MORAL DEVELOPMENT AND SPEEDING

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Context

Traffic is defined as the “joining of people and vehicle displacement on public roads, within a conventional system of laws, that aim at assuring the integrity of its participants.”

Traffic accidents occur in the whole world, but in our country this reality is even more alarming, because according to MARÍN & QUEIROZ (2000), traffic in Brazil is one of the worst and more dangerous in the world, being noted for one accident for each 410 circulating vehicles; as a comparison, in Sweden this number is one accident for each 21,400 circulating vehicles. According to DENATRAN (2002), there are 7.58 registered accidents involving victims for each 1,000 circulating vehicles. Traffic accidents cause many deaths and physical injuries, besides being very costly due to hospitalization. Accident victims are reportedly the second cause of death of Brazilian people in general, and the first one among individuals between 5 and 39 years of age (ANDRADE et al. 2003). In Brazil, the 1994 mortality rate by traffic accident was of 18.9 (for each hundred thousand inhabitants), being greater to the one in the USA (18.4), in France (16.5), and in Argentina (9.1), among others (MARÍN & QUEIROZ, 2000).

The level of expense created from traffic accidents to the countries of intermediate development levels represents about 1% of the internal national product. In the countries considered to be in the process of development, in spite of the concerns generated by the traffic accidents, it is not possible to establish programs or politics that aim at diminishing the mortality rate. The authors MARÍN & QUEIROZ (2000), emphasize that, “the great focus of the government attention should be the traffic in the cities, because two thirds of the traffic accidents that cause injury take place in urban areas.”

At least 80% of the accidents are due to human factors. “Every traffic supposes the displacement of people and vehicles and every displacement happens through behaviors. Traffic is a joining of displacement-behavior within a system of law. It took a long time until psychologists found out that this behavior can be and must be scientifically studied, even more because it has revealed itself as one of the most dangerous behaviors.” (ROZESTRATEN 1988, p. 9). ROZESTRATEN (1988) enumerates three categories of human factors of accident order: 1) the ones associated with the basic processes of information receiving, information processing, decision making, reaction, and feedback; 2) the ones associated to personality, including accident tendency, social disorder, personal
disorder, perceptive style, and the use of the vehicle to secondary aims); and 3) temporary factors such as tiredness, drugs, and alcohol. One of the important factors is the drivers’ moral development level.

The driver's behavior is the main factor responsible for traffic accidents, when it refers to the observation of traffic signs, speed and decisions made at the moment he passes another car or crosses a road. MARÍN & QUEIROZ (2000), conclude that “it is necessary to have a better knowledge of the cultures and the local life conditions so that the drivers attitudes can be understood, using this knowledge in the capacity of rehabilitation and educational programs that promote more appropriate behavior.”

The research conducted by THIELEN (2002) confirms the speeding behavior with two groups of drivers: one with tickets and the other one without them. The author presents data which reveals that the behavior of the drivers is decided through the driver's perception of the relationship established among the several factors involved with traffic activity, which includes individual, group or social order. One of these perspectives of analysis can be based on the moral development level of the individual.

The idiosyncratic moral development study can help out in the search for an explanation to the collective behavior. The disrespect to the traffic law has several causes, yet pointed in literature. One of the possible causes can be related to mortality.

The moral development level of an individual has influence over the given judgment in face of several situations. Different factors are considered, and for each stage of moral development there is a way to judge a determinate action or choose a determinate way to act at a specific context. When one analyzes a subject judgment in face of determinate situations, he can find some clues about the moral development stage he has reached. KOHLBERG (1981) defines three moral development stages, the first one is called Pre-Conventional Level, the next is called Conventional Level, and the last one is the Post-Conventional Level.

The theory developed by Lawrence Kohlberg about moral development is accepted by several theorists and questioned by many others, mainly in what it refers to the universality and invariance of the moral development (BIAGGIO, 1999, BERNARDES & KOLLER, 1997, KOLLER & HAITID 1994). In this study the scale developed by Kohlberg (1981) is used, based on Piaget's (1932) studies that details the characteristics of each stage, making it possible to identify the stage in which the interviewed drivers are.

When analyzing the answers of the group of offending drivers for speeding to the questions related to traffic, it is possible to identify the driver's level of moral development, verifying the relationship that exists between the level of moral development and the offending behavior in traffic. In a way, it becomes possible to generate a basis for further studies in an effort to establish how the drivers’ moral development stage can influence his driving behavior.

The confirmation of the correlation between the moral development level and traffic behavior can provide subsidies to develop programs that faces the drivers’ individual morality question, so as to promote progress in the morality rate, making possible more harmonic relations in traffic, through proposals on the formation level, or drivers recycling, or even on the promotion and development of a safe behavior level in a larger sense.

This study searched to verify the level of the drivers’ moral development of Curitiba region, so as to understand if this variable has any influence in the drivers’ behavior.
Morality

Morality is an ancient concern, present since the Greek philosophers, like Socrates, Plato and Aristotle, passing through modern philosophers like Voltaire, Montesquieu, Rousseau and Kant, getting to Sociology through de Hegel, Max, Weber and Durkhein (ARAÚJO, 1999, FREITAG, 1992). In this area, Psychology has an important contribution. Morality was carefully studied by two authors, Piaget e Kohlberg, and the present study will be based on them.

PIAGET (1932) searched for an answer to explain how, beginning with the amoral world of a small child, it is possible for him to grow into manhood and act ethically. In an effort to do this, he studied the development of morality and justice. For Piaget the morality essence lays on the respect the individual has to norms. Therefore, to understand how the moral development happens, and consequently the internalization of rules, Piaget used a game as a way of study. The study rules of the game led him to the hypothesis that there are two kinds of respect, and consequently, two morals: the obligation or heteronomy and the cooperation or autonomy. The first one is formed through unconditional respect to the rules, the second one is linked to the conscience and social attitudes of the time. The cooperation has affectionate and reciprocal characteristics. The more rational notion of morality, that seems to result from cooperation, is the notion of justice. This is a type of condition law of balance of the social relationships, and so it becomes clearer and more autonomous while the solidarity among children grow.

Lawrence Kohlberg furthered Piaget studies at such a point that many authors give Kohlberg the credit for the moral psychogenesis theory. According to FREITAG (1997, P.192) “Kohlberg confirmed and consolidated the parallelism thesis between logic and moral, the stages theory and the universality of cognitive and moral processes (…)”

The theory developed by Kohlberg is different from the one developed by Piaget, and from many other realized studies about moral development, once that it believes in the universality of moral values. For Kohlberg, different from many other psychologists who believe that moral values development happens through the internalization of cultural values, ethical principles are different from rules and beliefs that are culturally developed.

Besides being universal, the sequence of stages is hierarchical and invariant. “For Kohlberg, (...) the sequence of stages through which the person goes is invariant, universal, and in other words, all the people from all cultures go through the same sequence of stages, in the same order, though not all of them reach the higher stages” (BIAGGIO et al. 1999). Kohlberg admitted that individuals could show reasoning of stages next to theirs, but they wouldn't use or have access to reasoning from two or more stages higher than their dominant stage (BERNARDES & KOLLER, 1997). “Typically, as children develop, they are partially in the main stage (about 50 percent of the ideas), partially in the stage they are going to and partially in the stage they have just left behind” (KOHLBERG 1971, p. 122).

Kohlberg appoints the three moral development levels, subdivided into six stages (BIAGGIO, 1981 and 1997, FREITAG, 1992, KOHLBERG, 1971, KOHLBERG, 1981), which are summarized in the sequence.
PRE-CONVENTIONAL LEVEL

Stage 1 - The Orientation to obedience and punishment

It is considered correct to obey the laws, not because you are concerned about other people, but because you want to avoid punishment or physical harm, the reason for acting right is to avoid punishment or the authorities' power.

Physical consequences that come from the action determine its moral judgment, if an action is punished it is considered wrong, if it is praised, it is considered right. The action is motivated by its direct consequences to the author of the action.

Stage 2 - Individualism and Exchange

An action has the purpose of obtaining some gain, through fair exchanges; each one must search their own interest.

An action is considered morally right if its result brings satisfaction to the author or, rarely, to another person. There is no reciprocity in terms of loyalty, thankfulness or justice, but in terms of an “eye for an eye” or “one hand washes the other.”

CONVENTIONAL LEVEL

Stage 3 - Good Interpersonal Relationships

The right thing to do is to play a good role, to be concerned about other people and their feelings, to act in a way it is expected by the others, to accomplish your paper being “good”, showing some consideration for other people.

Action is motivated by external approval, one searches to play the good boy role. There is a tendency to believe that it is fair that poor people deserve more.

Stage 4 - Maintaining the Social Order

One must do its social paper, maintaining the good run of the society through the obedience to the law. One believes that if everybody submits to the law, the social system will be preserved.

There is a great respect for the laws. An action is immoral if it goes against the society norms. These norms are not questioned and the subject just submits himself to them.

POST-CONVENTIONAL LEVEL

Stage 5 - Social Contract and Individual Rights

It is considered correct to maintain the basic rights, values and legal contracts, even when they are in conflict with the society rules or laws. One must be aware that most of the rules and values are related to the group itself, although some values are universal and must be kept independently from the majority opinion, like for example, freedom and life.

At this stage the individual is capable of questioning the law, noticing that there can be mistakes, and try to correct them democratically, or through legal processes.
Stage 6 - Universal Principles

Action is motivated by the individual’s internal conviction, based on principles like justice, reciprocity and equality of human rights. Laws are considered fair because they are based on these principles, when the law goes against the universal ethical principles, the law must be ignored and the ethical principle followed.

This is the morality of the martyrs, the revolutionaries and of civil disobedience. The individual keeps himself loyal to his principles, without conforming himself to the established power and authority.

In the pre-conventional level, individuals haven’t yet internalized the moral principles and the consequence acquires a greater importance, configuring itself as a motivation for the act. The conventional level is characterized by the internalization of the acts and are motivated by the search for the partners’ acceptance for the respect to the established order and the welfare of the group. The post-conventional level can be reached by any individual, however just 5 percent of adults reach it, generally after 20 or 25 years of age (BIAGGIO, 1997; BIAGGIO, et al. 1999, LOOS, FERREIRA & VASCONCELOS, 1999). Such a level occurs when the individual becomes able to notice that some laws are morally wrong and seek to change them, transcending this way, the level that many authors appoint as the final point of moral development, which is the internalization of the societal norms and values (BIAGGIO, 1997).

Moral reasoning is a dynamic skill, which is expressed on the verbal excuses given by individuals in answer to a dilemma. Kohlberg´s dilemmas require extreme choices between life vs. dead, authority vs. contract, and conscience vs. punishment questions, in which the individual must decide between breaking the law or not. It involves a choice between the needs of other people and violation of a norm, what determines a serious dispute between the high price of helping and the doubtful gain to be punished for this transgression. It also involves moral decisions of individuals who closely related. Kohlberg´s codification system takes into account verbalizations related to the stages and it makes an attempt to determine the moral reasoning level the individual uses with some consistency. The stages defined by Kohlberg reflect ways of reasoning, and not moral content. That way a person can be classified in any stage independent from the dilemma’s answer, with the argument being given that the answer determins the classification (BERNARDES & KOLLER, 1997, BIAGGIO 1997).

Kohlberg highlights the universality of moral judgment, without favoring the individual differences. The author considers that morality “will be, in fact, universal to all the humanity, if the socio-moral development conditions were ideal for all the people in all cultures” (KOHLBERG 1971, quoted by BERNARDES & KOLLER 1997). BERNARDES & KOLLER (1997) report that in Kohlberg’s point of view, “individuals that show low or moderate level of logical or cognitive functioning, frequently due to their young age and incomplete development, are not able to understand or use higher moral judgment levels.

Studies realized in Brazil (BIAGGIO 1988, BIAGGIO et al. 1994a, BIAGGIO et al. 1994b), confirm that the predominant moral development stages among teenagers between 14 and 18 years of age are stages 3 and 4 (conventional level). Many teenagers, because of their concern about social and group acceptance, internalize the group moral values, aiming at avoiding disapproval, and demonstrating in this way that they are at level 3. However, teenagers who are reaching adulthood predominantly show characteristics of level 4.
DIAS, (1999, p. 461) emphasizes that “the moral development obeys a progressive and invariant sequence, whose promotional factor of change, from a lower stage to another qualitatively higher, is the cognitive conflict.” KOHLBERG & TURIEL (1987) quoted by BIAGGIO (1981), studied ways to increase the individual's morality level. The increase happens through an unbalance of the present stage. Through discussions about moral dilemmas, a facilitator proposes and makes clear the arguments that are in the medium level of the group, and questions the ones that are under this stage. When the group comes to understand the arguments, the facilitator starts to make clear ideas of the higher level, and the lower level is questioned, making it possible for the group to show the reasoning of higher stages. The debates based on the dilemmas allow a cognitive conflict which can lead to the maturing of the moral reasoning. The cognitive conflict is a concept similar to the equilibrium in Piaget (Inhelder & Piaget, 1958). People exhibit discomfort when they are faced with more mature opinions than their own. “This conflict generates maturing and change of the opinions toward higher stages of moral and cognitive development” (BIAGGIO, 1999).

**Methodology**

Drivers that got more than nine tickets for speeding were interviewed. Four questions presented moral development level indicators: a) What is speeding?; b) What is the significance of having more than nine tickets for speeding?; c) Was there any behavioral change? Which ones?; d) Which factors lead to your speeding?

Among the 80 answers found, 49 were selected for analysis; the other ones could not be used to moral development analysis.

The framing of the moral development stages and the categorization of the answers were made this way:

**PRE-CONVENTIONAL LEVEL**

**Stage 1 - The Orientation to obedience and punishment**

**Kind of answers** - answers that refer to supervision (radar), or other kind of punishment, as a controlling agent of the behavior. **Example:** I didn’t know there was a radar there.

**Stage 2 - Individualism and Exchange**

**Kind of answers** - answers that justify the act because it has caused some pleasure or goodness for the author. **Example:** I speed to get home quickly. (Examples were not found among the analyzed answers)

**CONVENTIONAL LEVEL**

**Stage 3 - Good Interpersonal Relationships**

**Kind of answers** - answers that refer to social approval, in which one talks about what other people think of committing offenses or being fined. **Example:** If you drive too slowly they stick together and honk. You must drive fast due to the pressing behind you.
Stage 4 - Maintaining the Social Order

**Kind of answers** - answers that refer to the law as a behavior control, independent from the presence of radars or any other kind or supervision. **Example:** If the speed limit is 60 and you are going 65, it’s already excessive speed.

**POST-CONVENTIONAL LEVEL**

Stage 5 - Social Contract and Individual Rights

**Kind of answers** - answers that question if the law is correct and looks out for everybody’s welfare, without using possible legal errors as an “excuse” for offensive driving behavior. **Example:** I try to drive in a way that doesn’t disturb the good flow of traffic. (Examples were not found among the analyzed answers.)

Stage 6 - Universal Principles

**Kind of answers** - answers that are placed against the present law, show concerns about the general welfare, about a good flow of traffic, and its own safety or that of others. **Example:** “From a specific limit, in any circumstance, it is considered speeding. Depending on the conditions of balance, health and expertness, 30 km/h can be considered speeding. On one hand, determined by the individual and local conditions, and on the other hand, by the speed itself. Why would you drive in the city at 100 or 120? One must relegate fast speeds to open roads. At Flamengo Filling, for instance, if you drive at 60, it’s if your car had stopped!”

The identification of the level of the drivers’ morality was a complex task, since it was not possible to define a pattern for each driver. The classification was made by analyzing the answers, not by interviewing the subjects. Many of the answers didn’t allow for any classification, some drivers just had one of their answers classified, while yet others showed characteristics of different stages for each answer, and a few presented a consistent pattern.

**Results and discussion**

Eighty answers were analyzed, among which 49 gave some clues pertaining to the stage of the driver. There were 37 answers framed for stage 1 (75,51%), and 8 answers framed for stage 4 (16,32%), two answers framed for stage 4 and 5 (4, 08%), one answer framed for stage 3 (2,04%), and one answer framed for stage 6 (2,04%). Stages 2 and 5 did not appear in any of the answers.

It was noticed that in this sample, composed of 20 drivers with more than nine tickets each for speeding, that the predominant moral development stage, according to Kohlberg’s scale, was stage 1.

The main answers that made it possible to be framed at stage 1 of moral development referred to the presence of radar as a behavior-controlling agent. Several examples of these references were found.

When analyzing the question, “You have more than nine tickets for speeding. What does it mean to you?”, we found these answers:

*A disaster. Lack of attention. I didn’t realize there was a radar there.*
I’m not yet used to radars.

Making use of KOHLBERG’S (1981) theory, the stage 1 of moral development is characterized by the concern about the punishment of a behavior. The behavior is considered inadequate if it brings harmful results to the author. This concern was identified in the analyzed answers, showing that the drivers’ answers were based on a conviction that speeding over the limits fixed by competent institutions is harmful when this behavior is caught and generates a punishment, that being the ticket. The many answers suggest that if there was no supervision there wouldn’t be a reason to obey the law.

Stage 1 joining stage 2, which wasn’t found at any of the analyzed answers, composes the Pre Conventional Level. This level can be compared to the first phase of the moral development studied by PIAGET (1932), characterized by egocentrism, and in the game it appears through the lack of interaction. The child plays alone among other children, he is at the same place, but does not relate to the other children. Likewise, the driver is at the first stage of moral development. He drives among other cars, but he doesn’t maintain a relationship with them, is not concerned with established norms of conduct that promote good relationships, and is not concerned with the collective good of society. The same thing does the driver at the first moral development stage, he drives among other cars, but does not establish a relation with them, he is not worried about accomplishing the law which promote good relation to everybody, he is not worried with collectiveness. He thinks of himself as unique, as if the radar was in that place because he didn’t know, or because it will make him diminish the speed when driving there. He does not notice that law seeks to organize traffic, making it possible that everybody, when doing their part, makes it easier for the others to make their travel in safety.

A person that is concerned about relationships and about the favorable flow of traffic, a person that is conscious of traffic as a collective reality and realizes that when one is driving he must think about the other drivers, pedestrians, cyclists and motorcyclists that pass by him, will be at the Post Conventional level named by Kohlberg. This is the level in which the individual is beyond his egocentric concerns and even social approval. This is the level in which the individual acts motivated by the search for the overall welfare. This level is characterized by the stages 5 and 6, and is more difficult to be reached. Among the analyzed drivers we found one that made it possible to notice this concern when he answered the question, “What is speeding?” saying, “Going faster than the specific limit, in any circumstance, is considered speeding. Depending on the conditions of balance, health and expertise, 30 km/h can be considered speeding. On one hand, it’s determined by the individual and local conditions, and on the other hand, by the speed itself. Why would you drive in the city at 100 or 120? One must relegate fast speeds to open roads. . .

At Flamengo Filling, for instance, if you drive at 60, it’s if your car had stopped!”

The answer seems to indicate an overall concern, not with the possibility of being fined or the necessity of strictly obeying the law, but from a concern about discovering which speed limit would makes it possible to avoid problems in traffic.

The intermediate level, named by the Kohlberg Conventional Level is the one that is most generally found in relationships. Composed by stages 3 and 4, it is characterized by the
insertion of the individual into society. This is the level of social relations, in which behaviors are emitted according to the present social order, the laws are accomplished, and the norms are considered. Egocentrism does not characterize itself, but there isn’t maturity yet to go beyond what is socially determined to give judgments beyond the law, as it is possible at the Post Conventional Level.

Stage 4, which belongs to the Conventional Level, was the level most often found after the stage 1, Pre Conventional Level. Stage 4 is characterized by the obedience to law. When we analyzed the question, “What is speeding?,” we found some answers that made it possible to identify the fourth stage of moral development:

Beyond what is established. On some roads it is 60 - if you are over that it is speeding.

If the speed limit sign says 60 and you are going 65, it is already excess speed.

Stage 3 also belongs to the Conventional Level and is characterized by the search for social approval by the interaction of acting correctly, according to the judgment of others. One of the interviewed drivers answered the question, “You have more than nine tickets for speeding. What does it mean to you?”, by replying, “I had a bad habit. Speeding. If people drive very slow, the others stick out and honk. You are obligated to drive faster because of the pressing behind you.”

This answer shows plainly that the motivation for the behavior is both external and social.

**Final concerns**

When analyzing the data obtained from the interviews with 20 offending drivers for speeding in the Curitiba region – Paraná – Brazil, aiming at delimiting the moral development stage in which these drivers were, according to the moral development scale elaborated by Kohlberg (1971, 1981), it was possible to verify that the predominant moral development stage of the interviewed sample was at the conventional level, represented by Stage 1 - The Orientation to obedience and punishment, in which the physical consequences of the action determines their moral judgment: If an action is punished it is considered wrong, if it is praised, it is considered correct. The action is motivated by its direct consequence to the author of the action. A characteristic answer of this level: “I didn’t know there was a radar there.”

Among the 49 answers, 37 were found like the one exemplified.

The data analysis realized cannot affirm that all offending drivers are in the first stage of moral development and cannot also make any affirmation about the morality of non-offending drivers, since the data that refers to this group was not analyzed.

The predominance of stage 1 among drivers would be harmful in the sense that people who are at this stage of moral development are not concerned about following rules for the sake of societal safety, seeking the welfare of the whole, or the adaptation to social norms. Neither were they concerned about the good flow of traffic or about risking their own lives or the lives of others. Their behavior was shaped by the consequences of the action in terms of punishment. This type of moral reasoning just takes the individual to act in agreement with the norms where there is a risk of punishment risk, in other words, supervision, which in the case of excess speed, is through radar.

It is possible to find among the answers of the majority of the interviewed drivers that it is not necessary to drive under the limit in every way, but only where the supervision is
present. The motivation to accomplish the law is not to avoid serious accidents, run over pedestrians, etc, but not being caught by the electronic supervision instrument, not suffering legal sanction, and not paying a fine.

This study intends to serve as a basis for future research, in the sense that clues can be discovered regarding the relationship between the low moral development level and the offending behavior in transit, demonstrating how the low moral development level expresses in these relationships. Besides, this research focused on one kind of offending driver (the speeder), whereas other studies that verify the relationship between the moral development and other offending behaviors could enrich the current data. Such research could subsidize the creation of moral development programs for offending drivers, with the intention of improving traffic relationships.

It is worthwhile to remember that studies done in Brazil (BIAGGIO 1988, BIAGGIO et al. 1994a, BIAGGIO et al. 1994b) demonstrate that the overall moral development level of Brazilian adults and teenagers is between the level 3 and 4. It remains to be seen if there are any differences between the overall moral development level and the moral development in traffic, and the reasons, if any, that exist for this difference.
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