

Road accidents and its consequences: A psychological perspective

Author : Khurshid, F.

Abstract:

accidents in past few years has been increased gradually and becoming worse, so this theoretical paper talks about road accidents and its consequences afterwards. Road accident happens for a moment but the effects last longer and in some cases for lifetime, and not only on victims but their family members, more or less equally suffers not physically but mentally, emotionally, and financially. Humans are the major cause behind these scary accidents and that is why author is using psychological perspective in this present study for these problems and consequences, because psychology gives us a better understanding of human behaviour and cognition. This perspective is also important to know despite all the efforts from government these accidents are not suppressing but rising . providing with psychological perspective, why these are happening as well as effects afterwards, and then followed by conclusion, where concluded the whole research and lastly with some valuable future suggestion from again psychological perspective. The main motive of the present paper is to make aware of this perspective through which we can

Keywords: Road accidents, consequences, Death, psychological perspective.

Objective: Did you open your newspaper today ? How many cases were there of road accidents ? Or how many road accidents you have witnessed in past 15 days ? Or how many people you know who have lost their lives or have become physically challenged ? Or at least how many times you have become the victim of accident ? See the problem is huge and scary ,we all have gone through or witnessed road accidents . Some times we feel ourselves too habitual to these devastating accidents that we don't even bother about these, unless it happens to some known person, then only we feel that pain and then only we began to think . We have seen so horrifying scenes from public road transport too , the condition of public road transport has become worst ,there is no such systematic body . We need to raise our thoughts about it ,the causes are much bigger than we think ,there are so many factors and some of them are too deep to even understand . Let me give you an example , imagine a bus driver has a personality of being angry too quick ,and some sort of disharmony has occurred on the road with him , how would he react? Don't you think any wrong or furious reaction can put everyones life in danger , and not simply to the passengers but to the other vehicles and their passengers . So till now things are quite clear to us that not only poor driving skills , poor roads, unwell traffic management , and etc are the factors but there are bigger fish to be blamed. These bigger factors are coming from mostly psychological problems and issues. The main objective of this study is to expose the causes and consequence of road accident by specs of psychology that is hidden in the dark.

Introduction:

In 2021, 4,03,116 road accident occurred in India and caused 1,55,622 deaths and 3,71,884 injured. Loss of properties are in billions in worth, according to Indian government reports, 3% of the GDP is lost in accidents only. Everything comes with a

price and so in the case of rapid development in transport sector. Transportation facilities are now the basic need for us but with a price. These factual data are reflecting these things like, death of people, they become physically impaired, making the loved one emotionally, financially, socially and psychologically unstable. However these instability are connected with psychological issues and problems. These horrifying accidents are also creating some sort of psychological disharmony on those who have witnessed , lets take an example , consider a 10 year child has witnessed an accident where he has been exposed to blood and dead people, don't you think that his mind, behaviour and his further life could be affected, or he could develop a trauma, or he could develop phobias, he can have nightmares, difficulty sleeping, and in worst scenario what if he develops a personality who likes blood and violent things?. This same principle can apply to adults also. It's worth noting that while exposure to trauma can be a significant risk factor for the development of certain mental health disorder or personality traits. Although governments are running many awareness programme and their rules and regulations and many road sign depicted on the road side, despite all of these situation is not getting better. On road accidents if we analyse, human errors are almost 94%, followed by vehicle malfunctioning and faulty roads. This human error is very big area, containing so much of surprised and unbelievable causes. Saddest part is this that these causes have been in dark for years. Lets take an example, consider a man who has been suspended or found her wife cheating him or any recently and obviously he is feeling depressed now , and in this condition he is driving , don't you think his driving skill would be impaired , his muscle coordination would be impaired , his vision would be distracted .This is human tendency.With all these accident provoking conditions consequences could be dangerous. Remember, road safety is a shared responsibility and that's how it is crucial to prioritised mental well-being for the safety of oneself and others on the road./

Why road accidents are occurring? Human error is the main cause of these devastating accidents ,and reasons are in plenty behind human errors. psychology gives us better understanding and can take us to the deep root causes.

Intoxicants: Along with alcohol other substances too are responsible for making a chaos in mind and effecting CNS(central nervous system). These substances includes any type of drugs, cannabis, weed ,smack , palm wine causes excitement or frenzy and can cause a person to loose control of their mind and body , alcohol affects driving even on straight road . We are aware only about alcohol because other intoxicants are banned in major countries , so only concern is alcohol ,however people are taking those too in ample quantity that messes up their mind. Although there are many other reasons why not to take these intoxicants but this study is trying to focus on the topic. Intoxicants slows down reaction time, making it more difficult for driver to respond quickly according to conditions and circumstances. Judgement and decision making is impaired and ability to make quick decisions to the situations. Alcohol can also affect a driver's depth perception, vision, and ability to judge distances, which can make it more difficult to navigate the road safely.

Drug use can also impact driving ability, as different types of drugs can have a range of effects on the body and mind. Some drugs, such as marijuana or prescription painkillers, can cause drowsiness or slow reaction times, while others, such as cocaine or amphetamines, can cause overconfidence or reckless behaviour[2] as their dopamine level increases. Alcohol puts us in a trance like state where many areas of our brain or rather central nervous system is attacked as alcohol in blood. Study conducted by Zhang, Zhao and Rong (2014) shows that how the effect of alcohol on drivers performance.

Impatience : In today's fast and modern world, people are loosing patience and are always on the edge. Thus, impatience are contributing in road accidents along with other aspects of life. Impatience while driving certainly lead to risky and dangerous behaviour which can result in an accident . When drivers are in hurry or feel frustrated by traffic they may be more likely to speed , tailgate, weave in handout of traffic, run red lights or stop signs , or engage in other risky driving behaviours. Impatient drivers are also more likely to make sudden and erratic such as changing lanes without singling or cutting off other driver and cause them to lose control over their vehicles. Impatient can lead to aggressive driving, which involves intentionally intimidating or threatening other drivers. This behaviour can escalate quickly and lead to road rage, which can result in physical altercation and collisions. Everyone looks so eager to go first avoiding the rules and so resulting in traffic jams. This is adding of course more numbers in the total number of accidents, this is so relatable in everyday life that we can observe impatience on roads and thus leading major and minor accidents along with making social harmony worse.

Over speeding as a psychological cause: The question is why over speeding is harmful and why this over speeding have become a common trend?. In some people there is psyche of over speeding and we can also say that this is a general human tendency to speed up on roads, some over speeders experience pleasure or gratification, some over speeders are just following the trend. There is a negative schema in young mind that over speeding is savage thing and they will be considered more valuable in their circle.

Over speeding can have a psychological impact on a driver's ability to drive safely. When a driver is travelling at high speed, their brain has less time to process incoming information and make decisions, which can increase the risk of accidents. Additionally, driving at high speeds can cause a driver to feel sense of invincibility, leading them to take risks they might not otherwise take. Studies have also shown that over speeding can increase stress levels and lead aggressive driving behaviour. Drivers who feel rushed or stressed may be more likely to engage In risky driving behaviours.

Furthermore, over speeding can also have a negative impact on a driver's mental and emotional well being. The stress and anxiety caused by over speeding can lead to chronic stress, which can have negative health effects including high blood pressure, heart disease and depression and anxiety .(Daniel R., Koojiman, Talib Rothengatter, and Karel A.Brookhuis) [1]

Age group: Teenage drivers (ages 16-19): This group has a higher risk of accidents compared to other age groups, partly because of their relative lack of driving experience. Teen drivers also tend to engage in riskier behaviours behind the wheel, such as speeding, driving under the influence of alcohol or drugs, and distracted driving. Older adults drivers(60 and above): this group may have risk of accidents due to age-related factors. Such as decreased vision, slower reaction times, and other health conditions that can affect driving ability. People who lies between has a lower risk of accidents[3].

Furthermore, having a supportive family network can also reduce stress and distraction that may contribute to reckless driving. Individuals who have strong relationships with their family members may be less likely to engage in aggression or impulsive driving behaviours, as they have a support system to help them cope with stress and emotional challenges. Research has shown that family oriented messages and campaigns can be effective in promoting safe behaviours. In a study by Al-Saleh, M., shows the effectiveness.[4]

Mental health condition : Our mind is the controller of our body and our mind is deeply affected by our bad mood, anxiety, depression. Which eventually slows down the processing of mind, by decreasing of serotonin level. In case of manic high depression, defined as an extremely unstable euphoric mood along with an excess activity or energy level, excessively rapid thoughts and speech, Mind gets also affected by. These mental condition can led to distraction. For example, a driver who is feeling anxious or depressed may be preoccupied with their thoughts and not paying attention to the roads. Similarly mental health issues can also impair judgement, leading drivers to take unnecessary risks or make poor decisions on the roads. For example, a driver with untreated bipolar disorder manic episodes that lead them to engage reckless driving. Mental health condition such as depression and anxiety can cause fatigue and sleep disturbances, which can impair driving ability and increase the risk. Drivers with untreated mental health conditions may also experience impairments in attention, reaction time, decision making, and other cognitive functions[5]. A recent study found that individuals with attention deficit/hyperactivity disorder(ADHD) are more likely to be involved in car accidents, particularly those involving high speeds and multiple vehicles[6]. Furthermore, mood disorders or emotional instability that can lead to sudden and unpredictable shifts in emotions while driving. Driver may feel intense anger, sadness, or irritability, which can definitely impair ones ability to react calmly and appropriately. If someone has gone through a traumatic event or even he has witnessed an accident, those memory can come before eyes if there memory is triggered anyhow. Someone is having any kind of psychological problem that is very unhealthy.

Mental health of professional drivers like buses and truck drivers become very crucial because their accidents unlike normal drivers are more destructible and dangerous. This poses a threat to passengers, pedestrians and other motorists.

Personality of professional drivers: Professional drivers like truck and bus drivers who drive large and heavy vehicles, who carries many lives at a time are responsible for their safety as well as to other vehicles on the roads, remember that road safety is a cohesive responsibility, specially when it comes to heavy vehicle drivers. we can imagine how fatal it could be when a heavy vehicle bangs. That's why this is considered as scary and devastating contributor in the number of deaths and the accidents. The personality of these professional drivers is very important aspect, their personality can very well affect their driving, and we cannot tolerate even a little mistake. If a frustrated and angry man gets this responsibility of driving, and while driving some disharmony occurred, there is a high chance that his personality traits could be triggered and any little wrong decision can cause a lot. Similarly low self control, egoistic personality, restlessness personality, risk tolerance, distraction susceptibility, and impulsive personality are definitely not healthy. If a driver has witnessed a trauma, this also could be very dangerous, consider while driving, if that driver come across something that eventually triggered his memory. He will totally lose his state of mind. Psychological disorders like Amnesia, DID(dissociative identity disorder), fugue Amnesia, psychotic personality are also very important aspect to extra cautious about . On the other hand if we see Indian Railways, where the loco pilot (drivers) are recruited after the mental and personality checked by psychologists to ensure the maximum safety to the passengers unlike in the road transport where the numbers are far more than railways.

Distraction: Distractions can come in many forms, visual distractions (taking your eyes off the road), how it happens, it could be internal and external visual distraction. Internal distractions includes, mind absence which means the mind is somewhere else, for an example, if a person had a bad day at office, then there is a chance of mind absence. Likewise any other past pleasant or unpleasant event can cause mind absence. In case of driving the presence of mind becomes most important and that's how accident can occur. External distraction are many in numbers, advertising boards or displays plays a role of an agent of distraction sometimes. Consider a male person sees an advertising board, that contains an image of a beautiful model, there is a chance, depending on his personality that he will react. Similarly there are other external distractions like phone texting, calling, etc.

when we listen to Music, it can elicit a range of emotions, including sadness, nostalgia, or melancholy. These emotions can activate different brain regions and neurotransmitters, including those involved in the processing of emotions and mood regulations. Research has shown that certain types of types music can modulate brain activity and neurotransmitter release. Sad music, in particular, has been found to activate brain areas associated with emotional processing, such as the amygdala and the prefrontal cortex. Further sad songs may evoke a sense of sadness or melancholy, they can also provide a cathartic experience for some individuals. These things ultimately may lead to distraction and bang happens.

Psychological effects:

Effects on victims: Its experiencing an accident can unleash a tempest of psychological effects upon its unsuspecting victims, the repercussions of which can be both profound and far reaching. Each delicate psyche is uniquely susceptible to the storm, with the intensity and manifestation of its impact dependent on a myriad of factors including the accidents nature, severity, the individual's resilience, and the availability of support systems. Within this complex tapestry of emotions, the following evocative hues emerge, painting a portrait of psychological aftermath:

- Post-traumatic stress disorder(PTSD): like a haunting ghost, the traumatising event often casts its shadow over the victim's mind, giving rise to the tormenting tendrils of PTSD. In the depths of this affliction, one may find themselves ensnared by relentless flashbacks, nightmares that pierce the evil of sleep, and intrusive thoughts that poison moments of respite. Anxiety, an unwelcome companion, coils tightly around the heart, and emotional distress surges forth whenever the accident's memory is evoked.
- 2. Anxiety and panic disorders: As the wreckage of the accident recedes, it can leave in its wake a landscape of anxious uneases and the spectre of panic. The once- stable foundations of the victim's existence crumble, replaced by a trembling

uncertainty. The mind becomes a battleground, where worries wage relentless skirmishes, restlessness reigns supreme, and irritability simmers beneath the surface. Concentration becomes an elusive mirage, and the very air seems thick with trepidations. In the most dire moments, panic descends like a tempest, with heart racing and breath stolen away in a frenzy of fear.

- 3. Depressions: In the aftermath of such harrowing events, a shadow of desolations can envelop the victim, plunging them into the abyss of depression. The vibrant tapestry of life loses its lustre and the once joyful hues fade into an ashen palette of sorrow. An insidious melancholy takes root, sapping vitality and replacing it with an oppressive weight of sadness. Appetite wanes, sleep becomes a restless dance with exhaustion, and even the simplest tasks become herculean endeavours. Concentrations falters, and a pervasive sense of emptiness permeates the very core of being.
- 4. Phobias and Avoidance Behaviour: The trauma inflicted by the accident can sow the seeds of irrationals fears and blooming into phobias that taint the victim's perception of the world. An innocent road becomes a sinister path, and the once familiar embrace of a vehicle becomes a vessel of terror. Avoidance becomes a coping mechanism, a desperate attempt to shield oneself from the spectre of past trauma. Places and situations that bear even the faintest resemblance to the accident become uncharted territory, to be skirted and sidestepped in a dance of evasion.
- 5. Survivor's Guilt: For those who emerge from the wreckage, the burden of survivorship can be an unwelcome weight upon their conscience. The tendrils of guilt and self blame twine around the soul, their grip unyielding. Why did they survive while others perished? In depths of their anguish, shame becomes a relentless companion, whispering accusations and casting dark shadows upon their fragile sense of self. Emotional turmoil swells, threatening to drown them in a sea of remorse.
- 6. Physical symptoms: The unseen scars of psychological trauma often find their voice through physical manifestations, echoing the torment within. Headaches besiege the mind, relentless in their assault, while chronic pain seizes the body like an unwelcome spectre. Gastrointestinal maladies twist and churn, mirroring the turmoil that rages within, and fatigue settles like a leaden shroud upon weary shoulders. These physical manifestations intertwine
- 7. Dissociative identity disorder(DID): Very few cases but this has happened where victims have developed dissociative disorder (multi personality disorder). Although the victims were earlier having some family history or prove to illness but in case of heavy injury on mind where the frontal lobe has been injured.

Effects on Family And Loved One's: experiencing an accident can unleash a torrent of emotional upheaval, not only for those directly involved but also for their cherished family members. The profound psychological effects that ripple through that lives of victim's families are multifaceted, capturing the intricacies of their relationships, their coping mechanisms, and the labyrinth of support systems at their disposal. Let us delve into depths of these psychological repercussions, painted with the strokes of intricate detail and adorned with tapestry of eloquent language.

- 1. Trauma and Post-traumatic stress disorder(PTSD): witnessing or receiving news of a loved one's accident can be a traumatic event for family members. They may develop symptoms of PTSD, such as intrusive thoughts, flashbacks, nightmares, anxiety, and heightened sensitivity to triggers related to the accident.
- 2. Shock and Denial: In the wake of such calamity, the family members find themselves marooned in a sea of bewildering disbelief. Their souls succumb to a tempest of shock, as if standing on a precipice overlooking an abyss of shattered realities. Denial becomes their unwitting ally, a fragile fortress shielding them from the overwhelming waves of emotions that threaten to consume their very beings.
- 3. Grief and Loss: Within the recesses of their wounded hearts, family members bear the weight of an irreplaceable loss. The tendrils of grief seep into their souls, intertwining with a tapestry of emotions—sadness, anger, guilt, and confusion. Like a

pendulum, their emotions swing, traversing the realms of denial, anger, bargaining, depression, and, eventually, begrudging acceptance.

- 4. Guilt and Self-Blame: Amidst the maelstrom of emotions, family members castigate themselves, searching for answers that only elude them. The whispers of guilt echo in the corridors of their minds, beckoning them to shoulder the burden of responsibility, even when their influence over the situation was but a thread in the tapestry of fate.
- 5. Anxiety and Fear: The very foundation of safety and security crumbles beneath their feet, leaving them awash in a sea of anxiety and trepidation. Fear, an unwelcome guest, takes up residence in their souls, its tendrils coiling around their thoughts. Hyper vigilant, they find themselves constantly scanning the horizon for signs of danger, their worries an unrelenting chorus that plays on repeat.
- 6. Depression and Emotional Distress: The weight of the accident bears down upon family members, forcing them to navigate the treacherous terrain of depression and emotional distress. The weight of hopelessness settles upon their weary shoulders, eclipsing the light of joy that once illuminated their lives. They become mere spectators, disenchanted from the activities that once brought solace to their hearts.
- 7. Relationship Strain: In the aftermath of tragedy, the foundations of familial bonds can tremble under the weight of emotional turmoil. Each family member embarks on their own odyssey of coping, navigating the labyrinthine corridors of grief in their unique way. The dissonance of individual journeys may give rise to conflicts, misunderstandings, or even the erosion of communication, straining the delicate threads that weave them together.
- 8. Social Isolation: Bereft of solace and struggling to reconcile their altered reality, family members may retreat into solitude, seeking solace within their own cloistered worlds. The chasm between their experiences and those untouched by such profound loss widens, making it arduous to relate to friends and acquaintances who remain uninitiated in the crucible of grief.
- 9. Financial and Practical Concerns: As the dust of the accident settles, practical concerns descend like a tempest, casting dark shadows on the horizon. The weight of medical expenses, funeral costs, and the loss of income becomes a tempestuous burden that heightens the stress and anxiety already coursing through the veins of family members. They grapple with the intricacies of these practical challenges, struggling to navigate a world suddenly awash with fiscal strains.

Future suggestion: Road transport is one of the largest transport system, as well as largest contributor in accidents, and still this is most handed authority, it seems like no one has ever thought about it, there is no particular system, organisation. This sector has majorly given to the privet sector and they are running on their own, there is no particular discipline only there is nominal control. Unlike Indian railways on the other hand. There are biggest loop holes in this sector.

- There should be proper control and coordination and supervision over the private sector of road transport, as this sector is managing the biggest share of this area. These should be proper check and balance and followed by a particular system, private players are having very free hand despite the presence of RTA, that is majorly because no one taking this sector seriously, unlike railways and as a result there is very less number of accidents than road transport.
- 2. The RTA should be including several psychological test for drivers. As we have talked in this whole paper about how psychological aspect is very crucial. Several psychological test to check reaction time, personality, behaviour and many more should be done before licensing. Furthermore there should be yearly psychological test to check mental wellbeing for professional drivers and for non-professionals at least at the time of reissuing of licence.

- 3. There should be a psychological team who asses professional drivers when they need, if they are not mentally healthy at this case they should be presented over them to asses.
- 4. The number of research on road accidents or about public transportation (road) is very limited in India. Research numbers should be increasing.
- 5. Awareness among people of this psychological perspective is very low, although government is doing many campaigns on road safety. These things should also be included to get the maximum results.

Conclusion:

Till now we could have easily observed and felt the devastating effects of road accidents and its consequences, as I used a word' felt 'but in reality we cannot feel effects unless this Owen things don't happen with us, so it does become very important, as we have analysed in this article, we need awareness about, we have to put thoughts, get lessons from the past Owen accidents and their effects, we ourself are responsible and answerable for such accidents as we have mentioned about the various factors behind these horrifying accidents, so even after so much of technology we were ignorant about this perspective, now we have tried to put these things on the board.

[1].speeding and stress: THE IMPACT OF TRAFFIC SPEEDS ON DRIVERS AFFECTIVE RESPONSES...JOURNAL OF ENVIRONMENTAL PSYCHOLOGY. <u>https://www.sciencedirect.com/science/article/abs/pii/S0272494415000167</u>

[2]. NIDA. 2021, August 3. Preface. Retrieved from behavior-science-addiction/preface on 2023, April 26

[3].insurance institute for highway safety (IIHS).(2021).older drivers. https://.iihs.org/topics/olderdrivers.

[4]. The effectiveness of a family based intervention to improve road safety among young drivers : A cluster randomised controlled trial. "Authors : Al Saleh , M., KSA-JDC (Kingdom of Saudi Arabia - Japan Driving center) Research Team. Journal of injury control and safety promotion (2019). https://www.tandfonline.com/doi/full/10.1080/17457300.2018.1541001

[5]. NAMI.(2021). Mental health and safe driving Retrieved from <u>https://www.nami.org/about-Mental-Illness/common-with-</u> <u>Mental-Illness/Mental-Health-and-safe-driving</u>

[6]. Chang, C.-F., Wang, Y.-C., & Liang, C.-S(2020). Risk of Traffic accidents in adult with attention-deficit/hyperactivity disorder. https://doi.org/10.1001/jamanetworkopen.2020.5930