


The importance of psychology in controlling the behavior of emotions in traffic in the light of Skinner's theory and other contributions

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ABSTRACT

The present study aims to analyze human behavior in traffic influenced by subjective emotions, considering the Brazilian case under analysis, as well as its circumstantial aspects. The country has in its statistics the highest number of deaths in traffic, with most caused by drunkenness, distractions and aggressiveness. Such reasons can also be caused by consequences of pre-conceived emotional states in other areas of life, be it professional, romantic, family or social. In this context, it is important to report on the role of psychology and the professional psychologist and the imminent possibility of their preventive contribution in a positive way in the prevention of accidents, analyzing the human being in his life trajectory and evaluating the superlative factors that may be influencing, and in some way, indicating reckless actions in traffic. In this way, a specialized diagnosis can help drivers to manage, drive and understand their feelings in a more balanced way, taking advantage of elements to reflect on their condition as a driver and their relationships in the social environment, through the act of driving in a context population in which there are established rules and norms. In another aspect, which adds relevance to the general objective and is important to support the theoretical foundation of the proposed study, it was to bring to this discussion, in the field of behavioral psychology, one of the main interventions in the works of Burrhus Frederic Skinner, one of the most important aspects of psychology in the behavioral area that dominated innovative practices and ideas in schools and clinics. Such interventions are remarkable in the sense of jointly explaining the repercussions of positive projects by psychologists so that institutions can further evaluate and value the aspects of mental health, not only as a restorative action by the professional, but also as a preventive action.

Therefore, from methodological aspects, this is a bibliographic and qualitative research, in which articles, reports and books were used as data collection tools.

The study will reveal that emotional reactions, whether primary such as: fear, disgust, surprise anger, happiness and sadness or secondary such as stress, jealousy, pride, guilt, shame among others, can directly influence traffic accidents, but there are ways of control.

Keywords: Psychology, Behavior, Emotions, Skinner Theory, Traffic.

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INTRODUCTION

This study aims to analyze human behavior in traffic influenced by subjective emotions, especially in the Brazilian case and its circumstantial aspects, which, according to recent data from the World Health Organization (WHO, 2023), Brazil ranks third in the ranking of the country with the most traffic deaths, behind only India and China. The national transport and traffic agency (AGETTRAN) recorded in the first two months of 2023, in addition to deaths, 1,040 accidents without victims and 577 with victims.

The WHO also indicated the main risk factors for traffic accidents, which are mostly caused by human errors. These are: speeding, driving under the influence of alcohol and other substances, **failure to use motorcycle helmets, seat belts and child restraint systems, distracted driving, unsafe road infrastructure, unsafe vehicles, inappropriate attention after accidents, and insufficient compliance with traffic rules/laws.**

According to Schmitz (2010, p.104, apud SCHMITZ E SILVA, 2010 p.32) it is possible to consider transit as "if it were a weave, a network of relationships in constant movement, as an uninterrupted weaving and unweaving of connections, composing a form that did not exist before it, but which, with its participation, helps to form"

Following this line of reasoning, the book "The Brain and Emotional Intelligence: New Perspectives" written by Daniel Goleman (2012) uses the example of a person who is in a bad mood, inferring that this feeling, when not managed, controlled or educated, affects the individual and those around him. In another aspect, the person's cognitive points are also subtly impaired, making them more predisposed to be inattentive and sadder. Sadness, on the other hand, is considered a primary emotion. The person involved by this feeling begins to see things in a more distorted and negative way, a factor that corroborates reactions that vary between escape, defense and protection.

It is understandable that in traffic, the driver is more likely to have exacerbated fear, because his psychic system is activated in a negative way and, immediately, the brain region where the amygdala is located is activated, precisely the area responsible for decision-making. Therefore, the probability of this individual potentiating situations that in reality are more pleasant than in their imagination is quite high.

In addition to the sadness and fear mentioned above, there are other primary emotions that are: surprise, disgust, joy, anger and love. All these feelings can interfere with the dynamics of the commute home, to work, to a party, to an appointment, regardless of one's route. At that moment, the subjectivities of each person merge on the same roads, access roads, avenues and even at the same time, but each one in their own unique psychological state.

It is understood, then, that knowing how to manage emotions and acquire emotional intelligence through appropriate tools and taught by specialized psychology professionals become



essential and help with a marked degree of importance in the sense of guiding the individual when it comes to taking the wheel. Such resources in the field of health help to make the journey less dangerous, as there are several particular emotions within the same space of traffic and time, where risks and disastrous consequences can be avoided or minimized, and many lives can be saved.

ON THE BEHAVIORAL THEORY APPROACH

In the theoretical field, we refer to Burrhus Frederic Skinner, "Distinguished Practitioner of Behavioral Psychology", born in 1904, in Pennsylvania, in the United States and died in 1990. He studied at the Faculty of Psychology at Harvard, bringing a scientific approach to human behavior and how to control it. Skinner adds a conception of what we can observe independently of what we are subjectively feeling.

In Skinner's book *Science and Human Behavior* it is possible to identify the reason for the actions of individuals in a given environment, and, by discovering this factor, it will be possible to increase the chances of changing behavior. This technique is based on an analysis of the subject's behavioral repertoires whenever a certain emotion affects him. After that, it is possible, together with the individual, to explore more positive ways of reacting and that cause less harm to him and to the other.

Emotional states are considered universal, as they biologically activate the same physical components of each human being, what changes is how the individual reacts to a given situation, no matter how different the context and history of their life may be.

Still, according to Skinner's work in the book *Science and Human Behavior* (1953, p.184), it is possible to highlight the reason why we can manage our emotions:

"If the problem of emotion is conceived only as a matter of inner states, progress in practical technology is not likely to be achieved. It is of no help in solving a practical problem to say that some aspect of man's behavior is due to frustration or anxiety; We also need to know how frustration or anxiety has been induced and how it can be changed. In the end, we find ourselves dealing with two events—emotional behavior and the manipulable conditions of which that behavior is a function—which constitute the proper object of the study of emotion. (1953, p. 184)."

That is, for Skinner, behavior can be modeled and educated based on the management of emotions, so as to obtain the desired result. Skinner's central idea is the learning of a new behavior, which he calls "operant behavior", and as the main tool for this theory, he also used the term "reinforcement", which is the consequence of an action when it is perceived by the one who practices it.

Skinner believed in the existence of an ideal society, but one that needs to be educated with broad planning applying the principles of positive reinforcement to each correct behavior rather than punishments and repressive schemes. But, for this scenario to happen, it is necessary to give real



meaning to Behavioral Psychology in human relations in various social, political and cultural aspects. Also in the book (1953, page 249) Skinner shows an example so that we can understand how society can evolve if we learn to control our behaviors.

"An analysis of the techniques by which behavior can be manipulated shows the kind of technology that emerges as science progresses, and indicates the considerable degree of control that is currently exercised. The problems raised by the control of human behavior obviously can no longer be avoided by refusing to recognize the possibility of control. (1953, p. 249)

In a way, we can see that the behavioral process, when controlled in the sense of evolving positively, the subject can learn responses to his emotions in the face of various situations that happen in traffic. Most of the time when we are emotionally affected in a negative way, our behavior is automatically directed towards behaviors such as avoidance, aggressiveness, compulsivity, generating a more negative consequence. Therefore, the goal is for psychology to act, teach, guide and stimulate aspirants, especially the youngest, adult drivers and future drivers, to behave safer.

This management of emotions taught by a professional psychologist can be performed using the self-control method as a reference. For example, when the Psychologist helps the individual to think about their emotions and the problems that their actions can cause, they also think of a solution to this, increasing their self-knowledge and resulting in a more collaborative behavior benefiting society.

BRIEF REPORT ON THE PSYCHOLOGIST'S WORK AND THE POSITIVE EFFECTS OF HIS ACTIVITIES IN TRAFFIC

Some important considerations about the work of the Psychologist can be highlighted in his/her psychological evaluation activity to obtain the National Driver's License (CNH), in which the individual is psychologically qualified, or not, to drive vehicles. This, professional activity, is a contributory action of Psychology in the protection of individuals, corroborating to strengthen the rights and duties of citizens in traffic.

However, despite being minimally valued and recognized, the Traffic Psychologist also operates by analyzing the main causes of accidents, thus contributing to the prevention and safety of drivers and pedestrians. Some examples of actions that can be carried out: (1) Traffic education campaigns within schools for students who are leaving high school and for children as well; (2) In interdisciplinarity with traffic engineers, showing how they can contribute assertively thinking about the collective; (3) In the sleeper school at the Traffic Department, teaching how individuals should manage their emotions during traffic.

In this context, we realize that the Psychologist contributes significantly in a broader sense, in the field of public policies for the well-being of society as a community that needs to progress. Of



course, one of the elementary challenges that psychologists still face is to convince the government and political representatives that the work of the psychology professional is fundamental to reduce the mortality rate and essential for traffic education, benefiting both holistically and individually, that is, There are countless possibilities that can be directed within the same field.

In another aspect, as a favorable example, we can cite the participation of traffic psychologists in the United Nations (UN) event in 2011, in view of the goal of reducing the mortality rate by 2020, considering the alarming data presented by the World Health Organization, already cited in this research.

SOME SUCCESS STORIES THROUGH THE INTERVENTION OF THE TRAFFIC PSYCHOLOGIST: EMOTIONAL AND BEHAVIORAL EDUCATION

We reported to the city of Mallet in Paraná, where Larissa from the Psychology course developed a project for children on how to act disciplinarily in traffic. This type of approach is very effective, as many children also have to deal with their emotions as passengers for their parents, a school van, a bus, or even as a pedestrian. It is worth mentioning that all this articulation also involves shedding light on the feelings and questions of children who are often invisible as citizens who also behave in the flow of traffic.

Guidance on traffic and its consequences in the social environment is not only focused on drivers, but passengers and pedestrians should also be guided to deal with their reactions and sometimes with that of others as well. The author of the project quoted: "Real teaching and social commitment". With this work, as a psychology student, it can be seen that the future psychologist showed positive results that it is possible to intervene in the community, in this specific case, the repercussion was significant in the city of Mallet.

Another initiative took place in the state of Mato Grosso do Sul, in Brazil, where the traffic department launched a public notice for psychologists to work helping people who are afraid of driving, through a program called "Overcoming the fear of driving" in partnership with the Dom Bosco Catholic University. The result was positive, considering the possibility of using cognitive and practical resources in the area of Psychology, allowing the achievement of a level of participation of more than 20 thousand people, seeking, through the guidance received, to control fear and its derivations.

It can be seen, then, that such initiatives demonstrate that it is scientifically possible to manage feelings and for the individual, drive more safely and responsibly, overcome phobia and build coping techniques.

Also as a permanent institutional action in the country, the "Yellow May" project was created, which is a campaign of the public power aiming to draw attention to the growing number of



accidents, in addition to highlighting the importance of the professional psychologist and their participation in traffic health programs, emphasizing even more, their contribution to saving lives and preventing accidents.

The reports presented here are only excerpts of personal and institutional attitudes that characterize the importance of the psychologist, as well as the various possibilities of fields of his performance as an essential collaborator in society, and alerting the public power about the effects of science acting effectively in the social control of human life.

FINAL CONSIDERATIONS

Through this brief analysis carried out from the bibliographic material made available during the research, which had as its object one of the fields of Psychology, which has in its conception, a broad base of disciplinary and interdisciplinary study, it was possible to understand that the field of action of the psychological permeates the whole society. Well, it is scientifically proven that the human being has primary and secondary emotions and that the best solution is not always to react according to the momentary feeling.

Bearing in mind that traffic is not only a flow of cars, but also of people in different emotional states, with their personality characteristics and unique past history, who need to communicate and interact in a beneficial way, it is imperative to act as a psychologist in the collective, even if there are particular psychic states. In other words, if each individual reacts without thinking about strategies and peaceful solutions, traffic will increasingly collapse.

From the theoretical framework presented in the study, in which it is possible to apply the technique of operant control that gives rise to "the active behavior that operates on the environment", it can be inferred that it is necessary to think about these strategies for problem situations acting on what is scientifically observable, that is, to bring positive responses, based on the idea that learning occurs in the change of behavior and increase of the behavioral repertoire.

In addition, there are still not many articles and/or reports that directly mention the role of the Psychologist in the field of traffic administration. However, it was possible to verify that the projects already carried out, many of them by students who are beginners in Psychology, and others, by volunteer professionals, even though not yet officially disclosed and originating from the behavioral techniques of reaction control based on Skinner's studies, it can be verified that there was success in their applications.

Finally, it is worth highlighting the broad competence of Psychology professionals in awareness campaigns, teaching courses on how the individual should behave in a citizen and cooperative way, guiding them not to react impulsively in traffic and that there are techniques for



this. The psychologist can instruct more assertive behaviors when involved by strong mental impacts in a conjuncture of people and transportation.

It should also be emphasized the need for advances in society to understand the importance of the profession of Psychologist and its visibility, because, as reported in this brief study, professional activities transcend psychotechnical evaluations (Personality assessment to identify whether or not a person is qualified to drive). That is, the psychologist, despite his importance in traffic management, still faces professional obstacles in a society that is increasingly reactive to emotional and behavioral pressures.



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