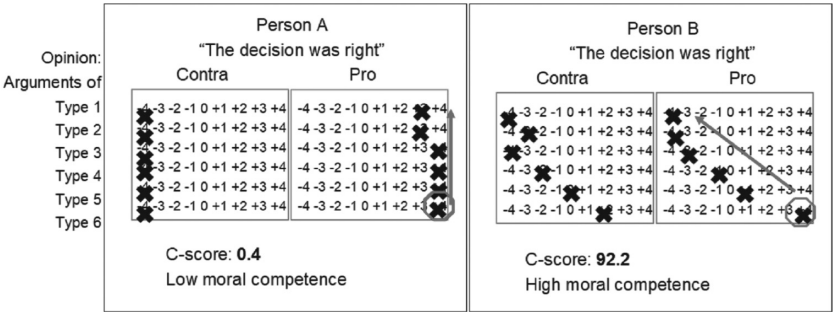
Figure 8.1 Making the Moral Competence of Two Persons Visible

Note: Different levels of moral competence are manifested in different *pattern* of judgments: "A" judges the arguments consistently with regard to their opinion-agreement. "B" judges the arguments consistently with regards to their moral quality.

Finally, Figure 8.1 proves that we can make moral competence visible through using ideas originating in experimental psychology. Donders (1868) proved through an ingenious experiment that people do not always react mechanically, as behaviorist psychologists used to think, but pause to think when they face a dilemma. His experiment laid the grounds for the methods of modern brain research. The concept of Experimental Questionnaires has been inspired by Brunswik's (1955) diacritical method. Like many psychologists, Brunswik was aware of the fact that human behavior is usually determined by more than one trait, as most test makers assume. He was the first one who had an idea how we could disentangle the traits involved in producing a certain behavior. He called it 'diacritical method', which is the same as the method of multivariate experimental design. The *Moral Competence Test* is the first application of his idea in psychological research (Lind, 1982).

The fact that a single response typically has more than meaning has important implications for the selection of methods for assessing moral competence and human traits in general. It excludes the use of all methods that are based on the idea that single items (or a sample of similar items) contain all that we need to know about a trait and therefore can be the basis of analysis. This excludes methods like item analysis ('reliability') and correlation and regression analysis because they are based on the assumption that a single response of a person has a single meaning and, therefore, we can put all people on the same item-based scale. However, our examples show also that we can compare them with respect to their pattern of responses. We only need to construct a proper index for this.

4. The Index for Moral Competence: C-Score

For analyzing the nature, relevance and education of moral competence, we can translate the visual impressions depicted in the Figure 8.1 into adequate

numbers. We do this with the help of multivariate analysis of variance (MANOVA). With this method, we can express in a number how much each design factor determines a person's responses. This number is called 'C-score', whereas 'C' stands for competence. The C-score tells us what proportion of the person's judgments is influenced by the moral quality of the arguments. It reaches from 0 (no moral competence) to 100 (maximum moral competence). As we can see in Figure 8.1, this score corresponds well with what we see. 'A', who evaluates argument only with regard to their opinion agreement, get a very low score, whereas 'B', who rates arguments with regard to their moral quality, gets a very high C- score.

The C-score is a pure measure of moral competence. It is not conflated with moral orientations like Kohlberg's Stage score. Yet the MCT provides also independent measures of the six moral orientations that are built in the test. This makes it possible to test the Piagetian hypothesis of cognitive-affective parallelism, which predicts that both aspects of moral judgment, moral competence and moral orientations, correlate highly. Indeed, they correlate almost perfectly (Lind, 2002). However, this correlation can break down when the participants have reasons to believe that the MCT is used as a high-stakes test.

The MCT is theoretically and empirically valid. It is theoretically valid because its construction has been guided by an elaborate theory and is grounded in several decades of moral psychological research. This has been possible because this research has produced resilient knowledge about the nature of moral competence, which we can use as criteria for checking the MCT's empirical validity. The MCT is also empirically valid. Like no other test, the MCT and most of its translations, have been submitted to very rigorous empirical validity tests, which use four criteria that root in moral competence theory (Lind, 2019): (1) Experimental studies show that participants cannot simulate the C-score upward (Lind, 2002). If they could, as is the case with most other tests, it would measure only a moral orientation, value or attitude. As Pohling et al. (2017, p. 466) states: "since the MCT is the only measure with an inbuilt task to assess pro- and counter- arguments and thus simulates a moral discourse, we agree . . . that the MCT . . . measures a cognitive competence aspect of moral judgment". (2) By and large, all participants prefer the six Types of moral orientations represented by the arguments in the same order as moral philosophers do. (3) These types correlate as Kohlberg predicted: the correlations between 'neighboring' types are the highest and between more 'distant' types are the lowest. (4) Finally, the MCT data conform almost perfectly Piaget's (1976) hypothesis of affective-cognitive parallelism.

Although the *a priori* probability of confirming these four criteria by chance is extremely small, much smaller than the conventional p-value of 0.05, the MCT meets all these criteria nearly perfectly (Lind, 2002, 2019). Data from validated and certified MCT versions are fully equivalent and, therefore, can be compared with one another. New tests or translations

of the MCT must meet the last three of these criteria in order to become certified as valid. Non-certified MCT versions should me mistrusted.

Some researchers think that the content (story) of the MCT should be adapted to the purpose of the study. We do not recommend this because it would make comparison of different studies almost impossible. Note that the participants' stance on the story plays no role in calculating the C- score.

However, certain dilemma stories can depress the C-score in certain participants, namely when they make them think that their answers will be judged for 'correctness' by an authority. Then, it seems, they hold back their own thinking about the dilemma. This results in low C-scores. For example, accounting students tend to get lower C-scores on an accountant dilemma than they get on the standard MCT (Kodwani & Schillinger, 2009a, 2009b; Costa, 2016, p. 125). Obviously, they feel that they are not free to say what they think but try to please the institution that has commissioned the survey. Similarly, people with dogmatic religiosity refrain from thinking about it when their religion considers it to be a sin (Bataglia & Schillinger, 2013) and soldiers refrain from thinking when they have to discuss a military dilemma story (Senger, 2010). This phenomenon of *moral segmentation* would deserve further studies. Conventionally we speak of moral segmentation when the C-scores of the two dilemma-stories differ 8 points or more.

5. The Relevance of Moral Competence for Behavior[3]

Moral competence has a strong impact on a variety of behaviors that are of high relevance for accounting professionals. This has been shown by many carefully planned experiments and correlation studies, which have used Kohlberg's qualitative *Moral Judgment Interview* or objective tests like the MCT by Lind (2019) and the DIT by Rest (1979). Most effects are not only statistically significant (which does not mean much when large samples are involved) but are mostly very strong as can be seen in the original reports. There appears to be no other human trait that has shown to be as powerful as moral competence.

The following discussion looks at characteristics of moral competence and their application in experiments.

Criminal behavior: already four decades ago, Blasi (1980) has shown in his review article, that criminal behavior is strongly associated with low moral judgment competence. Wischka (1982) reports that the inmate of a German prison who have been convicted of white collar crime, had an average C-score of only 22.2, whereas a parallel sample of non-prisons had a C-score of 39.7. Similarly, Hemmerling (2014), who has done an intervention study in a large detention center in Germany, found that its inmates had a much lower moral competence than comparable persons without a criminal record. These findings suggest that high moral competence immunizes people against criminal behavior.

Honesty: in fact, three experiments show that when participants take a test and are not supervised, those with higher moral competence rarely take advantage of this in order to cheat, whereas those with low moral competence mostly do (see summary report by Kohlberg, 1984, p. 549). This could mean that only accountants with low moral competence actually need to be supervised by compliance forces and that these forces would be superfluous if accountants would get an opportunity to develop this ability.

Keeping a contract: with a rather simple experiment, Krebs and Rosenwald (1977) demonstrated how important moral competence is for keeping contracts. They assessed their participants' moral development and then asked them to fill out and return a questionnaire afterwards by mail, purportedly for time reasons. The participants were given an envelope with return address and stamps. They explicitly agreed. But only in the group of the higher morally competent, nearly all kept the contract. In low moral competence group, the return rate was very low.

Withholding retaliation: Jacobs (1975) ran several rounds of a prisoner dilemma game with the same pairs of participants, in which one was her confidante who she instructed to frustrate the other one. While in the first rounds, all subjects punished their partners for their apparent misbehavior, those with higher moral competence corrected themselves later during the game series. One can easily see how this finding applies to accountants who feel frustrated by the peers or their superiors. Like in the game, communication is often blocked so that the actors have to rely on their judgment how to react.

Assessing *the moral competence of others*: the success of communication in a conflict situation depends much on the perception of the other person. Is this person approachable or not? Does he understand my arguments? Wasel (1994) tested the hypothesis that people with high moral competence are better able to assess the moral competence of other people. He first assessed all participants' moral competence using the MCT. Then they asked them to fill out the MCT a second time as if they thought that a colleague would fill it out, a person whom they knew through their collaboration. Indeed, participants with higher C-scores were better in simulating the responses of their colleagues to the MCT than those with lower moral competence were. Again, one can imagine many occasions when accountants' ability to rate other people's moral competence can play a role, for example, when evaluating customers, when choosing a job or when blowing the whistle.

Whistle blowing: moral competence is indeed important for moral culture in an organization. As two experiments show, people with higher moral competence are more likely to blow the whistle when they discover the breaking of a rule (Brabeck, 1984; Roberts & Koeplin, 2002).

Resisting immoral orders: moral competence seems to be even more important when accountants are asked to follow illegal orders of their superiors. As Milgram (1974) showed in his famous experiments on

obedience, many people submit to disparaging orders if they come from an authority. They obey even when they do not have to fear any consequences for not obeying. However, in his experiments not all participants obeyed. In a follow-up experiment Kohlberg (1984) showed that of the participant with high moral competence almost all stopped following these orders in the middle of the experiment, whereas those with lower moral competence all continued to obey the very end.

More positive traits: in their study of undergraduates, Pohling et al. (2017, p. 458) found more evidence that moral competence correlates positively with a number of traits, at least when these traits are self-assessed: positive traits in their study in which the correlated the moral competence: perspective tasking (0.17), emphatic concern (0.20), fantasy (0.16), openness to experience (0.18), agreeableness (0.30), straightforwardness (0.33) and tender-mindedness (0.31).

Moral competence beats motivation: in a series of experiments Mansbart (2001) demonstrated that participants with higher moral competence make difficult decisions more swiftly than those with lower moral competence. The effect of size was rather large. In contrast, various indicators of motivation showed hardly any influence on the time they needed to reach a decision.

Helping people in distress: the ability to make moral decisions appears to play a role in helping behavior, as the experiment by McNamee (1977) demonstrates. She created an emergency situation and observed how participants reacted to it. Participants with higher moral development scores showed a quick readiness to help. However, of those with a lower moral competence, only a few helped immediately. When interviewed before, nearly all participants said that they would help in such a situation, also those who did not. When asked about their actual behavior they mostly said that they were paralyzed by conflicting thoughts. Obviously, the more morally competent participants could resolve these inner conflicts swiftly.

Avoiding drugs: not being able to resolve urging conflicts over a longer time-period can become painful for others and for oneself. This can result in lack of concentration and sleep, which can in turn hamper learning and work performance. People handle such situations quite differently. Some look up a friend or a therapist. Others, for whom such aid is not available, try to solve this problem with the help of cigarettes, alcohol, hashish or other drugs. In her study of ninth-graders, Lenz (2006) found that adolescents with higher moral competence avoided such 'solutions'.

Uncomforting moral competence: given all these positive effects of high moral competence, one should expect that companies would welcome employees who exhibit it. However, in her experimental Assessment Center exercise Eigenstetter (2008, p. 205) found that personnel officers give applicants with higher moral competence worse aptitude ratings. The global ratings which applicants received correlated highly negative (r = 0.46) with their C-score. Ironically, the same personnel recruiters attested these applicants a higher quality of work (p. 170).

These and other experimental studies on the importance of moral competence for professional life and beyond, suggest that it does not take a real high moral competence to impact behavior (Lind, 2019). Already a C-score of 20.0 seems to make a big difference. People that develop their moral competence though learning experiences can improve their moral behavior. Of course, a score of C = 20.0 is not a cut-off point. Moral behavior improves even more when moral competence increases beyond this point and we should not hesitate to offer moral learning opportunities also to those who have already higher scores. But if we had to choose between the promotion of a moral elite and the education of the moral competence of everyone above 20.0, we would be well advised to do the latter.

6. The Impact of Accountants' Education on Moral Competence Development

Given the great importance of moral competence for performing well as an accountant, one should hope (1) that this profession would attract applicants with higher moral competence and (2) that accountants' education fosters moral competence of those who lack it.

As we will see, studies have produced mixed results with regard to the first hope and clearly negative results with regard to the hope that the endeavors to promote moral competence are not in vein. How morally competent are accountants? The moral competence scores of accounting students in different countries vary greatly, most likely because of the great variation of the quality of their secondary education, but apparently less because of specific selection processes. However, the data are spotty and should not be generalized unless more representative studies become available.

In several countries, the average moral competence of students is below the critical value of 20.0. Some do have a higher moral competence but a majority lacks the amount of moral competence needed to act morally. Again, we should remember that these are all statistical numbers that apply to many but not all people. Brazilian business students showed a C-score of 15.0 (Schillinger, 2006, p. 99), in Portugal certified accountants were reported to have an average C-score of 13.9 (Costa, 2016), Mexican management students showed a mean C-score between 15.0 and 16.0 (Robles, 2015), business school students in the US are reported to have an average of C = 18.0 (Desplaces et al., 2007).

The situation looks somewhat better in Swiss and German samples. In Switzerland students of economics and business education have a moral competence score of 23.0 (Hummel et al., 2016). In Germany, such students have got C-score of and C = 29.0 (Schillinger, 2006) and 28.1 (Pohling et al., 2017). Because these are average scores, in these samples there are many people whose moral competence is lower than 20.0.

These studies do not provide a sufficient basis for judging the moral competence of accounting students in these countries, nor do they tell us
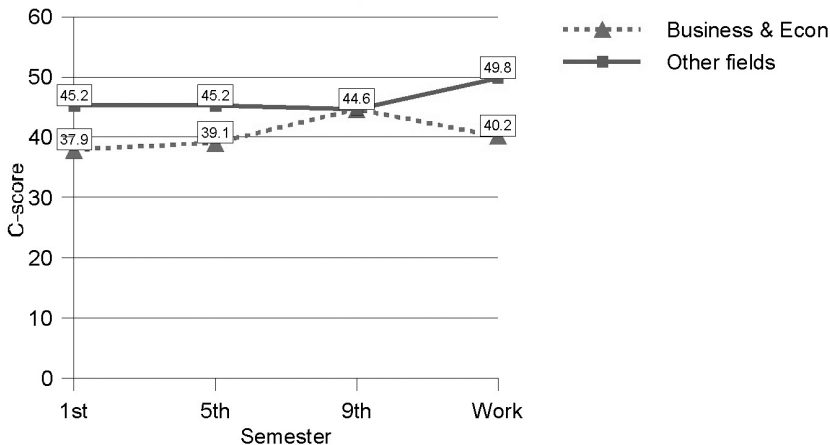
Figure 8.2 The Development of Moral Competence of Business and Economic Students, Germany 1977–85. N = 746, Core Sample

anything about the situation in the rest of the world. However, they give us some signs that there is a need of fostering this key competence for the accounting profession.

Does business and accountant education promote moral competence? The longitudinal study of our FORM Project in the 1970s and 1980s (Bargel, Markiewicz & Peisert, 1982), business and economic students showed a slight increase of their moral competence from first semester to the first year of their employment (see Figure 8.2). Interestingly, their initial moral competence was much higher (C = 37.9) than the findings reported earlier. This may suggest that the moral competence of university students has diminished in the past three to four decade. This could mean that secondary schools have become less effective in promoting moral competence. Other studies point in a similar direction but we do not have enough evidence for such a conclusion. There is too little research done in this area.

7. What Can Promote Moral Competence?

Force seems to be the least effective method to promote moral competence. The more that students feel pressure from family, peers and faculty to excel academically, the lower is their moral competence (Desplaces et al., p. 82).

Can special ethics programs promote moral competence? The *Association of Chartered Certified Accountants* (ACCA), located in the United Kingdom, commissioned a cross-sectional study to find out. ACCA had recently introduced a *Professional Ethics Module* (PEM) in their accountants' education program. The study was designed to assess students' moral competence at four levels of education. Their scores showed no increase of moral competence, but a slight decrease (Kodwani &

Schillinger, 2009a, 2009b). Moreover, this study also showed that the moderate level of moral competence declined after they entered the labor market. Because the data do not come from a longitudinal study, we cannot know whether accountants' moral competence regresses or whether accountants with higher moral competence leave this profession because, as we have seen, their moral competence is not welcome at their workplace (Eigenstetter, 2007).

Other studies showed that if ethics is integrated into the course it has a slightly positive impact on students' moral competence. The absolute effect size is about three C-points increase (Desplaces et al., 2007; Bosco, Melchar, Beauvais & Desplaces, 2010).

Better ways in which accountants' education could foster moral competence are suggested by a cross-sectional and cross-national study of the development of moral competence of students of psychology, medicine and business (Schillinger, 2006). The findings show that moral competence of those students increased during study time whose learning environment was favorable in the sense that it provided them with sufficient opportunities to practice and develop their moral competence. The moral competence of students whose learning environment was 'unfavorable' decreased dramatically. The absolute effect size is 13.5—points [= (27–25.3)—(23.6–11.8)] (see Figure 8.3).

Both approaches seem to work quite well. But both afford a rather large input of time. The effects were produced through four years of study. We
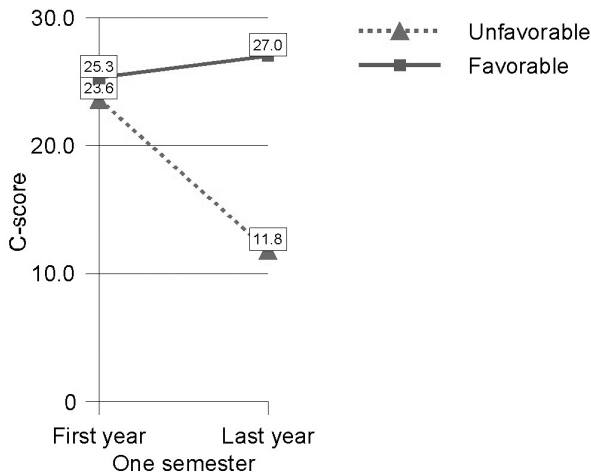
Figure 8.3 Change of Moral Competence of University Students (Business, Psychology, Medicine) Over Four Years as a Function of Their Learning Environment; Absolute Effect Size = 13.5 C-points [(27.0–25.3)–(11.8–23.6)]

Source: Schillinger, 2006, Table 5.1, p. 90

should keep this in mind when we compare it with other effects that were achieved in a shorter time, like the method to which I will now turn.

8. A Method for Fostering Moral Competence Efficiently: The KMDD

As we have seen, teaching legal and ethical rules to accountants is very important but it is does not improve students' moral competence. All studies have shown that moral competence does not increase when students are taking business ethics courses. Some studies show that the moral competence of students who took ethics courses or attended course in which ethics was taught, was slightly higher than the moral competence of the other students. However, this difference may have been the effect of self-selection: students who feel more comfortable dealing with ethical standards are more likely to choose courses that expose themselves to these standards. Therefore, business ethics courses would probably attract more students and produce better results if students would be prepared for them through a training of their moral competence.

Teaching only legal and ethical rules without moral competence is unlikely to prevent wrongdoing Knowing rules does not guarantee that people behave accordingly. When they feel overburdened by them or do not know how to solve the conflicts that come up when they try to follow them, they will try to find ways around them.

Many decades of moral psychological research and educational practice have taught us that people's moral competence develops best when they can apply it (Kohlberg, 1984; Lind, 2019). As in sports, we can train people's moral competence best when we provide a challenging and supporting learning environment, that is, opportunities for responsibility-taking and for guided reflection (Schillinger, 2006).

Such training can be effectively done with the *Konstanz Method of Dilemma Discussion* (KMDD).® The KMDD is in use in many institutions of education in many countries for more than twenty years (Lind, 2002; Hemmerling, 2014; Reinicke, 2017). The rationale behind the KMDD and how it works is described in Lind (2019).[4]

Like a theater play, a KMDD session is set up in nine acts: (I) The teacher opens the session with presenting a story of a protagonist (P) who has to make a difficult decision. His (or her) decision is not intellectually difficult but morally; (II) The participants are asked whether they can see P's moral dilemma and which thoughts might crossed P's mind before he or she made the decision. They get time to think this over individually; (III) Then the teacher asks them to talk about this in the whole group: did the protagonist really have a dilemma? What makes it a dilemma? What thoughts might cross his or her mind? (IV) The teacher lets the participants vote on P's decision: was it right or wrong? (V) On the basis of their votes they are divided into two groups; before they discuss they get time to prepare for the discussion in small groups; (VI) The teacher instructs

them to convince their opponents that their vote was wrong. The participants must obey only two rules: (1) they are free to anything can be said, but must not qualify any people; (2) The right to speak will be granted by the opponent who spoke last. The teacher only supervises these two rules; (VII) After the discussion they are asked to recall the arguments of their opponents and nominate their best argument for a fictitious prize; (VIII) They are asked to judge the protagonist's decision a second time. (IX) Finally, the teacher asks the participants to evaluate the KMDD session: was it fun? Did they learn something from it?

Several experimentally designed intervention studies have shown that the KMDD is not only highly effective but also very efficient. A single KMDD session of ninety minutes can produce an increase of moral competence between five and ten C-points. Moreover, teachers report that after a KMDD session, students engage more actively in their courses and learn better in all subject areas. It seems that students with a higher moral competence, who can better free their minds from the burden of moral problems and conflicts, have more capacity for learning the academic matter and the ethical rules of their profession. It could also be that students who have a moral cause can appreciate more the value of learning.

Triggered by the teachers' reports I integrated the KMDD into most of my teaching, not only into my moral competence courses during my active time as a university teacher. In most courses, I offered one KMDD session at the beginning of the semester. Aside from this, in my lectures, I adhered to the traditional format. However, I changed the didactics of my seminars from the traditional paper-presentation format to a KMDD-style workshop format. I evaluated the efficacy of this reform of my teaching over the period of eight years, involving more than 3,000 students (Lind, 2015). I tested all students' moral competence before and after each lecture and seminar.

The findings show that this didactical innovation was very effective. Within only a semester, the mean moral competence of the participants of my KMDD-enriched courses increased much more than it would in many years of good education. Remember that bad education does not foster moral competence at all or makes it even regress. The gross effect size was 13.1 C-points. KMDD-style teaching is even more effective than *favorable learning environments*, although their effect size looks similar (13.5; see Figure 8.3). However, it takes four years to produce a similar effect. In other words, the KMDD is four times as *efficient* as the provision of a favorable learning environment.

The KMDD produces high effects with little costs of time and money. But these effects do not come for free because they require a thorough training and certification of the KMDD Teachers. Studies show that untrained teachers do not produce any gains of moral competence in their students even when they offer several KMDD sessions in a row (Lind, 2019). Therefore, we would need centers for moral competence education that offer KMDD Teacher training and certification.

9. Conclusion

This chapter presents evidence that moral competence is real: it manifests itself in the pattern of people's responses to carefully designed measurement instruments. It has also been shown that moral competence has a real impact on many kinds of human behavior that are essential for the accounting profession and, therefore, should be considered a key competence. In spite of this fact, accountants' education seems to undertake no efforts to foster moral competence. Teaching conveying legal and ethical rules has no impact on students' moral competence. The studies reviewed in this chapter clearly show: students in this field suffer from a lack of moral competence when they enter university and show the same lack when they leave.

On the base of this finding, it is strongly recommended that accountant education is supplemented with teaching modules that foster moral competence. This can be done without any changes of the curriculum because modules like the KMDD use up only ninety minutes. These modules could be offered at the beginning of each semester. However, one should not offer them too often. Students could get weary of them. Moreover, they will have diminishing returns.

Presently, any efforts in this direction are constrained by the lack of trained and certified KMDD teachers. The improvement of accountants' education would require centers of moral competence education that education KMDD Teachers and promote research in this field.

Firms could also foster their accountants' moral competence. They could make their learning environment more favorable:

> If business organizations offer their employees possibilities and requirements for participatory, democratic, decision-making then, because such participation has an educative influence, the workers experience political efficacy. In the long run, they will transfer their readiness to bear responsibility and to act democratically to the larger society in which they demonstrate political engagement as active citizens.
>
> (Weber & Unterrainer, 2013, p. 249; see also Weber, Thoma, Ostendorf & Chisholm, 2012)

Firms could also amplify the efficacy of these measures by offering KMDD sessions, directed by trained KMDD teachers, once or twice a year.

Notes

1. Retrieved March 9th, 2020, from www.gutenberg.org/files/1643/1643-h/1643-h.htm
2. The old name of the MCT is *Moral Judgment Test* (MJT), which we have renamed in order to avoid confusion with tests that focus on ethical judgment competence.

3. In the following review of empirical findings, I report only numbers of relative effect size (correlations r) and numbers of absolute effect size (mean C-scores). I leave it to the reader to look up the results of statistical significance tests. Note that statistical significance does not tell us whether the findings are meaningful, but only whether the researcher has drawn a large enough sample to get an effect, as tiny as it may be: "There is no good excuse for saying that a statistically significant result is significant because this language erroneously suggests to many readers that the result is automatically large, important, and substantial" (Carver, 1993, p. 288; see also Meehl, 1978).
4. More publications can be found in the list of references and in the internet (www.uni-konstanz.de/ag- moral/home-e.htm).

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Figure 8.4 - Change of moral competence of university students (education, psychology) during one semester as a function of didactic method; N = 3102; absolute effect size = 13.1 C-points [(31.6 – 31.0) – (46.7 – 33.0)] (own graphics adapted from Lind, 2015)