

Study on Mechanism of Driving Emotion on Traffic Safety

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Abstract

The main purpose of this study is to explore the influence of emotion on driver's driving state. Nowadays, driving negative emotion not only improves the risk of driving, but also becomes a challenge that can not be ignored. This paper mainly studies the psychological factors causing traffic accidents, especially the emotional state. This study is used to evaluate the relationship between emotional responses and traffic accidents. Assuming that the greater the interference of driving emotions, the greater the responsibility for traffic accidents. Methods: the study was based on a sample of 955 drivers injured in a vehicle collision. Results: the emotional response characteristics of four drivers were divided by stratification: basic emotional responsiveness (54%), mild emotional response (29%), emotional hypersensitivity (11%) and affective hypersensitivity (6%). Drivers who showed low emotional responsiveness were 2-3 times more likely to suffer from traffic accidents than those who had basic emotional reactions. Conclusion: the probability of traffic accidents depends on their emotional state. Emotions can change drivers' abilities and change their behaviors, thereby increasing their tendency to behave dangerous behaviors and causing traffic accidents.

Keywords

Emotional traffic safety driving behavior traffic accident.

1. Introduction

In the real society, most cities have a fast pace of life, and some office workers are prone to fatigue, anxiety, anxiety, and patience. In daily life, the pressure is huge, and individuals are easily stimulated by the surrounding things, causing their emotions to get out of control and causing disputes. Cognition and learning in the process of human interaction are generally from perceptual to rational, that is to say, the learning and dissemination of irrational factors often precedes the rational factors and plays an important role in the process and outcome of the evolution of rational factors. As an irrational factor, emotional state has a great impact on driver safety.

1.1. Research Purposes

Firstly, the psychological factors causing traffic accidents, emotional state, emotional connection and traffic safety are explored. Secondly, the influence of bad emotions on the incidence of traffic accidents is obtained through investigation, and an emotional layering model is established. Finally, discuss emotional changes over time and study the mechanisms of emotional dynamics and their relevance.

1.2. Research Significance

China's living standards have gradually entered a well-off level, and the economic income of every household has also increased. Traffic travel has become more convenient and faster, and the number of private cars has also increased. Now almost every family has at least one car, and road resources are limited. The ever-increasing number of vehicles has also brought many problems. The pace of life is accelerating, people also have a lot of pressure on their work, pressure is accumulating, and bad emotions need to be released. During the peak hours of

commuting, traffic accidents caused by traffic conflicts are also increasing. According to statistics, most traffic accidents are also caused by driver factors, so the driver's physiological and psychological factors have an important impact on traffic safety. The driver's mental health, relatively stable personality, ability, way of doing things, etc., vulnerable to environmental impact, patience, road congestion, serious traffic jams, parking difficulties, vehicle driving, car insertion and many other factors will affect driving mood. The driving impulsiveness of bad impulses causes the driver to change the lane, overtake, car, speeding, and distracted to make a wrong judgment. The driver who is out of control vents anger on the road, collides in speech, and even uses force, traffic. Accidents and even deaths can easily occur, and hidden dangers threaten traffic safety. Therefore, this topic analyzes the driver's behavior according to emotional changes, and then understands the negative emotions of the driver while driving. The main source of reducing traffic accidents is of great significance to ensure traffic safety.

1.3. Research Status at Home and Abroad

Driving emotions, as a variable causing traffic accidents, are unpredictable. At present, domestic research on this is not yet deep, and foreign psychology research is more comprehensive and in-depth than China, and research on driving anger in Fort Collins, USA. It was the earliest. The American psychologist selected 1,500 students and used the student as the driver. In the experiment, 53 driving situations that would lead to angry driving were simulated. Statistical analysis showed the angry driving table of 33 scenes. Female drivers are more sensitive to traffic chaos caused by illegal driving. However, there are certain differences in driving objects, cultural level and driving habits at home and abroad. It is not necessarily related to the domestic traffic situation. For example, when the vehicles in China and abroad are in the opposite direction, foreign traffic uses roads separated from motor vehicles and non-motor vehicles. In addition to highways and first- and second-class roads in China, many roads are non-mixed. When conducting research and research, our culture should be combined with traffic conditions. In China's survey, Chinese drivers involve people from all walks of life. The level of education is not uniform. The foreign students who are mainly investigating in colleges have higher cultural level. Therefore, it is necessary to carry out investigations in conjunction with the unique traffic conditions in China. Relevant research can get more accurate data on the impact of driving sentiment on traffic safety.

2. The Influence of People's Psychological and Emotional Factors on Traffic Safety

2.1. Driver Characteristics and Personality Differences

(1) Age and gender and reaction

Different ages have different reaction times, young people have shorter response time, and older people have a slightly longer reaction time. Generally, they are 30 years old. Under the same age, women respond longer than men of the same age. Younger, more able to learn, in an emergency situation can be handled easily, but easy to impulsive, not very rational: elderly: under normal circumstances, have a wealth of driving experience, mature and stable, the possibility of accidents is small, but Do not blindly arrogant, think that driving skills are skilled, blind driving.

(2) Differences in psychological characteristics: attention, emotions and emotions, personality, ability, will, etc. Drivers with positive emotions have strong vitality and good spirits, which improves the reaction speed. The brain can quickly capture information, make correct judgments, and reduce mistakes. Under negative emotions, the reaction speed is slower and driving. Inadvertent, inattention, low sensitivity, easy to judge mistakes, traffic accidents. Different people feel different from the speed of perception. The individual's sensory organs perceive the characteristics of external objective things, such as the eyes, nose, ears, and the

reaction through the nerve center and the reaction arc. (Visual, auditory, balanced, dynamic) perception is based on the comprehensive response of meaning to various attributes of things. Each response includes spatial perception, temporal perception, and kinesthetic perception.

2.2. Disadvantage Driving Psychology

Winning psychology, this kind of mental driving is mostly young people, they like to show off their excellent driving skills in front of everyone. I don't know how to be polite, I only want to go ahead, as long as there is a gap that can pass through when driving, I try to wear it. If I encounter a slower vehicle, I will press the flute, or I will not accurately estimate the overtaking of the overtaking. The driver is driving with the car, very barbaric, as if they are unfathomable, and they don't believe it, and just step on the accelerator pedal to compete with other vehicles until the winner decides that the traffic accident is extremely likely. Driving with this mentality, lack of accurate judgment of the environment and problems that cannot be dealt with calmly will lead to panic when the crisis occurs and lead to traffic accidents.

Frustration psychology, every driver will encounter various dissatisfaction in daily life. Career development encounters bottlenecks, quarrels with his wife or girlfriend, worry about children's performance, face disappointment in life, and different people's ability to withstand. Once you can't stand it, your heart collapses, you lose your mind, you will be in a state of mental disorder, making you distracted during driving, your mind is not concentrated, thinking about other things while driving, mechanically operating the vehicle, it is easy to cause traffic. The accident happened.

Emotional psychology, personal emotions are affected by the surrounding things, will be affected all the time, when happy, emotionally excited, attention will not concentrate, driving in the excitement of blind driving, driving at high speed. When encountering unpleasant things, feeling depressed, angered by the outside environment, feeling that the surrounding food is all bad, for example, the front vehicle is driving too slowly, the rear vehicle overtaking, causing emotional excitement, and thus in an angry mood, Emotional impulses, judgments and arbitrariness increase the probability of traffic accidents.

Adventure psychology, some road signs on the road section: accidental areas, slowdown, sharp turns, blind spots, narrow roads, low speed driving, no overtaking, etc., but the driver turned a blind eye, still taking his own path, ignoring traffic signs, traffic rule. Knowing that the intersections and curves must be slowed down, you can still drive at high speeds and corners. This kind of psychological drive tends to put traffic rules and dangers behind, and then there is an accident.

3. Emotional Driving Analysis of Traffic Accident Risk

3.1. Introduction

Reducing mortality and morbidity caused by traffic accidents is a public health challenge. In this type of accident, many variables are identified as potential sources of responsibility. These risk factors can be broadly divided into two categories: one is endogenous and the other is exogenous. Among the exogenous factors, some environmental factors and other factors that depend on driver behavior are now well known: lethargy, drug and alcohol consumption, car status and driving speed. In addition, external disturbances such as external centroids, smoking and object manipulation have also been identified. Recently, risk factors have been identified, and psychological variables have become a factor that cannot be ignored by the public. These variables have different properties, some of which confer pathological features (eg, depression, anxiety, stress, etc.) and other factors that reflect normal function, but their occurrence can have a negative impact on driving activities and lead to accidents. Some studies have demonstrated the impact of endogenous factors such as inner part of mind, distraction and lack

of concentration (task-independent ideas) on driving performance or traffic accident liability. For example, a strong mental distraction may be related to the responsibility of a traffic accident. However, the involvement of emotional factors in traffic accidents has received little attention. Two studies assessing specific emotions highlight two factors and active driving: (a) driving violations and (b) irritability while driving, both of which have a strong connection to road crashes. In addition, road anger is an important factor in reckless driving. Interestingly, aggressiveness and road anger have a common dimension, high emotional intensity, which is part of emotional responsiveness.

In a traffic accident, it can be assumed that it occurs frequently due to a complicated combination of various factors. To uncover the complex relationship between potential risk factors, the first step is to identify the potential impact of each traffic accident. To the best of our knowledge, observational epidemiological methods have not been used to describe emotional responsiveness and traffic accidents in the real world. Therefore, the purpose of this study was to investigate how emotional responsiveness interferes with driving by assessing the association between emotional responsiveness and responsibility in traffic accidents. We assume that the more emotional responses are disturbed, the greater the likelihood of being responsible for traffic accidents.

3.2. Method

3.2.1. Participants and Settings

The study was conducted at a university hospital that serves urban and rural populations in areas with more than 1.4 million people. A total of 887 participants were recruited from April 2010 to August 2011. Participants included admission to the emergency department within 72 hours of admission (average time between accident and interview was 4 hours and 34 minutes), age 18 or older, was the driver, and was able to answer the interviewer. The interview time is determined by the doctor, and the trained research assistant uses a set of questions about patient characteristics to interview the patient. Accidents (eg, season, driver's condition, location), alert status (including poor sleep quality, alcohol use, problems with psychotropic use), socio-demographic characteristics (see Table 1), external distractions for drivers (eg, listening to music, phone usage, etc.), emotions (see description) Below are a few questions about road safety. The main variable that draws attention is the driver's assessment of the responsibility for the accident, which is measured along with the measurement of their activity and emotional response. (A measure that can be considered a wake-up) and an emotional state (which can be considered a measure of potency), participants complete the questionnaire after providing written informed consent.

3.2.2. Variables

The purpose of the study was to assess the link between emotional response and responsibility in a traffic accident. According to the standard division method of the degree of collision responsibility, the driver's accident liability is determined according to the accident responsibility level. The method considers six mitigating factors to reduce driver responsibility: road environment, vehicle related factors, traffic conditions, accident type, obeying traffic. The difficulty of rules and driving tasks. A higher score corresponds to a lower level of responsibility. The distribution of the summary scores is: 8 - 12 = responsible; 13 - 15 = contribution; 15 = not responsible. A driver who is assigned any responsibility for the crash is considered to be an irresponsible case and driver (score > 15) as a comparison. Evaluate the emotional response of the week before the accident. The emotional response score (a dimension of the Matisse scale, a multidimensional assessment of the thymus state) changed from 0 to 40. Emotional scores indicate the overall level of emotionally low-reactivity hyper responsiveness, and 20 basic emotional response scores. The emotional response dimension indicates whether the individual feels normal intensity, greater intensity, or less intensity. For each of the four items

Table 1. Sample characteristics of drivers and responsibility for traffic accidents.

	Responsible (n = 415)	Not responsible participants (n = 472)	Total (n = 887)	P-value
	n (%)	n (%)	n (%)	
Gender				NS
Male	252 (47.9)	274 (52.1)	526	
Female	163 (45.1)	198 (54.9)	361	
Age (years)				NS
18-24	112 (51.9)	104 (48.1)	216	
25-34	114 (47.3)	127 (52.7)	241	
35-44	064 (39.5)	098 (60.5)	162	
45-54	061 (45.9)	072 (54.1)	133	
≥ 55	064 (47.4)	071 (52.6)	135	
Socioeconomic category				NS
Worker/farmer	022 (51.2)	021 (48.8)	043	
Self-employed	024 (45.3)	029 (54.7)	053	
White collar	209 (45.3)	252 (54.7)	461	
Middle management, Top management and professional occupation	038 (46.3)	044 (53.7)	082	
Retired/unemployed	021 (46.7)	024 (53.3)	045	
Student	041 (45.6)	049 (54.4)	090	
Driver's status				< 10 ⁻²
Not professional	362 (48.3)	387 (51.7)	749	
Professional	053 (38.4)	085 (61.6)	138	
Vehicle type				NS
Light vehicle	190 (43.9)	243 (56.1)	433	
Commercial vehicle	010 (52.6)	009 (47.4)	019	
Heavy goods vehicle	008 (66.7)	004 (33.3)	012	
Bicycle	090 (51.1)	086 (48.9)	176	
Scooter	049 (46.7)	056 (53.3)	105	
Motorbike	068 (47.9)	074 (52.1)	142	
Time of day				NS
05.00-10.59	169 (44.0)	215 (56.0)	384	
11.00-13.59	099 (48.5)	105 (51.5)	204	
14.00-19.59	109 (46.2)	127 (53.8)	236	
20.00-04.59	038 (60.3)	025 (39.7)	063	
Season				< 10 ⁻²
Summer	119 (50.2)	118 (49.8)	237	
Autumn	103 (45.6)	123 (54.4)	226	
Winter	043 (35.3)	079 (64.7)	122	
Spring	150 (49.7)	152 (50.3)	302	
Location				< 10 ⁻²
≥ 50,000 inhabitants	207 (43.4)	270 (56.6)	477	
< 50,000 inhabitants	208 (50.7)	202 (49.3)	410	
Mean emotional state (standard deviation)	6.4 (2.1)	6.7 (1.8)		NS

of the emotional response dimension, the individual must indicate their feeling before the accident by marking a vertical line on the 10 cm horizontal line. This is a complete spectrum, from inhibition to activation, 0 to 10. The points represent emotional responsiveness, and the middle line represents the usual state, indicating the emotional hyper responsiveness of the item being evaluated. The concept of emotional reaction determines whether a person's emotions are less intense than usual. It may be that the feelings of the emotions fade (regardless

of the emotions considered: happiness, anger, sadness) or whether the person feels emotionally weak and feels that he or she cannot clearly Thinking and being invaded by emotions (super-perception, excessive alertness, high responsiveness to the environment, and simultaneity). People with low moods feel numb, their emotions are constant or change little, and their response to the environment is reduced or absent, as if a person lives in a fantasy, neither perceive nor react to his or her environment. Things that happened. Emotional people respond to the environment more than usual. They lose control of their emotions and react less to the environment than usual. Their emotions seem to be very different, depending on their environment.

The potential impact on the outcome variable (ie responsibility). These include gender variables (see Table 1 for details), such as gender, gender, and socioeconomic categories, as well as the status of drivers and the number of accidents over the past five years.

3.2.3. Statistical Analysis

The sample is divided into two groups: the driver is responsible for the crash (case) and the driver is not responsible for the collapse (control) assessment of the standardized method for quantitative. Of the original samples of 887 participants, 181 (17%) were excluded from the analysis because of the incompleteness of the liability variables or emotional state. The socio-demographic characteristics of responsible and non-responsible participants were compared using a category chi-square test. The quantification of the Karl's qualitative variable and the independent Student's t test is continuous. We systematically examined the results of the t-test. All trials were a two-sided test with $P < 0.05$ using the Wilcoxon W test with significant deviation from the normal distribution and the square difference. In order to classify individuals according to their emotional response characteristics, hierarchical clustering analysis was performed on the scores on the Matisse scale. The test is then used to assess the classification accuracy of each dimension of the scale. This analysis allows us to identify different types of participants based on their emotional responses.

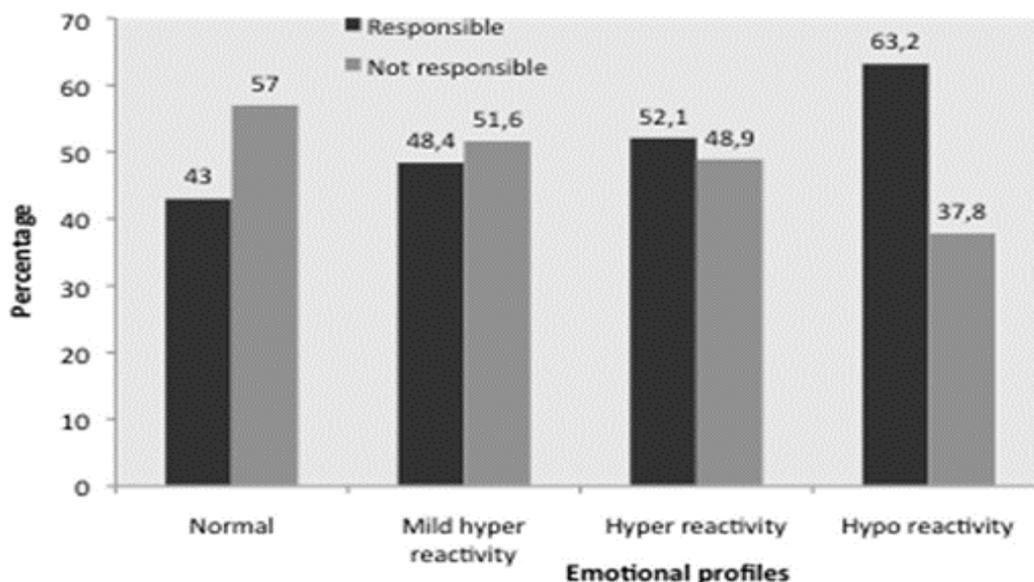


Fig 1. Percentage of drivers responsible and non-responsible according to emotional reactivity profile.

Finally, in order to assess the link between responsibility and interest variables—ie, emotional responsiveness and emotional valence. Binomial regression analysis was used. Interest variables and potential confounders (social demographic variables, driver status, and number

of accidents over the past five years included predictive responsibilities in a multiple binomial regression model).

Table 2. Univariate analysis of driver responsibility for traffic accidents.

	Participants (%)	Responsible %	Odds ratio (95% CI)
Emotional reactivity			
Normal	480 (54.1)	42.9	Ref.
Mild hyper-reactivity	254 (28.6)	48.4	1.25 0.92–1.70)
Hyper-reactivity	096 (10.8)	52.1	1.45 0.93–2.24)
Hypo-reactivity	057 (06.5)	63.2	2.28 1.29–4.02)
External distraction			
Yes	310 (35.0)	53.2	1.49 1.13–1.96)
No	577 (65.0)	43.3	Ref.
Alcohol use			
Yes	064 (07.2)	75.0	3.73 2.08–6.67)
No	823 (92.8)	44.6	Ref.
Sleep deprivation			
Yes	092 (10.4)	65.2	2.32 1.48–3.65)
No	795 (89.6)	44.7	Ref.
Psychotropic medicine use			
Yes	091 (10.3)	61.5	1.95 1.25–3.04)
No	796 (89.7)	45.1	Ref.

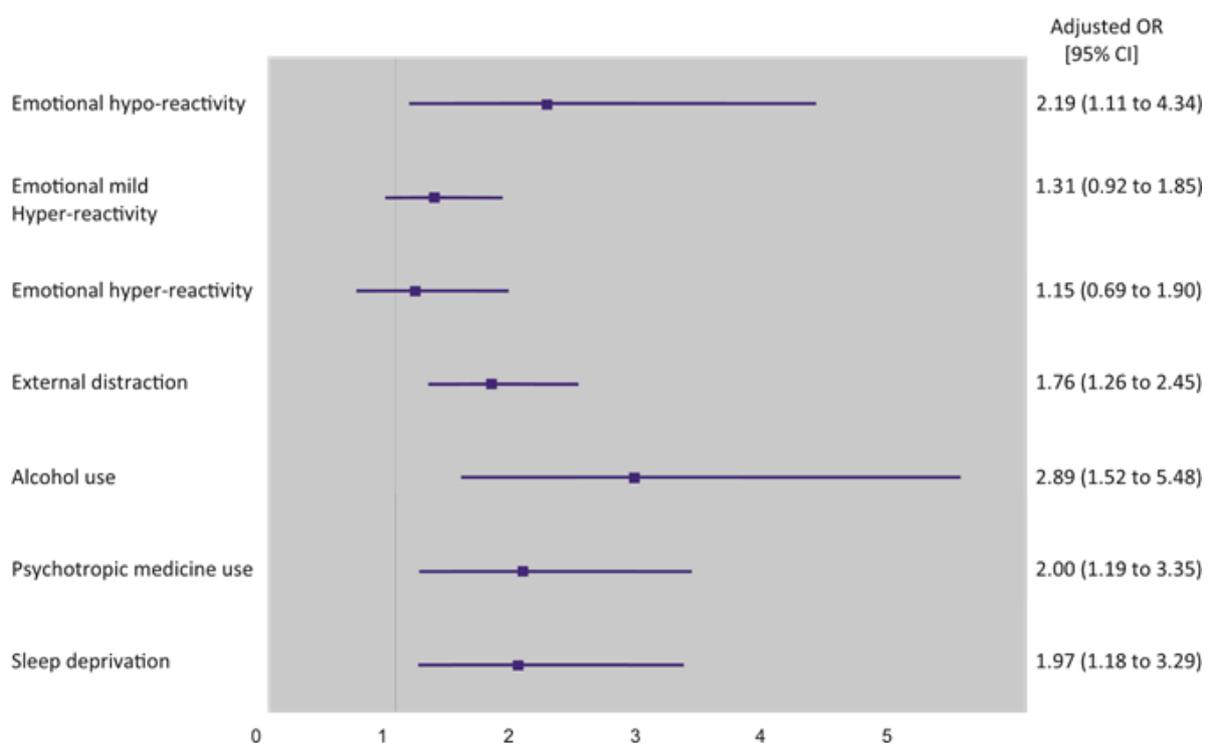


Fig 2. Odds ratios for responsibility for traffic accidents, adjusted for sex, age, emotional status, driver's status, season and location.

4. Results

According to their report, 415 (47%) participants were classified as responsible and 472 (53%) were irresponsible. Among the sociodemographic variables, only the driver's status is significantly related to the responsibility ($\chi^2 = 4.6(1)$, $p < 0.05$), indicating that the professional driver is more responsible than the non-professional driver. Emotional potency has a trend effect ($W = 96390$, $p = 0.077$), suggesting that responsible drivers ($M = 6.24$, $Sd = 2.2$) are more negative than non-responsible ($M = 6.57$, $Sd = 1.92$) Emotional state. No other variables are related to liability (see Table 4). The model and emotional response were still significant ($\chi^2 = 10.2$, $P < 0.05$) and the driver's status ($\chi^2 = 4.9$, $p < 0.05$). Only the low-response group had a significant odds ratio ($Z = 2.34$, $P < 0.05$). Finally, the relationship between emotional response levels and traffic accident risks is assessed. Univariate and multivariate regression analyses showed emotionally low reactivity. The results of the univariate binomial regression showed that drivers in a traffic accident who showed emotionally low reactivity (less emotional, less nervous) reported greater responsibility than those with basic emotional responsiveness. Times (95% CI [1.29, 4.02]). Although not significant, drivers with a high emotional response (more emotional, more intense) were 1.45 times (95% CI [0.93, 2.24]).

The risk of a traffic accident is higher than those of those who have a basic emotional response (see Table 2). When emotional responsiveness, sociodemographic variables, emotional valence, and driver status are simultaneously included in the model, emotional responsiveness remains significant ($\chi^2 = 10.2$, $p < 0.05$) and driver status ($\chi^2 = 4.9$), $p < 0.05$). Only the low-response group had a significant odds ratio ($z = 2.34$, $p < 0.05$).

5. Discussion

The main purpose of this study was to assess the extent to which emotional response is a factor in participating in a traffic accident. The results show that the driver's responsibilities depend at least in part on their emotional state. In fact, drivers with low emotional reactions are more prone to crashes than those with basic emotional responsiveness. Regarding the high responsiveness of emotions, the pattern of outcomes, although not important, suggests the possible impact on the responsibility for the collapse. Overall, the results suggest that mood regulation may be part of the individual coping style, while emotional disorders may impair function, and with mental disorders (Henry et al., 2012) and risk behaviors, we find emotionally low reactivity to predict traffic accidents. This result suggests that emotions with low perceived intensity lead to changes in the ability of individuals to adapt to the environment, making these abilities less efficient for a given ongoing task. This result provides insight into the processes involved in depression and highlights the link between depression and the risk of involvement in a traffic accident. In fact, depression is one of the main symptoms of depression. It not only focuses on the valence of emotions, but also on the activation of emotions. Lack of pleasure is an ability to feel happy in normal and enjoyable activities. The ability to experience fun is reduced. Other studies have shown that emotional disorders have an impact on attention and behavior. Note that deployment is one of the first emotional adjustment processes that have occurred. For example, emotional price has an impact on attention; negative stimuli are related to long-term reactions, not positive stimuli. In addition, negative effects and risks and aggressive behavior. In the context of driving, performances have been shown to be affected by the valence of emotional content. In the study of Chan and Sinhal, participants must perform driving tasks in the simulator under four different conditions. They must drive on a 6.4-kilometer-long circuit, while on the billboards they see non-emotional words under one condition, positive emotional words under the second condition, and negative emotional words under the third condition. Nothing is displayed on the billboard under the fourth (control) condition. The main results of this study showed that when emotional words (negative and

positive) interfered with them, the driver showed a lower average speed (average speed at km/h) compared to the neutral background. In addition, when the word is positive, the mitigation effect lasts longer. Distracted emotions can cause attention to deviate from driving tasks, which can interfere with the decision-making process. In fact, the description of emotions should go beyond the simple mention of the types of emotions (anger, sadness, fear). The conceptual behavioral model defines emotion as a core emotional system, including neurobiological states, which can be described as pleasant or unpleasant, with some degree of arousal. The conscious experience is an integral integration of two dimensions, namely price and awakening. The driver's internal state is considered a risk factor for distraction. For example, distraction seems to be a risk factor for road traffic accidents. D is the nature of the mistake made by the driver. In terms of distraction, behavior is related to the transfer of attention to competitive activities. However, in another study on the effects of attention shifting, the authors argued that this definition ruled out driver distraction, which may affect performance (boring, drowsiness, fatigue, drunkenness, illegal or drug effects) Down, emotionally irritable) or because of C. Workloads induced by internal activities such as daydreaming. Therefore, our data support the hypothesis that emotional disorders can impair function and induce traffic accidents. The overall emotional disorder seems to be a potential source of internal disturbances that may affect negative safe driving. In terms of prevention campaigns, drivers are told about their impact. Behaviors such as drug and alcohol consumption and driving speed, but their emotional state has never been targeted. The results obtained in the general population indicate that the public should be aware of their level of emotional response before driving. Just like checking the level of gasoline, doing an automatic emotion scan can be a reflection behavior before driving. This is especially useful for high-risk groups, such as professional drivers who are engaged in the transportation of goods or passengers.

Another issue is the link between high-level emotions and risky behaviors, such as patients with borderline personality disorder (BPD), who are characterized by mood disorders, impulsivity, and identity. Interference, problematic relationships, and suicide/self-behavior. According to Lehanham's model (1993), such people have improved emotional sensitivity, unable to regulate strong emotional responses and slowly return to emotional baselines. In fact, many people with BPD have risky behaviors that lead to increased internalization and externalized psychopathology of suicide and non-suicidal self-harm. One hypothesis is that risk behavior is an attempt to self-regulate emotions. Our findings suggest that some highly-motivated drivers tend to exhibit more risky behavior than drivers with normal emotional responses. Emotional responsiveness is associated with a variety of dangerous behaviors such as addictive behavior, suicide attempts, or sexual adventures. In addition, they may be the basis for establishing behavioral strategies for emotionally vulnerable people, such as marginal personality patients, patients with bipolar disorder, and patients with attention deficit hyperactivity disorder. However, due to some limitations, the results of this study should be carefully explained. If you want to improve the safety of road users, especially vulnerable road users (such as pedestrians, cyclists and motorcyclists), you need Do more research on all types of traffic accidents. Another limitation relates to methods for collecting data. Participants were interviewed at an adult emergency hospital at some point after the accident, which inevitably meant that the impact of memory bias was difficult to understand. The use of empirical sampling methods (ESM) to study the propensity of traffic accidents is related to emotional state, and it is interesting to design interesting research. In fact, ESM can capture a wealth of information that may not be detected by observer ratings (SO et al., 2013). Several approaches to research now need to be explored. In the case of public health, it is necessary to take preventive measures. At the clinical level, patients with mood disorders, such as hypomania, anxiety, and depression, need to be alert to limit the risk of participating in an accident. Health professionals such as family doctors, psychiatrists, and psychologists can be encouraged to inform patients about the personal

hazards of driving in emotional distress. Increasing the relationship between emotional instability and traffic accidents will promote the health and safety of public road users.

6. Future Prospects

Through the analysis of the investigation and research, this paper has a clearer understanding of the impact of emotional driving on traffic safety. Due to my limited time and ability, this is only some basic work of driving emotion research. There are many places that need to be improved, and there is more depth. The research work needs to be carried out, and I will further study in the future to improve the research on traffic safety. The future traffic is bound to be smart transportation. I believe that the new era must be an era of rapid development of science and technology. With the in-depth exploration and development of 5G technology, intelligent transportation will bring convenience to people, and its security will also be very good. Great improvement, using electronic technology to better capture the driver's emotions, and making relevant reminders or stop behaviors, the car can also take certain defensive measures according to the dangerous measures that the driver may take, thus avoiding emotional driving. The negative impact, the study of traffic safety in terms of emotions, is not only the study of transportation, but also the study of psychology. It is necessary to combine psychology and traffic engineering well to obtain better results. In addition, the tools used for investigation are far from enough. It is necessary to use advanced electronic equipment to obtain more accurate data for predictive analysis. It is also a hot research topic in the future to adopt effective preventive measures to prevent traffic accidents. All aspects of forecasting, adjusting, and managing the emotions of the driver during driving need to be further understood, so as to effectively reduce traffic accidents caused by driving negative emotions.

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