STATISTICAL ANALYSIS OF DRIVING IMPATIENCE AMONG VEHICLE DRIVERS: A CASE STUDY

**Muhammad Ahmed Kalwar**

Post Graduate Alumini (MUET) & Assistant Manager Production

Shafi Private Limited, Lahore, Punjab, Pakistan

\*kalwara.muhammad.ahmed@gmail.com

**Shakeel Ahmed Shaikh**

Associate Professor & Co-director (Post Graduate Studies)

Department of Industrial Engineering & Management

Mehran UET, Jamshoro, 76062, Sindh, Pakistan

**Muhammad Ali Khan**

Post Graduate Student & Assistant Professor

Department of Industrial Engineering & Management

Mehran UET, Jamshoro, 76062,Sindh, Pakistan

# ABSTRACT

Purpose: To put the clear and broader picture of driving impatience across the various considered demographics.

Methodology: In the present cross sectional research, the research area was Mehran University of engineering and technology, Jamshoro. 140 valid responses were collected from the location by using the questionnaire of Dr. Larson. The questionnaire was based on five sections i.e. demographics (gender, age and driving experience), driving anger, driving impatience, competing while driving and punishing while driving. In scope of the present paper, driving impatience was included and rest of the factors would be covered in the upcoming papers. The data was analyzed in the statistical package for social sciences (SPSS) version 22. Frequency distribution and mean+SD were used for the analysis across all the demographic characteristics.

Findings:The male drivers from the age group of (18-22) years were found to be more impatient and at the same time, female drivers from the same age group were also found to be the same. Moreover, with increasing experience, female drivers were observed to be more impatient because the females from the driving experience group i.e. (11-15) were found to be the most impatient among all the respondents.

Importance: Research evidence from the literature indicates that driving anger is closely associated with driving impatience thus, it was necessary to analyze the driving impatience so that the useful conclusion could be drawn for the greater good of the society.

Implications: Data for the present research paper was collected at the university level and it was collected at the canteens from students and at offices from the teachers but if the data is collected instantly after the drivers drive off through the traffic; it would be helpful in recording the more accurate response than it was collected for the present research. The more accurate data will yield the more accurate results.

Limitations: More demographic characteristics were not included in the present research and the sample size was also smaller. Both points are considered to be the major limitations of the present research.

# INTRODUCTION

It is a common phenomenon largely observed among drivers to drive aggressively nowadays (Mizell 1997). The common elements observed among drivers entails impatience, hostility and grave anguish and to save time which are deliberated, and aptly to increment the chances of collision Tescan (Gilbert and Orlans 2011) or deliberately ill-intention(AAA Foundation for Traffic Safey 2009). It is likely underscored as a Road rage(Paleti, Eluru, and Bhat 2010), (Kalwar, Khan, et al. 2020), (Wan et al. 2019). It may be cogitated to get an edge over compatible drivers, and subsequently, it may surge chances of violations while exceeding the traffic required speed(Goodwin et al. 2013). This attitude on ground increment chances of mental and physical injury to the driver and the rest of the involved human beings (Grey, Triggs, and Haworth 1989). Aggressive is detriment and far more dangerous problem as compare to traffic jam. Driving with aggression can inflict injury that could be physical and emotional to masses as defined by Daula, C.S. (Dula and Geller 2003).At the large extent, it could be apt result of frustration (Lajunen and Parker 2001), (Abou-Zeid, Kaysi, and Al-naghi 2011), which may not be considered in every situation, but aggressive driving behaviour is suggested by that (Berkowitz 1989). One of the main aspect is personality reported as an outstanding reason liable of driving aggressively(AAA Foundation for Traffic Safey 2009). The fundamental reasons behind the expression of aggression in a research was reported as : i.e. anger, speeding tailgating and includes safety on road negatively(SWOV Institute for Road Safety Research 2012). Any injury, damage of property and more importantly mortality could be result of driving aggressively (Dula and Geller 2003). During past few years, aggressive driving was underscored by people(Deffenbacher et al. 2002). Anger and impatience can inflict aggressive driving(Khaskheli et al. 2018); Furthermore, an offender driven by anger may hurt masses(Abou-Zeid et al. 2011), (SWOV Institute for Road Safety Research 2012), (Deffenbacher et al. 2003), (Schafer 2015). Driving with anger is come upon behind the wheel(Chakrabarty and Riku 2013). Another element of aggression is expressed or reflected in stuffy traffic(A. Hennessy and L Wiesenthal 1999). When anonymity, congestion and hostile gestures are confronted with- driving angrily is expressed(Deffenbacher et al. 2003).Compatible drivers is another fundamental factor linked up with aggressive driving and it is connected to violations of traffic(Dula and Geller 2003). The significant cause of accidents is punishing behaviour of drivers , and followed by tailgating practice and drivers getting angry with each other react to responses directed by any on road(Chakrabarty and Riku 2013). Anger and aggressiveness are connected with physical health, traffic violations and accidents(Deffenbacher et al. 2000), (Novaco et al. 1979). During a simulation based experimental research where drivers were given with ambiance to driver and resulted that judgement, perception and the control of impulse gets damaged by the aggressive driving (Schafer 2015).Other factors associated with aggressive driving behaviour are reported in literature. “*belief that one holds better driving skills*”, “*being young*”, “*traffic congestion, but only if drivers do not expect it*” etc. (Chakrabarty and Riku 2013). This research is conducted to analyse the driving impatienceof the drivers of Mehran UET, Jamshoro. This research encompasses the influence of demographics on the driving impatience of participants.

# LITERATURE REVIEW

Anger is harmful socially, physically and psychologically (Montoro et al. 2018), (Priyanka and Tigga 2015). Road rage was indicated as the cause of frustration and which was reported to be expressed (verbal/nonverbal) in the form of driving anger (Cayanus, Martin, and Weber 2005). Underwood et al investigated the factor having an impact on driving anger and at the same time, the consequences of driving anger were also highlighted; in this regard, drivers were asked to keep dairies to write the happening accidents and events of expression of anger feelings; and the dairies of 100 drivers were analyzed and 293 and 383 accidents and events of expression of anger feelings were reported respectively; for most of the cases, traffic congestion was heighted as the cause of expression of anger (Underwood et al. 1999). Zang et al., 2019 conducted a research in which they investigated the relationship of driving anger and aberrant driving behavior with the risk of crash by testing and suggesting one mediated model. The impact of driving anger on the crash on the road was mediated by aberrant behaviors of driving. As an alternative to the overall scale scores, driving anger`s subscales and aberrant behaviors of driving were used for the development of mediated model. Model validity was tested by using the online questionnaire consisted on variables of driving anger, aberrant driving and history of road crashes. The study was based on the 1974 responses of drivers of china. Results indicated the impact of driving anger fully mediated by aberrant behaviors on the risk of road crash. The results were useful to develop the countermeasures for the reduction of crashes of road traffic in China (Zhang et al. 2019). Useche et al., 2019 conducted their research in which they worked on the analysis of driving styles and trait driving anger among the professional drivers of Colombia. Driving anger scale (DAS-14) and Spanish version of multi-dimensional driving style inventory (MDSI) were used in the research based on 492 bus and taxi drivers of the city. Results of linear regression analysis indicated 3 factors of DAS-14 i.e. illegal driving, impeded progress by others and direct hostility by which the adaptive and maladaptive driving styles could be significantly predicted. DAS-14 was proved to be the reliable measurement tool for traits of driving anger in professional drivers (Useche et al. 2019). Saikalis et al., 2020 used electromyography (EMG) for the measurement of driving anger by using driving simulator while completing a navigation task. Traffic events (frustrating events) were used for the induction of anger in participants and at the same time, there was the pressure of time during which they had to follow the directions of navigation. Subjective self-report, facial EMG and DAS was used for the assessment of driving anger of participants. Higher facial EMG values of activation and subjective anger feelings were indicated by the results when participants experience frustrating events (Saikalis et al. 2020). Kalwar et al., 2020 carried out their research on 140 drivers (students and teachers) of Mehran University, Jamshoro. They analyzed the relationship among driving anger, driving impatience, driving competing and punishing while driving by using Pearson correlation. They also developed 16 hypothesis which were tested by using T-test and one way ANOVA. Results indicated that driving anger, impatience, competing and punishing were found to the same across age, gender, driving experience and academic status. Moreover, positive (significant) correlation was found in among driving impatience and driving anger, competing and punishing (Kalwar, Khan, et al. 2020). Industries need to innovate their processes and machines on the advent of new technology in the market especially when there is the matter of line performance, cost and process efficienc (Kalwar and Khan 2020a, 2020b). Popusoi and Holman, 2016 examined the strategy of regulation of habitual emotion on the association between in the aggressive tendency and driving anger. This study was based on 114 drivers of Romania. Significant association among expressive suppression, cognitive reappraisal, experimental avoidance, aggression and driving anger was found. Restrain impact of expressive was found on the association between aggressive tendency and driving anger and it was suggested that those drivers who overturn their emotions habitually incline to respond in higher aggressive manner when they are in the prone to experience higher levels of driving anger (Oi and Holman 2016). Queue is the common occurrence in daily life (Kalwar et al. 2018; Kalwar, Mari, et al. 2020; Khaskheli et al. 2020). Priyanka and Tigga, 2015 analyzed the relationship between driving anger and mindfulness in young adults. The sample size was 100 (50 from boys and girls each); the participants were in between the age of 18-25 years. Driving anger scale and mindful attention awareness scale were used for the data collection. After the analysis of results it was revealed that driving anger was influenced by the mindfulness: moreover, impact of mindfulness on the driving anger was also reported in the context of gender (Priyanka and Tigga 2015).

# RESEARCH GAP

Driving Impatience is the rare topic in the available literature; most of the researchers have conducted their research and published papers on the subject of aggressive driving or driving aggressiveness. In contrast, this paper presents the detailed analysis of driving impatience across gender, age and driving experience. The contribution of present research cannot be ignored because it provides the empirical evidence (from the students and teachers of the MUET, Jamshoro) on the subject.

# RESEARCH METHODOLOGY

This cross sectional research was conducted at Mehran University of Engineering and Technology, Jamshoro, Pakistan. Procedures for the data collection and analysis are discussed in detailed in below given headings.

## Data Collection

In a cross sectional research, there is the need of research instrument and respondents who get their responses recorded in the form of data sample. In order to fulfil the first need, research instrument i.e. questionnaire from Dr. Larson was adopted. For the measurement of thoughts of the people about the given closed ended questions in the questionnaire were measured with help of four point likert scale. Likert scale was especially designed for the measurement of thoughts of the people (Rensis 1932). It was consisted on five sections i.e. demographics (gender, age and driving experience), driving anger, driving impatience, competing while driving and punishing while driving; last four sections were based on eight questions each. In the present paper, only driving impatience of drivers was analyzed and rest of the factors would be separately discussed in detail in separate papers. For the second need, the printed questionnaires (200) were distribution among the students and teachers of the mentioned university. 160 filled questionnaires were obtained back and 20 of the filled were found to be invalid thus discarded from the analysis.

## Data Analysis

After collection of hard copies of filled questionnaire, the responses of the participants were put into the statistical package for social sciences (SPSS) version 22. The data analysis included the detailed frequency distribution of responses of the respondents against each of the question; and at the same time, frequency distribution of those responses was also compared across various demographic characteristics (gender, age and driving experience) of the participants. As discussed by ManiKandan that frequency distribution table presents the different categories and recorded observation against it (ManiKandan 2011). Moreover, individual mean+SD of the variables and their comparison across various demographics was also conducted.

# RESULTS

Result of the present paper is split into two sections i.e. frequency distribution of variables and their mean+SD which can be seen in the below given headings.

## Frequency Distribution of Variables

At the very first step of the analysis, simple frequency distribution of all the variables across various given option was taken out along with their mean+SD (see table 1). This table presents the detailed responses against each of the question.

Table 1: Frequency distribution, meanand standard deviation of various variables of driving impatience

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **1n (%)** | **2n (%)** | **3n (%)** | **4n (%)** | **Total****n(%)** | **Mean + SD** |
| I feel impatient waiting for passengers to get in | 40(28.57%) | 59(42.14%) | 33(23.57%) | 8(5.71%) | 140(100%) | 2.26+0.97 |
| I am so impatient, won’t let car engine warm up | 35(25.00%) | 52(37.14%) | 35(25.00%) | 18(12.86%) | 140(100%) | 2.21+0.88 |
| I feel impatient at stoplights | 32(22.86%) | 56(40.00%) | 42(30.00%) | 10(7.14%) | 140(100%) | 2.57+1.04 |
| I feel impatient waiting in lines (car wash, bank, parking space) | 24(17.14%) | 46(32.86%) | 36(25.71%) | 34(24.29%) | 140(100%) | 2.31+0.95 |
| I as passenger, impatient with driver | 32(22.86%) | 49(35.00%) | 43(30.71%) | 16(11.43%) | 140(100%) | 2.44+0.94 |
| I feel impatient when car ahead slows down | 22(15.71%) | 57(40.71%) | 38(27.14%) | 23(16.43%) | 140(100%) | 2.39+0.93 |
| I feel impatient driving in far right, slow lane | 26(18.57%) | 52(37.14%) | 44(31.43%) | 18(12.86%) | 140(100%) | 2.29+1.04 |
| I feel impatient with pedestrians crossing street | 36(25.71%) | 52(37.14%) | 27(19.29%) | 25(17.86%) | 140(100%) | 2.26+0.97 |

The greater value of mean+SD (2.57+1.04) was calculated for third question i.e. ‘I feel impatient at spotlights’ and 42 of the respondents have recorded their response as ‘3= agree’ as can be seen in the table 1.

## Mean and Standard Deviation of Various Variables of Driving Impatience

Under this heading, mean+SD of the various variables of driving impatience was calculated across demographics i.e. gender, age and driving experience.

### Gender and Variables of Driving Impatience

At the very first, the average response (mean+SD) of the participants against all the variables across the gender was calculated under the present heading. Table 2 shows the mean+SD of all the variables in the context of gender was calculated (see table 2).

Table 2: mean and standard deviation of various variables of driving impatience in the Light of Gender

|  |  |
| --- | --- |
| **Variable** | **Mean + SD** |
| **Male** | **Female** |
| I feel impatient waiting for passengers to get in | 2.04+0.82 | 2.17+1.04 |
| I am so impatient, won’t let car engine warm up | 2.18+0.95 | 2.55+1.06 |
| I feel impatient at stoplights | 2.20+0.88 | 2.28+0.88 |
| I feel impatient waiting in lines (car wash, bank, parking space) | 2.54+1.05 | 2.69+1.00 |
| I as passenger, impatient with driver | 2.32+0.92 | 2.28+1.07 |
| I feel impatient when car ahead slows down | 2.37+0.94 | 2.72+0.92 |
| I feel impatient driving in far right, slow lane | 2.41+0.89 | 2.31+1.11 |
| I feel impatient with pedestrians crossing street | 2.33+1.06 | 2.14+0.99 |

A look at the table 2 indicates that the response of male participants was greatest for the variable i.e. ‘I feel impatient waiting in lines’ (2.54+1.05) and at the same time, response of female respondents for the variable i.e. ‘I feel impatient when car ahead slows down’ (2.72+0.92) was greatest.

### Age and Variables of Driving Impatience

Participants belonged to four different age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+). In table 3, mean+SD of the various variables is presented across all the age groups of the participants (see table 3).

Table 3: mean and standard deviation of various variables of driving impatience in the Light of Age Groups

|  |  |
| --- | --- |
| **Variable** | **Mean + SD of Age Groups (Years)** |
| **(18-22)** | **(23-27)** | **(28-32)** | **(33-37)** | **(38-42+)** |
| I feel impatient waiting for passengers to get in | 2.05+0.91 | 1.97+0.67 | 2.13+1.06 | 1.75+0.96 | 2.71+0.49 |
| I am so impatient, won’t let car engine warm up | 2.29+1.03 | 2.09+0.87 | 2.60+0.91 | 1.50+1.00 | 2.43+0.79 |
| I feel impatient at stoplights | 2.16+0.92 | 2.21+0.73 | 2.47+0.92 | 1.75+0.96 | 2.57+0.98 |
| I feel impatient waiting in lines (car wash, bank, parking space) | 2.75+1.05 | 2.29+1.03 | 2.73+0.96 | 1.50+0.58 | 2.14+0.69 |
| I as passenger, impatient with driver | 2.43+0.92 | 2.06+0.95 | 2.47+0.99 | 1.25+0.50 | 2.43+0.98 |
| I feel impatient when car ahead slows down | 2.55+1.01 | 2.44+0.89 | 2.27+0.80 | 1.50+0.58 | 2.14+0.69 |
| I feel impatient driving in far right, slow lane | 2.48+0.91 | 2.21+0.91 | 2.47+1.13 | 1.50+0.58 | 2.57+0.79 |
| I feel impatient with pedestrians crossing street | 2.39+1.01 | 2.06+1.10 | 2.67+1.11 | 1.25+0.50 | 2.14+0.69 |

Participants from the first age group i.e. (18-22) came up with the greater response (2.75+1.05) on the question i.e. ‘I feel impatient waiting in lines’; from the second age group i.e. (23-27) the greater response (2.44+0.89) was on the question i.e. ‘I feel impatient when car ahead slows down’; the greater response of third age group i.e. (28-32) was recorded to be greater on the question i.e. ‘I feel impatient waiting in lines’; the greater response (1.75+0.96) of the fourth group i.e. (33-37) was recorded on the two questions i.e. ‘I feel impatient waiting for passengers to get in’ and ‘I feel impatient at stoplights’; similarly, from the fifth group i.e. (38-42+), the greater response (2.71+0.49) was recorded on the question i.e. ‘I feel impatient waiting for passengers to get in’.

### Driving Experience and Variables of Driving Impatience

Under this heading, the mean+SD of various variables of driving impatience is presented across driving experience. There were three driving experience groups of participants as shown in the table 4 below.

Table 4: mean and standard deviation of various variables of driving impatience in the Light of Driving Experience Groups

|  |  |
| --- | --- |
| **Variable** | **Mean + SD of Driving Experience (Years)** |
| **(1-5)** | **(6-10)** | **(11-15)** |
| I feel impatient waiting for passengers to get in | 2.06+0.90 | 2.16+0.82 | 1.57+0.53 |
| I am so impatient, won’t let car engine warm up | 2.32+0.94 | 2.08+1.05 | 2.43+1.13 |
| I feel impatient at stoplights | 2.23+0.82 | 2.16+1.05 | 2.29+0.76 |
| I feel impatient waiting in lines (car wash, bank, parking space) | 2.69+0.99 | 2.21+1.09 | 2.86+1.07 |
| I as passenger, impatient with driver | 2.35+0.94 | 2.13+0.93 | 2.71+1.11 |
| I feel impatient when car ahead slows down | 2.49+0.92 | 2.37+1.02 | 2.14+0.90 |
| I feel impatient driving in far right, slow lane | 2.39+0.85 | 2.24+1.02 | 3.14+1.21 |
| I feel impatient with pedestrians crossing street | 2.32+0.98 | 2.13+1.14 | 2.86+1.21 |

The participants from the first driving experience group i.e. (1-5) years recorded the greater average response (2.69+0.99) for the question i.e. ‘I feel impatient waiting in lines (car wash, bank, parking space)’ and respondents from the second group i.e. (6-10) years, came up with greater mean response (2.37+1.02) against the question i.e. ‘I feel impatient when car ahead slows down’ and the last group i.e. (11-15) years, responded the greater average response (2.86+1.21) against the last question i.e. ‘I feel impatient with pedestrians crossing street’.

## Detailed Analysis of Driving Impatience across Various Demographic Characteristics

Under this heading, each variable of driving impatience was analyzed in detail across all of the demographic characteristics; so that precise conclusions can be drawn from this research.

### Q1. I feel impatient waiting for passengers to get in the vehicle across gender and age

As mentioned earlier, the analysis of various variables of driving impatience is presented across various demographics in detail in the below given headings. In table 5, the analysis of one of the variable (Q1. I feel impatient waiting for passengers to get in the vehicle) of driving impatience is presented across two demographics (i.e. gender and age). The analysis of the responses of the respondents included the frequency distribution various responses given by the participants and at the same time, mean and standard deviation of response of participants were also calculated.

Table 5: Frequency distribution, mean and standard deviation of Q1. In the light of demographics i.e. age and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (Years)** | **I feel impatient waiting for passengers to get in the vehicle** | **Total****n (%)** | **Mean + SD** |
| **1****n(%)** | **2****n(%)** | **3****n(%)** | **4****n(%)** |
| Female | (18-22) | 4 (2.86%) | 7 (5.00%) | 5 (3.57%) | 3 (2.14%) | 19 (13.57%) | 2.37 + 1.01 |
| (23-27) | 4 (2.86%) | 3 (2.14%) | - | 1 (0.71%) | 8 (5.71%) | 1.75 + 1.04 |
| (28-32) | - | - | 1 (0.71%) | - | 1 (0.71%) |  |
| (33-37) | 1 (0.71%) | - | - | - | 1 (0.71%) |  |
| (38-42+) | - | - | - | - | - |  |
| Total n(%) | 9 (6.43%) | 10 (7.14%) | 6 (4.29%) | 4 (2.86%) | 29 (20.71%) |  |
| Male | (18-22) | 22 (15.71%) | 22 (15.71%) | 15 (10.71%) | 2 (1.43%) | 61 (43.57%) | 1.95 + 0.86 |
| (23-27) | 3 (2.14%) | 19 (13.57%) | 4 (2.86%) | - | 26 (18.57%) | 2.04 + 0.53 |
| (28-32) | 5 (3.57%) | 5 (3.57%) | 2 (1.43%) | 2 (1.43%) | 14 (10.00%) | 2.07 + 1.07 |
| (33-37) | 1 (0.71%) | 1 (0.71%) | 1 (0.71%) | - | 3 (2.14%) | 2.00 + 1.00 |
| (38-42+) | - | 2 (1.43%) | 5 (3.57%) | - | 7 (5.00%) | 2.71 + 0.49 |
| Totaln(%) | 31 (22.14%) | 49 (35.00%) | 27 (19.29%) | 4 (2.86%) | 111 (79.29%) |  |

Results indicated that the average response of age group (18-22) from female respondents was computed to be 2.37+1.01, whereas, the average response from the age group of (23-27) was 1.75+1.04. Furthermore, frequency distribution of the responses of female participants indicates that 9(6.43%) gave the response of ‘1=strongly disagree’, 10(7.14%) of them came up with the response of ‘2=disagree’, 6(4.29%) female drivers responded ‘3=agree’ and 4(2.86%) participants wrote ‘4=strongly agree’. A look at the table 5 shows that the average response from the male respondents of various groups against same question was different. Average response of age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+) was taken out to be 1.95+0.86, 2.04+0.53, 2.07+1.07, 2.00+1.00 and 2.71+0.49 respectively. Moreover, frequency distribution (n (%)) of the responses of male participants indicated that 31(22.14%) male participants selected the first option i.e. ‘1=strongly disagree’, 49(35.00%) chose second option i.e. ‘2=disagree’, 27(19.29%) of them responded with third option i.e. ‘3=agree’ and 4(2.86%) of them selected fourth option i.e. ‘4=strongly agree’ (see table 5).

### Q1. I feel impatient waiting for passengers to get in the vehicle across gender and driving experience

Since there were three demographic characteristics i.e. gender age and driving experience. The detailed analysis of same question was presented in the context of gender and age in previous heading. Under this heading, the detailed frequency distribution and mean+SD of the responses of participants against Q1. I feel impatient waiting for passengers to get in the vehicle are presented in table 6 given below.

Table 6: Frequency distribution, mean and standard deviation of Q1. In the light of demographics i.e. driving experience and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Driving Experience (Years)** | **I feel impatient waiting for passengers to get in** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (1-5) | 6 (4.29%) | 7 (5.00%) | 6 (4.29%) | 4 (2.86%) | 23 (16.43%) | 2.35 + 1.07 |
| (6-10) | 1 (0.71%) | 3 (2.14%) | - | - | 4 (2.86%) | 1.75 + 0.50 |
| (11-15) | 2 (1.43%) | - | - | - | 2 (1.43%) | 1.00 + 0.00 |
| Total n (%) | 9 (6.43%) | 10 (7.14%) | 6 (4.29%) | 4 (2.86%) | 29 (20.71%) |  |
| Male | (1-5) | 23 (16.43%) | 30 (21.43%) | 17 (12.14%) | 2 (1.43%) | 72 (51.43%) | 1.97 + 0.82 |
| (6-10) | 7 (5.00%) | 15 (10.71%) | 10 (7.14%) | 2 (1.43%) | 34 (24.29%) | 2.21 + 0.84 |
| (11-15) | 1 (0.71%) | 4 (2.86%) | - | - | 5 (3.57%) | 1.80 + 0.45 |
| Total n (%) | 31 (22.14%) | 49 (35.00%) | 27 (19.29%) | 4 (2.86%) | 111 (79.29%) |  |

A look at the response of female participants indicates that from the driving experience group of (1-5), (6-10) and (11-15), mean response of participants was computed to be 2.35+1.07, 1.75+0.50 and 1.00+0.00 respectively. Furthermore, after analyzing the responses of male participants it was indicated that the average responses form the various driving experience groups i.e. (1-5), (6-10) and (11-15) came out to be 1.97+0.82, 2.21+0.84 and 1.80+0.45 respectively as can be seen in the table 6.

### Q2. I am so impatient, won’t let car engine warm up across gender and age

As mentioned earlier, the analysis of various variables of driving impatience is presented across various demographics in detail in the below given headings. In table 7, the analysis of one of the variable (Q2. I am so impatient, won’t let car engine warm up) of driving impatience is presented across two demographics (i.e. gender and age). The analysis of the responses of the respondents included the frequency distribution various responses given by the participants and at the same time, mean and standard deviation of response of participants were also calculated.

Table 7: Frequency distribution, mean and standard deviation of Q2. In the light of demographics i.e. age and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (Years)** | **I am so impatient, won’t let car engine warm up** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (18-22) | 2 (1.43%) | 7 (5.00%) | 5 (3.57%) | 5 (3.57%) | 19 (13.57%) | 2.68 + 1.00 |
| (23-27) | 2 (1.43%) | 3 (2.14%) | 1 (0.71%) | 2 (1.43%) | 8 (5.71%) | 2.38 + 1.19 |
| (28-32) | - | - | 1 (0.71%) | - | 1 (0.71%) |  |
| (33-37) | 1 (0.71%) | - | - | - | 1 (0.71%) |  |
| (38-42+) | - | - | - | - | - |  |
| Total n (%) | 5 (3.57%) | 10 (7.14%) | 7 (5.00%) | 7 (5.00%) | 29 (20.71%) |  |
| Male | (18-22) | 18 (12.86%) | 24 (17.14%) | 10 (7.14%) | 9 (6.43%) | 61 (43.57%) | 2.16 + 1.02 |
| (23-27) | 7 (5.00%) | 12 (8.57%) | 7 (5.00%) | - | 26 (18.57%) | 2.00 + 0.75 |
| (28-32) | 2 (1.43%) | 4 (2.86%) | 6 (4.29%) | 2 (1.43%) | 14 (10.00%) | 2.57 + 0.94 |
| (33-37) | 2 (1.43%) | - | 1 (0.71%) | - | 3 (2.14%) | 1.67 + 1.15 |
| (38-42+) | 1 (0.71%) | 2 (1.43%) | 4 (2.86%) | - | 7 (5.00%) | 2.43 + 0.79 |
| Total n (%) | 30 (21.43%) | 42 (30.00%) | 28 (20.00%) | 11 (7.86%) | 111 (79.29%) |  |

Results indicated that the average response of age group (18-22) from female respondents was computed to be 2.68+1.00, whereas, the average response from the age group of (23-27) was 2.38+1.19. Furthermore, frequency distribution of the responses of female participants indicates that 9(6.43%) gave the response of ‘1=strongly disagree’, 5(3.57%) of them came up with the response of ‘2=disagree’, 10(7.14%) female drivers responded ‘3=agree’ and 7(5%) participants wrote ‘4=strongly agree’. A look at the table 7 shows that the average response from the male respondents of various groups against same question was different. Average response of age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+) was taken out to be 2.16+1.02, 2.00+0.75, 2.57+0.94, 1.67+1.15 and 2.43+0.79 respectively. Moreover, frequency distribution (n (%)) of the responses of male participants indicated that 30(21.45%) male participants selected the first option i.e. ‘1=strongly disagree’, 42(30.00%) chose second option i.e. ‘2=disagree’, 28(20%) of them responded with third option i.e. ‘3=agree’ and 11(7.86%) of them selected fourth option i.e. ‘4=strongly agree’ (see table 7).

### Q2. I am so impatient, won’t let car engine warm up across gender and driving experience

Since there were three demographic characteristics i.e. gender age and driving experience. The detailed analysis of same question was presented in the context of gender and age in previous heading. Under this heading, the detailed frequency distribution and mean+SD of the responses of participants against Q2. I am so impatient, won’t let car engine warm up are presented in table 8 given below.

Table 8: Frequency distribution, mean and standard deviation of Q2. In the light of demographics i.e. driving experience and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Driving Experience (Years)** | **I am so impatient, won’t let car engine warm up** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (1-5) | 5 (3.57%) | 7 (5.00%) | 6 (4.29%) | 5 (3.57%) | 23 (16.43%) | 2.48 + 1.08 |
| (6-10) | - | 2 (1.43%) | 1 (0.71%) | 1 (0.71%) | 4 (2.86%) | 2.75 + 0.96 |
| (11-15) | - | 1 (0.71%) | - | 1 (0.71%) | 2 (1.43%) | 3.00 + 1.41 |
| Total n (%) | 5 (3.57%) | 10 (7.14%) | 7 (5.00%) | 7 (5.00%) | 29 (20.71%) |  |
| Male | (1-5) | 14 (10.00%) | 32 (22.86%) | 19 (13.57%) | 7 (5.00%) | 72 (51.43%) | 2.26 + 0.89 |
| (6-10) | 14 (10.00%) | 10 (7.14%) | 6 (4.29%) | 4 (2.86%) | 34 (24.29%) | 2.00 + 1.04 |
| (11-15) | 2 (1.43%) | - | 3 (2.14%) | - | 5 (3.57%) | 2.20 + 1.10 |
| Total n (%) | 30 (21.43%) | 42 (30.00%) | 28 (20.00%) | 11 (7.86%) | 111 (79.29%) |  |

A look at the response of female participants indicates that from the driving experience group of (1-5), (6-10) and (11-15), mean response of participants was computed to be 2.48+1.08, 2.75+0.96 and 3.00+1.41 respectively. Furthermore, after analyzing the responses of male participants it was indicated that the average responses form the various driving experience groups i.e. (1-5), (6-10) and (11-15) came out to be 2.26+0.89, 2.00+1.04 and 2.20+1.10 respectively as can be seen in the table 8.

### Q3. I feel impatient at stoplights across gender and age

As mentioned earlier, the analysis of various variables of driving impatience is presented across various demographics in detail in the below given headings. In table 9, the analysis of one of the variable (Q3. I feel impatient at stoplights) of driving impatience is presented across two demographics (i.e. gender and age). The analysis of the responses of the respondents included the frequency distribution various responses given by the participants and at the same time, mean and standard deviation of response of participants were also calculated.

Table 9: Frequency distribution, mean and standard deviation of Q3. In the light of demographics i.e. age and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (Years)** | **I feel impatient at stoplights** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (18-22) | 4 (2.86%) | 5 (3.57%) | 9 (6.43%) | 1 (0.71%) | 19 (13.57%) | 2.37 + 0.90 |
| (23-27) | 2 (1.43%) | 3 (2.14%) | 3 (2.14%) | - | 8 (5.71%) | 2.13 + 0.83 |
| (28-32) | - | - | 1 (0.71%) | - | 1 (0.71%) |  |
| (33-37) | 1 (0.71%) | - | - | - | 1 (0.71%) |  |
| (38-42+) | - | - | - | - | - |  |
| Total n (%) | 7 (5.00%) | 8 (5.71%) | 13 (9.29%) | 1 (0.71%) | 29 (20.71%) |  |
| Male | (18-22) | 17 (12.14%) | 27 (19.29%) | 11 (7.86%) | 6 (4.29%) | 61 (43.57%) | 2.10 + 0.93 |
| (23-27) | 4 (2.86%) | 12 (8.57%) | 10 (7.14%) | - | 26 (18.57%) | 2.23 + 0.71 |
| (28-32) | 2 (1.43%) | 6 (4.29%) | 4 (2.86%) | 2 (1.43%) | 14 (10.00%) | 2.43 + 0.94 |
| (33-37) | 1 (0.71%) | 1 (0.71%) | 1 (0.71%) | - | 3 (2.14%) | 2.00 + 1.00 |
| (38-42+) | 1 (0.71%) | 2 (1.43%) | 3 (2.14%) | 1 (0.71%) | 7 (5.00%) | 2.57 + 0.98 |
| Total n (%) | 25 (17.86%) | 48 (34.29%) | 29 (20.71%) | 9 (6.43%) | 111 (79.29%) |  |

Results indicated that the average response of age group (18-22) from female respondents was computed to be 2.37+0.90, whereas, the average response from the age group of (23-27) was 2.13+0.83. Furthermore, frequency distribution of the responses of female participants indicates that 7(5%) gave the response of ‘1=strongly disagree’, 8(5.71%) of them came up with the response of ‘2=disagree’, 13(9.29%) female drivers responded ‘3=agree’ and 1(0.71%) participants wrote ‘4=strongly agree’. A look at the table 9 shows that the average response from the male respondents of various groups against same question was different. Average response of age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+) was taken out to be 2.10+0.93, 2.23+0.71, 2.43+0.94, 2.00+1.00 and 2.57+0.98respectively. Moreover, frequency distribution (n (%)) of the responses of male participants indicated that 25(17.86%) male participants selected the first option i.e. ‘1=strongly disagree’, 48(34.29%) chose second option i.e. ‘2=disagree’, 29(20.71%) of them responded with third option i.e. ‘3=agree’ and 9(6.43%) of them selected fourth option i.e. ‘4=strongly agree’ (see table 9).

### Q3. I feel impatient at stoplights across gender and driving experience

Since there were three demographic characteristics i.e. gender age and driving experience. The detailed analysis of same question was presented in the context of gender and age in previous heading. Under this heading, the detailed frequency distribution and mean+SD of the responses of participants against Q3. I feel impatient at stoplights are presented in table 10 given below.

Table 10: Frequency distribution, mean and standard deviation of Q3. In the light of demographics i.e. driving experience and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Driving Experience (Years)** | **I feel impatient at stoplights** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (1-5) | 6 (4.29%) | 8 (5.71%) | 8 (5.71%) | 1 (0.71%) | 23 (16.43%) | 2.17 + 0.89 |
| (6-10) | 1 (0.71%) | - | 3 (2.14%) | - | 4 (2.86%) | 2.50 + 1.00 |
| (11-15) | - | - | 2 (1.43%) | - | 2 (1.43%) | 3.00 + 0.00 |
| Total n (%) | 7 (5.00%) | 8 (5.71%) | 13 (9.29%) | 1 (0.71%) | 29 (20.71%) |  |
| Male | (1-5) | 12 (8.57%) | 34 (24.29%) | 22 (15.71%) | 4 (2.86%) | 72 (51.43%) | 2.25 + 0.80 |
| (6-10) | 12 (8.57%) | 11 (7.86%) | 6 (4.29%) | 5 (3.57%) | 34 (24.29%) | 2.12 + 1.07 |
| (11-15) | 1 (0.71%) | 3 (2.14%) | 1 (0.71%) | - | 5 (3.57%) | 2.00 + 0.71 |
| Total n (%) | 25 (17.86%) | 48 (34.29%) | 29 (20.71%) | 9 (6.43%) | 111 (79.29%) |  |

A look at the response of female participants indicates that from the driving experience group of (1-5), (6-10) and (11-15), mean response of participants was computed to be 2.17+0.89, 2.50+1.00 and 3.00+0.00 respectively. Furthermore, after analyzing the responses of male participants it was indicated that the average responses form the various driving experience groups i.e. (1-5), (6-10) and (11-15) came out to be 2.25+0.80, 2.12+1.07 and 2.00+0.71 respectively as can be seen in the table 10.

### Q4. I feel impatient waiting in lines (car wash, bank, parking space) across gender and age

As mentioned earlier, the analysis of various variables of driving impatience is presented across various demographics in detail in the below given headings. In table 11, the analysis of one of the variable (Q4. I feel impatient waiting in lines (car wash, bank, parking space)) of driving impatience is presented across two demographics (i.e. gender and age). The analysis of the responses of the respondents included the frequency distribution various responses given by the participants and at the same time, mean and standard deviation of response of participants were also calculated.

Table 11: Frequency distribution, mean and standard deviation of Q4. In the light of demographics i.e. age and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (Years)** | **I feel impatient waiting in lines (car wash, bank, parking space)** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (18-22) | 2 (1.43%) | 4 (2.86%) | 8 (5.71%) | 5 (3.57%) | 19 (13.57%) | 2.84 + 0.96 |
| (23-27) | 2 (1.43%) | 1 (0.71%) | 4 (2.86%) | 1 (0.71%) | 8 (5.71%) | 2.50 + 1.07 |
| (28-32) | - | - | 1 (0.71%) | - | 1 (0.71%) |  |
| (33-37) | 1 (0.71%) | - | - | - | 1 (0.71%) |  |
| (38-42+) | - | - | - | - | - |  |
| Total n (%) | 5 (3.57%) | 5 (3.57%) | 13 (9.29%) | 6 (4.29%) | 29 (20.71%) |  |
| Male | (18-22) | 9 (6.43%) | 19 (13.57%) | 13 (9.29%) | 20 (14.29%) | 61 (43.57%) | 2.72 + 1.08 |
| (23-27) | 7 (5.00%) | 10 (7.14%) | 5 (3.57%) | 4 (2.86%) | 26 (18.57%) | 2.23 + 1.03 |
| (28-32) | 1 (0.71%) | 6 (4.29%) | 3 (2.14%) | 4 (2.86%) | 14 (10.00%) | 2.71 + 0.99 |
| (33-37) | 1 (0.71%) | 2 (1.43%) | - | - | 3 (2.14%) | 1.67 + 0.58 |
| (38-42+) | 1 (0.71%) | 4 (2.86%) | 2 (1.43%) | - | 7 (5.00%) | 2.14 + 0.69 |
| Total n (%) | 19 (13.57%) | 41 (29.29%) | 23 (16.43%) | 28 (20.00%) | 111 (79.29%) |  |

Results indicated that the average response of age group (18-22) from female respondents was computed to be 2.84+0.96, whereas, the average response from the age group of (23-27) was 2.50+1.07. Furthermore, frequency distribution of the responses of female participants indicates that 5(3.57%) gave the response of ‘1=strongly disagree’, 5(3.57%) of them came up with the response of ‘2=disagree’, 13(9.29%) female drivers responded ‘3=agree’ and 6(4.29%) participants wrote ‘4=strongly agree’. A look at the table 11 shows that the average response from the male respondents of various groups against same question was different. Average response of age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+) was taken out to be 2.72+1.08, 2.23+1.03, 2.71+0.99, 1.67+0.58 and 2.14+0.69 respectively. Moreover, frequency distribution (n (%)) of the responses of male participants indicated that 191(13.57%) male participants selected the first option i.e. ‘1=strongly disagree’, 41(29.29%) chose second option i.e. ‘2=disagree’, 23(16.43%) of them responded with third option i.e. ‘3=agree’ and 28(20%) of them selected fourth option i.e. ‘4=strongly agree’ (see table 11).

### Q4. I feel impatient waiting in lines (car wash, bank, parking space) across gender and driving experience

Since there were three demographic characteristics i.e. gender age and driving experience. The detailed analysis of same question was presented in the context of gender and age in previous heading. Under this heading, the detailed frequency distribution and mean+SD of the responses of participants against Q4. I feel impatient waiting in lines (car wash, bank, parking space) are presented in table 12 given below.

Table 12: Frequency distribution, mean and standard deviation of Q4. In the light of demographics i.e. driving experience and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Driving Experience (Years)** | **I feel impatient waiting in lines (car wash, bank, parking space)** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (1-5) | 4 (2.86%) | 2 (1.43%) | 12 (8.57%) | 5 (3.57%) | 23 (16.43%) | 2.78 + 1.00 |
| (6-10) | 1 (0.71%) | 2 (1.43%) | 1 (0.71%) | - | 4 (2.86%) | 2.00 + 0.82 |
| (11-15) | - | 1 (0.71%) | - | 1 (0.71%) | 2 (1.43%) | 3.00 + 1.41 |
| Total n (%) | 5 (3.57%) | 5 (3.57%) | 13 (9.29%) | 6 (4.29%) | 29 (20.71%) |  |
| Male | (1-5) | 8 (5.71%) | 27 (19.29%) | 18 (12.86%) | 19 (13.57%) | 72 (51.43%) | 2.67 + 0.99 |
| (6-10) | 11 (7.86%) | 11 (7.86%) | 5 (3.57%) | 7 (5.00%) | 34 (24.29%) | 2.24 + 1.13 |
| (11-15) | - | 3 (2.14%) | - | 2 (1.43%) | 5 (3.57%) | 2.80 + 1.10 |
| Total n (%) | 19 (13.57%) | 41 (29.29%) | 23 (16.43%) | 28 (20.00%) | 111 (79.29%) |  |

A look at the response of female participants indicates that from the driving experience group of (1-5), (6-10) and (11-15), mean response of participants was computed to be 2.78+1.00, 2.00+0.82 and 3.00+1.41 respectively. Furthermore, after analyzing the responses of male participants it was indicated that the average responses form the various driving experience groups i.e. (1-5), (6-10) and (11-15) came out to be 2.67+0.99, 2.24+1.13 and 2.80+1.10 respectively as can be seen in the table 12.

### Q5. I as passenger, impatient with driver across gender and age

As mentioned earlier, the analysis of various variables of driving impatience is presented across various demographics in detail in the below given headings. In table 13, the analysis of one of the variable (Q5. I as passenger, impatient with driver) of driving impatience is presented across two demographics (i.e. gender and age). The analysis of the responses of the respondents included the frequency distribution various responses given by the participants and at the same time, mean and standard deviation of response of participants were also calculated.

Table 13: Frequency distribution, mean and standard deviation of Q5. In the light of demographics i.e. age and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (Years)** | **I as passenger, impatient with driver** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (18-22) | 4 (2.86%) | 9 (6.43%) | 3 (2.14%) | 3 (2.14%) | 19 (13.57%) | 2.26 + 0.99 |
| (23-27) | 3 (2.14%) | 1 (0.71%) | 2 (1.43%) | 2 (1.43%) | 8 (5.71%) | 2.38 + 1.30 |
| (28-32) | - | - | 1 (0.71%) | - | 1 (0.71%) |  |
| (33-37) | 1 (0.71%) | - | - | - | 1 (0.71%) |  |
| (38-42+) | - | - | - | - | - |  |
| Total n (%) | 8 (5.71%) | 10 (7.14%) | 6 (4.29%) | 5 (3.57%) | 29 (20.71%) |  |
| Male | (18-22) | 10 (7.14%) | 19 (13.57%) | 25 (17.86%) | 7 (5.00%) | 61 (43.57%) | 2.48 + 0.91 |
| (23-27) | 8 (5.71%) | 12 (8.57%) | 5 (3.57%) | 1 (0.71%) | 26 (18.57%) | 1.96 + 0.82 |
| (28-32) | 3 (2.14%) | 4 (2.86%) | 5 (3.57%) | 2 (1.43%) | 14 (10.00%) | 2.43 + 1.02 |
| (33-37) | 2 (1.43%) | 1 (0.71%) | - | - | 3 (2.14%) | 1.33 + 0.58 |
| (38-42+) | 1 (0.71%) | 3 (2.14%) | 2 (1.43%) | 1 (0.71%) | 7 (5.00%) | 2.43 + 0.98 |
| Total n (%) | 24 (17.14%) | 39 (27.86%) | 37 (26.43%) | 11 (7.86%) | 111 (79.29%) |  |

Results indicated that the average response of age group (18-22) from female respondents was computed to be 2.26+0.99, whereas, the average response from the age group of (23-27) was 2.38+1.30. Furthermore, frequency distribution of the responses of female participants indicates that 8(5.71%) gave the response of ‘1=strongly disagree’, 10(7.14%) of them came up with the response of ‘2=disagree’, 6(4.29%) female drivers responded ‘3=agree’ and 5(3.57%) participants wrote ‘4=strongly agree’. A look at the table 13 shows that the average response from the male respondents of various groups against same question was different. Average response of age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+) was taken out to be 2.48+0.91, 1.96+0.82, 2.43+1.02, 1.33+0.58 and 2.43+0.98 respectively. Moreover, frequency distribution (n (%)) of the responses of male participants indicated that 24(17.14%) male participants selected the first option i.e. ‘1=strongly disagree’, 39(27.86%) chose second option i.e. ‘2=disagree’, 37(26.43%) of them responded with third option i.e. ‘3=agree’ and 11(7.86%) of them selected fourth option i.e. ‘4=strongly agree’ (see table 13).

### Q5. I as passenger, impatient with driver across gender and driving experience

Since there were three demographic characteristics i.e. gender age and driving experience. The detailed analysis of same question was presented in the context of gender and age in previous heading. Under this heading, the detailed frequency distribution and mean+SD of the responses of participants against Q5. I as passenger, impatient with driver are presented in table 14 given below.

Table 14: Frequency distribution, mean and standard deviation of Q5. In the light of demographics i.e. driving experience and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Driving Experience (Years)** | **I as passenger, impatient with driver** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (1-5) | 7 (5.00%) | 8 (5.71%) | 5 (3.57%) | 3 (2.14%) | 23 (16.43%) | 2.17 + 1.03 |
| (6-10) | 1 (0.71%) | 1 (0.71%) | 1 (0.71%) | 1 (0.71%) | 4 (2.86%) | 2.50 + 1.29 |
| (11-15) | - | 1 (0.71%) | - | 1 (0.71%) | 2 (1.43%) | 3.00 + 1.41 |
| Total n (%) | 8 (5.71%) | 10 (7.14%) | 6 (4.29%) | 5 (3.57%) | 29 (20.71%) |  |
| Male | (1-5) | 13 (9.29%) | 25 (17.86%) | 26 (18.57%) | 8 (5.71%) | 72 (51.43%) | 2.40 + 0.91 |
| (6-10) | 10 (7.14%) | 13 (9.29%) | 9 (6.43%) | 2 (1.43%) | 34 (24.29%) | 2.09 + 0.90 |
| (11-15) | 1 (0.71%) | 1 (0.71%) | 2 (1.43%) | 1 (0.71%) | 5 (3.57%) | 2.60 + 1.14 |
| Total n (%) | 24 (17.14%) | 39 (27.86%) | 37 (26.43%) | 11 (7.86%) | 111 (79.29%) |  |

A look at the response of female participants indicates that from the driving experience group of (1-5), (6-10) and (11-15), mean response of participants was computed to be 2.17+1.03, 2.50+1.29 and 3.00+1.41 respectively. Furthermore, after analyzing the responses of male participants it was indicated that the average responses form the various driving experience groups i.e. (1-5), (6-10) and (11-15) came out to be 2.40+0.91, 2.09+0.90 and 2.60+1.14 respectively as can be seen in the table 14.

### Q6. I feel impatient when car ahead slows down across gender and age

As mentioned earlier, the analysis of various variables of driving impatience is presented across various demographics in detail in the below given headings. In table 15, the analysis of one of the variable (Q6. I feel impatient when car ahead slows down) of driving impatience is presented across two demographics (i.e. gender and age). The analysis of the responses of the respondents included the frequency distribution various responses given by the participants and at the same time, mean and standard deviation of response of participants were also calculated.

Table 15: Frequency distribution, mean and standard deviation of Q6. In the light of demographics i.e. age and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (Years)** | **I feel impatient when car ahead slows down** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (18-22) | - | 5 (3.57%) | 9 (6.43%) | 5 (3.57%) | 19 (13.57%) | 3.00 + 0.75 |
| (23-27) | 2 (1.43%) | 2 (1.43%) | 3 (2.14%) | 1 (0.71%) | 8 (5.71%) | 2.38 + 1.06 |
| (28-32) | - | 1 (0.71%) | - | - | 1 (0.71%) |  |
| (33-37) | 1 (0.71%) | - | - | - | 1 (0.71%) |  |
| (38-42+) | - | - | - | - | - |  |
| Total n (%) | 3 (2.14%) | 8 (5.71%) | 12 (8.57%) | 6 (4.29%) | 29 (20.71%) |  |
| Male | (18-22) | 13 (9.29%) | 22 (15.71%) | 14 (10.00%) | 12 (8.57%) | 61 (43.57%) | 2.41 + 1.04 |
| (23-27) | 3 (2.14%) | 11 (7.86%) | 9 (6.43%) | 3 (2.14%) | 26 (18.57%) | 2.46 + 0.86 |
| (28-32) | 1 (0.71%) | 10 (7.14%) | 1 (0.71%) | 2 (1.43%) | 14 (10.00%) | 2.29 + 0.83 |
| (33-37) | 1 (0.71%) | 2 (1.43%) | - | - | 3 (2.14%) | 1.67 + 0.58 |
| (38-42+) | 1 (0.71%) | 4 (2.86%) | 2 (1.43%) | - | 7 (5.00%) | 2.14 + 0.69 |
| Total n (%) | 19 (13.57%) | 49 (35.00%) | 26 (18.57%) | 17 (12.14%) | 111 (79.29%) |  |

Results indicated that the average response of age group (18-22) from female respondents was computed to be 3.00+0.75, whereas, the average response from the age group of (23-27) was 2.38+1.06. Furthermore, frequency distribution of the responses of female participants indicates that 3(2.14%) gave the response of ‘1=strongly disagree’, 8(5.71%) of them came up with the response of ‘2=disagree’, 12(8.57%) female drivers responded ‘3=agree’ and 6(4.29%) participants wrote ‘4=strongly agree’. A look at the table 15 shows that the average response from the male respondents of various groups against same question was different. Average response of age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+) was taken out to be 2.41+1.04, 2.46+0.86, 2.29+0.83, 1.67+0.58 and 2.14+0.69respectively. Moreover, frequency distribution (n (%)) of the responses of male participants indicated that 19(13.57%) male participants selected the first option i.e. ‘1=strongly disagree’, 49(35%) chose second option i.e. ‘2=disagree’, 26(18.57%) of them responded with third option i.e. ‘3=agree’ and 17(12.14%) of them selected fourth option i.e. ‘4=strongly agree’ (see table 15).

### Q6. I feel impatient when car ahead slows down across gender and driving experience

Since there were three demographic characteristics i.e. gender age and driving experience. The detailed analysis of same question was presented in the context of gender and age in previous heading. Under this heading, the detailed frequency distribution and mean+SD of the responses of participants against Q6. I feel impatient when car ahead slows down are presented in table 16 given below.

Table 16: Frequency distribution, mean and standard deviation of Q6. In the light of demographics i.e. driving experience and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Driving Experience (Years)** | **I feel impatient when car ahead slows down** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (1-5) | 2 (1.43%) | 6 (4.29%) | 12 (8.57%) | 3 (2.14%) | 23 (16.43%) | 2.70 + 0.82 |
| (6-10) | 1 (0.71%) | 1 (0.71%) | - | 2 (1.43%) | 4 (2.86%) | 2.75 + 1.50 |
| (11-15) | - | 1 (0.71%) | - | 1 (0.71%) | 2 (1.43%) | 3.00 + 1.41 |
| Total n (%) | 3 (2.14%) | 8 (5.71%) | 12 (8.57%) | 6 (4.29%) | 29 (20.71%) |  |
| Male | (1-5) | 11 (7.86%) | 31 (22.14%) | 18 (12.86%) | 12 (8.57%) | 72 (51.43%) | 2.43 + 0.95 |
| (6-10) | 7 (5.00%) | 14 (10.00%) | 8 (5.71%) | 5 (3.57%) | 34 (24.29%) | 2.32 + 0.98 |
| (11-15) | 1 (0.71%) | 4 (2.86%) | - | - | 5 (3.57%) | 1.80 + 0.45 |
| Total n (%) | 19 (13.57%) | 49 (35.00%) | 26 (18.57%) | 17 (12.14%) | 111 (79.29%) |  |

A look at the response of female participants indicates that from the driving experience group of (1-5), (6-10) and (11-15), mean response of participants was computed to be 2.70+0.82, 2.75+1.50 and 3.00+1.41 respectively. Furthermore, after analyzing the responses of male participants it was indicated that the average responses form the various driving experience groups i.e. (1-5), (6-10) and (11-15) came out to be 2.43+0.95, 2.32+0.98 and 1.80+0.45 respectively as can be seen in the table 16.

### Q7. I feel impatient driving in far right, slow lane across gender and age

As mentioned earlier, the analysis of various variables of driving impatience is presented across various demographics in detail in the below given headings. In table 17, the analysis of one of the variable (Q7. I feel impatient driving in far right, slow lane) of driving impatience is presented across two demographics (i.e. gender and age). The analysis of the responses of the respondents included the frequency distribution various responses given by the participants and at the same time, mean and standard deviation of response of participants were also calculated.

Table 17: Frequency distribution, mean and standard deviation of Q7. In the light of demographics i.e. age and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (Years)** | **I feel impatient driving in far right, slow lane** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (18-22) | 3 (2.14%) | 7 (5.00%) | 4 (2.86%) | 5 (3.57%) | 19 (13.57%) | 2.58 + 1.07 |
| (23-27) | 4 (2.86%) | 2 (1.43%) | 1 (0.71%) | 1 (0.71%) | 8 (5.71%) | 1.88 + 1.13 |
| (28-32) | - | 1 (0.71%) | - | - | 1 (0.71%) |  |
| (33-37) | 1 (0.71%) | - | - | - | 1 (0.71%) |  |
| (38-42+) | - | - | - | - | - |  |
| Total n (%) | 8 (5.71%) | 10 (7.14%) | 5 (3.57%) | 6 (4.29%) | 29 (20.71%) |  |
| Male | (18-22) | 8 (5.71%) | 25 (17.86%) | 21 (15.00%) | 7 (5.00%) | 61 (43.57%) | 2.44 + 0.87 |
| (23-27) | 6 (4.29%) | 6 (4.29%) | 14 (10.00%) | - | 26 (18.57%) | 2.31 + 0.84 |
| (28-32) | 3 (2.14%) | 5 (3.57%) | 2 (1.43%) | 4 (2.86%) | 14 (10.00%) | 2.50 + 1.16 |
| (33-37) | 1 (0.71%) | 2 (1.43%) | - | - | 3 (2.14%) | 1.67 + 0.58 |
| (38-42+) | - | 4 (2.86%) | 2 (1.43%) | 1 (0.71%) | 7 (5.00%) | 2.57 + 0.79 |
| Total n (%) | 18 (12.86%) | 42 (30.00%) | 39 (27.86%) | 12 (8.57%) | 111 (79.29%) |  |

Results indicated that the average response of age group (18-22) from female respondents was computed to be 2.58+1.07, whereas, the average response from the age group of (23-27) was 1.88+1.13. Furthermore, frequency distribution of the responses of female participants indicates that 8(5.71%) gave the response of ‘1=strongly disagree’, 10(7.14%) of them came up with the response of ‘2=disagree’, 5(3.57%) female drivers responded ‘3=agree’ and 6(4.29%) participants wrote ‘4=strongly agree’. A look at the table 17 shows that the average response from the male respondents of various groups against same question was different. Average response of age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+) was taken out to be 2.44+0.87, 2.31+0.84, 2.50+1.16, 1.67+0.58 and 2.57+0.79 respectively. Moreover, frequency distribution (n (%)) of the responses of male participants indicated that 18(12.86%) male participants selected the first option i.e. ‘1=strongly disagree’, 42(30%) chose second option i.e. ‘2=disagree’, 39(27.86%) of them responded with third option i.e. ‘3=agree’ and 12(8.57%) of them selected fourth option i.e. ‘4=strongly agree’ (see table 17).

### Q7. I feel impatient driving in far right, slow lane across gender and driving experience

Since there were three demographic characteristics i.e. gender age and driving experience. The detailed analysis of same question was presented in the context of gender and age in previous heading. Under this heading, the detailed frequency distribution and mean+SD of the responses of participants against Q7. I feel impatient driving in far right, slow lane are presented in table 18 given below.

Table 18: Frequency distribution, mean and standard deviation of Q7. In the light of demographics i.e. driving experience and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Driving Experience (Years)** | **I feel impatient driving in far right, slow lane** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (1-5) | 6 (4.29%) | 10 (7.14%) | 3 (2.14%) | 4 (2.86%) | 23 (16.43%) | 2.22 + 1.04 |
| (6-10) | 2 (1.43%) | - | 1 (0.71%) | 1 (0.71%) | 4 (2.86%) | 2.25 + 1.50 |
| (11-15) | - | - | 1 (0.71%) | 1 (0.71%) | 2 (1.43%) | 3.50 + 0.71 |
| Total n (%) | 8 (5.71%) | 10 (7.14%) | 5 (3.57%) | 6 (4.29%) | 29 (20.71%) |  |
| Male | (1-5) | 8 (5.71%) | 29 (20.71%) | 30 (21.43%) | 5 (3.57%) | 72 (51.43%) | 2.44 + 0.79 |
| (6-10) | 9 (6.43%) | 12 (8.57%) | 9 (6.43%) | 4 (2.86%) | 34 (24.29%) | 2.24 + 0.99 |
| (11-15) | 1 (0.71%) | 1 (0.71%) | - | 3 (2.14%) | 5 (3.57%) | 3.00 + 1.41 |
| Total n (%) | 18 (12.86%) | 42 (30.00%) | 39 (27.86%) | 12 (8.57%) | 111 (79.29%) |  |

A look at the response of female participants indicates that from the driving experience group of (1-5), (6-10) and (11-15), mean response of participants was computed to be 2.22+1.04, 2.25+1.50 and 3.50+0.71 respectively. Furthermore, after analyzing the responses of male participants it was indicated that the average responses form the various driving experience groups i.e. (1-5), (6-10) and (11-15) came out to be 2.44+0.79, 2.24+0.99, 3.00+1.41 respectively as can be seen in the table 6.

### Q8. I feel impatient with pedestrians crossing street across gender and age

As mentioned earlier, the analysis of various variables of driving impatience is presented across various demographics in detail in the below given headings. In table 19, the analysis of one of the variable (Q8. I feel impatient with pedestrians crossing street) of driving impatience is presented across two demographics (i.e. gender and age). The analysis of the responses of the respondents included the frequency distribution various responses given by the participants and at the same time, mean and standard deviation of response of participants were also calculated.

Table 19: Frequency distribution, mean and standard deviation of Q8. In the light of demographics i.e. age and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Age (Years)** | **I feel impatient with pedestrians crossing street** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (18-22) | 5 (3.57%) | 10 (7.14%) | 3 (2.14%) | 1 (0.71%) | 19 (13.57%) | 2.00 + 0.82 |
| (23-27) | 2 (1.43%) | 2 (1.43%) | 1 (0.71%) | 3 (2.14%) | 8 (5.71%) | 2.63 + 1.30 |
| (28-32) | - | 1 (0.71%) | - | - | 1 (0.71%) |  |
| (33-37) | 1 (0.71%) | - | - | - | 1 (0.71%) |  |
| (38-42+) | - | - | - | - | - |  |
| Total n (%) | 8 (5.71%) | 13 (9.29%) | 4 (2.86%) | 4 (2.86%) | 29 (20.71%) |  |
| Male | (18-22) | 11 (7.86%) | 22 (15.71%) | 14 (10.00%) | 14 (10.00%) | 61 (43.57%) | 2.51 + 1.04 |
| (23-27) | 12 (8.57%) | 7 (5.00%) | 5 (3.57%) | 2 (1.43%) | 26 (18.57%) | 1.88 + 0.99 |
| (28-32) | 2 (1.43%) | 5 (3.57%) | 2 (1.43%) | 5 (3.57%) | 14 (10.00%) | 2.71 + 1.14 |
| (33-37) | 2 (1.43%) | 1 (0.71%) | - | - | 3 (2.14%) | 1.33 + 0.58 |
| (38-42+) | 1 (0.71%) | 4 (2.86%) | 2 (1.43%) | - | 7 (5.00%) | 2.14 + 0.69 |
| Total n (%) | 28 (20.00%) | 39 (27.86%) | 23 (16.43%) | 21 (15.00%) | 111 (79.29%) |  |

Results indicated that the average response of age group (18-22) from female respondents was computed to be 2+0.82, whereas, the average response from the age group of (23-27) was 2.63+1.30. Furthermore, frequency distribution of the responses of female participants indicates that 8(5.71%) gave the response of ‘1=strongly disagree’, 13(9.29%) of them came up with the response of ‘2=disagree’, 4(2.86%) female drivers responded ‘3=agree’ and 4(2.86%) participants wrote ‘4=strongly agree’. A look at the table 19 shows that the average response from the male respondents of various groups against same question was different. Average response of age groups i.e. (18-22), (23-27), (28-32), (33-37) and (38-42+) was taken out to be 2.51+1.04, 1.88+0.99, 2.71+1.14, 1.33+0.58 and 2.14+0.69 respectively. Moreover, frequency distribution (n (%)) of the responses of male participants indicated that 28(20%) male participants selected the first option i.e. ‘1=strongly disagree’, 39(27.86%) chose second option i.e. ‘2=disagree’, 23(16.43%) of them responded with third option i.e. ‘3=agree’ and 21(15%) of them selected fourth option i.e. ‘4=strongly agree’ (see table 19).

### Q8. I feel impatient with pedestrians crossing street across gender and driving experience

Since there were three demographic characteristics i.e. gender age and driving experience. The detailed analysis of same question was presented in the context of gender and age in previous heading. Under this heading, the detailed frequency distribution and mean+SD of the responses of participants against Q8. I feel impatient with pedestrians crossing street are presented in table 20 given below.

Table 20: Frequency distribution, mean and standard deviation of Q8. In the light of demographics i.e. driving experience and gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Driving Experience (Years)** | **I feel impatient with pedestrians crossing street** | **Total****n (%)** | **Mean + SD** |
| **1****n (%)** | **2****n (%)** | **3****n (%)** | **4****n (%)** |
| Female | (1-5) | 6 (4.29%) | 11 (7.86%) | 3 (2.14%) | 3 (2.14%) | 23 (16.43%) | 2.13 + 0.97 |
| (6-10) | 2 (1.43%) | 2 (1.43%) | - | - | 4 (2.86%) | 1.50 + 0.58 |
| (11-15) | - | - | 1 (0.71%) | 1 (0.71%) | 2 (1.43%) | 3.50 + 0.71 |
| Total n (%) | 8 (5.71%) | 13 (9.29%) | 4 (2.86%) | 4 (2.86%) | 29 (20.71%) |  |
| Male | (1-5) | 14 (10.00%) | 29 (20.71%) | 17 (12.14%) | 12 (8.57%) | 72 (51.43%) | 2.38 + 0.98 |
| (6-10) | 13 (9.29%) | 8 (5.71%) | 6 (4.29%) | 7 (5.00%) | 34 (24.29%) | 2.21 + 1.17 |
| (11-15) | 1 (0.71%) | 2 (1.43%) | - | 2 (1.43%) | 5 (3.57%) | 2.60 + 1.34 |
| Total n (%) | 28 (20.00%) | 39 (27.86%) | 23 (16.43%) | 21 (15.00%) | 111 (79.29%) |  |

0 A look at the response of female participants indicates that from the driving experience group of (1-5), (6-10) and (11-15), mean response of participants was computed to be 2.13+0.97, 1.50+0.58 and 3.50+0.71 respectively. Furthermore, after analyzing the responses of male participants it was indicated that the average responses form the various driving experience groups i.e. (1-5), (6-10) and (11-15) came out to be 2.38+0.98, 2.21+1.17 and 2.60+1.34 respectively as can be seen in the table 20.

# DISCUSSION

The probability or chances of anger surge, if drivers are under immense pressure or in any form of stress before driving(Priyanka and Tigga 2015)**.** Anger commences face off aggression and drive an offender in a way to cause damage to property or harm to any person(SWOV Institute for Road Safety Research 2012)(Deffenbacher et al. 2003). Anger is disastrous in any way i.e. socially, physically as well as psychologically(Priyanka and Tigga 2015). Anger is the fundamental reason behind driving with aggression which follows to incident that put humans life on stake by an angry driver on road due to traffic dispute(Mizell 1997). Moreover, the effects of anger remains visible in drivers’ personal life and on highways before and after they driver (Deffenbacher et al. 2003). The major reason of violation of traffic was frustration among drivers which concluded in traffic congestion(Lajunen and Parker 2001)(Shinar 1998). A research was conducted by J. A. Vazquez based on 52 males and 46 females (Vazquez 2013); to include further, negation associated between age and driving with aggression (Vazquez 2013) and in negative way was interlinked with anger and age reported as well(Sullman, Stephens, and Yong 2015)(Sullman, Stephens, and Yong 2014a). In the present research, the greater value of mean+SD (2.57+1.04) was calculated for third question i.e. ‘I feel impatient at spotlights’ and 42 of the respondents have recorded their response as ‘3= agree’ as can be seen in the table 1. The response of male participants was greatest for the variable i.e. ‘I feel impatient waiting in lines’ (2.54+1.05) and at the same time, response of female respondents for the variable i.e. ‘I feel impatient when car ahead slows down’ (2.72+0.92) was greatest. Participants from the first age group i.e. (18-22) came up with the greater response (2.75+1.05) on the question i.e. ‘I feel impatient waiting in lines’; from the second age group i.e. (23-27) the greater response (2.44+0.89) was on the question i.e. ‘I feel impatient when car ahead slows down’; the greater response of third age group i.e. (28-32) was recorded to be greater on the question i.e. ‘I feel impatient waiting in lines’; the greater response (1.75+0.96) of the fourth group i.e. (33-37) was recorded on the two questions i.e. ‘I feel impatient waiting for passengers to get in’ and ‘I feel impatient at stoplights’; similarly, from the fifth group i.e. (38-42+), the greater response (2.71+0.49) was recorded on the question i.e. ‘I feel impatient waiting for passengers to get in’. Age was indicated to be firmly linked up with the driving anger as reflected by traffic impediments, discourtesy, aggressive gestures (Sullman, Stephens, and Yong 2014b). The participants from the first driving experience group i.e. (1-5) years recorded the greater average response (2.69+0.99) for the question i.e. ‘I feel impatient waiting in lines (car wash, bank, parking space)’ and respondents from the second group i.e. (6-10) years, came up with greater mean response (2.37+1.02) against the question i.e. ‘I feel impatient when car ahead slows down’ and the last group i.e. (11-15) years, responded the greater average response (2.86+1.21) against the last question i.e. ‘I feel impatient with pedestrians crossing street’.(Sullman et al. 2014b). The average response male respondents from the last age group i.e. (38-42+) against the question i.e. ‘I feel impatient waiting for passengers to get in the vehicle’ was calculated to be 2.71 + 0.49. On the same question, the response from male drivers of the driving experience group i.e. (1-5) years, was computed to be 2.35 + 1.07. The response of female drivers from the age group i.e. (18-22) on the second question i.e. ‘I am so impatient, won’t let car engine warm up’ was 2.68 + 1.00. At the same, the response of female drivers from driving experience group i.e. (11-15) years, on the second question was calculated to be 3.00+1.41. The response of male drivers from the age group i.e. (28-32) years against third question i.e. ‘I feel impatient at stoplights’ was calculated to be 2.43+0.94. On third question, the average response of female drivers from the driving experience of (11-15) years was computed to 3.00+0.00. The average response the female drivers from the age group i.e. (18-22) years against fourth question i.e. ‘I feel impatient waiting in lines’ was 2.84 + 0.96; on the same question, females from driving experience group i.e. (11-15) came up with the average response of 3.00+1.41. The average response of male drivers from the age group i.e. (18-22) years on the fifth question i.e. ‘I as passenger impatient with drivers’ was calculated to be 2.48+0.91. On the same question, the mean response of female drivers from the driving experience group of (11-15) years was computed to be 3.00+1.41. The average response of female drivers from the first age group (18-22) years on the 6th question i.e. ‘I feel impatient when car ahead slows down’ was recorded to be 3.00+0.75 and at the same time, the average response of female respondents form the driving experience group of (11-15) years against same question was calculated to be 3.00+1.41. The average response of female drivers from the age group of (18-22) years against 7th question i.e. ‘I feel impatient driving in far right, slow lane’ was recorded to be 2.58+1.07 and on the same question, response of female respondents from the driving experience group of (11-15) years was calculated to be 3.50+0.71. The average response of female drivers from age group (23-27) years on the last question i.e. ‘I feel impatient on the pedestrians, crossing the street’ was calculated to be 2.63 + 1.30 and the average response of female drivers from the driving experience group of (11-15) years on the same question was calculated to be 3.50 + 0.71. During that course, female drivers with far less experience mean anger response (1-5 years) was calculated to be at the top on all the variable, comparatively, to both genders of all the experience groups. The linkage between accidents and concerning events in which angry feelings are reflected by drivers has been concluded (Underwood et al. 1999). It has been proved by reports and literature that driving psychology and education are requisite to improve people’s driving habits. Likewise, new facets for improving driving are required to be taught to drivers for development of their character; there is a major requirement of research for the origination of framework through which the drivers can evaluated and assess themselves in terms of their own driving; to add further, it is highly required for drivers to acknowledge that driving is the social activity in coordinated interactions are required (James 2017).

# CONCLUSION

Young male participants (belonging to the age group (18-22) years) were found to be the most impatient among all the male drivers. Evidence from the present research indicated that the male drivers from the age group of (18-22) years were found to be more impatient and at the same time, female drivers from the same age group were also found to be the same. Moreover, experience was found to have an impact on the driving impatience as it was concluded that with increasing experience, female drivers were observed to be more impatient because the females from the driving experience group i.e. (11-15) were found to be the most impatient among all the respondents.

# FUTURE IMPLICATIONS

Data for the present research paper was collected at the university level and it was collected at the canteens from students and at offices from the teachers but if the data is collected instantly after the drivers drive off through the traffic; it would be helpful in recording the more accurate response than it was collected for the present research. The more accurate data will yield the more accurate results.

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# CONFLICT OF INTEREST

There are no conflicts of interest among the authors of the present research paper

# REFERENCES

A. Hennessy, Dwight, and David L Wiesenthal., Traffic Congestion, Driver Stress, and Driver Aggression, *Agressive Behavior*, vol. 25, no. 6, pp. 409–23, 1999.

AAA Foundation for Traffic Safey,*Aggressive Driving: Research Update*, 2009.

Abou-Zeid, Maya, Isam Kaysi, and Hani Al-naghi., Measuring Aggressive Driving Behavior Using a Driving Simulator: An Exploratory Study, *3rd International Conference on Road Safety and Simulation*, pp. 1–19, 2011.

Berkowitz, Leonard., Frustration-Aggression Hypothesis ; Examination and Reformulation,*Psychological Bulletin*, vol. 106, no. 1, pp. 59–73, 1989.

Blanca, María J., Rafael Alarcón, Jaume Arnau, Roser Bono, and Rebecca Bendayan., Non-Normal Data: Is ANOVA Still a Valid Option ?*Psicothema*, vol. 29, no. 4, pp. 552–57, 2017.

Cayanus, Jacob L., Matthew M. Martin, and Keith D. Weber., The Relationships between Driver Anger and Aggressive Communication Traits,*Communication Research Reports*, vol. 22, no. 3, pp. 189–97, 2005.

Chakrabarty, Neelima, and Reetesh Riku., Aggressive Driving Case Studies and Mitigations in India, *International Journal of Scientific and Research Publications* vol. 3, no. 2, pp. 1–10, 2013.

Deffenbacher, J. L., R. S. Lynch, L. B. Filetti, E. R. Dahlen, and E. R. Oetting., Anger, Aggression, Risky Behavior, and Crash-Related Outcomes in Three Groups of Drivers,*Behaviour Research and Therapy*, vol. 41, no. 3, pp. 333–49, 2003.

Deffenbacher, Jerry L., Maureen E. Huff, Rebekah S. Lynch, Eugene R. Oetting, and Natalie F. Salvatore., Characteristics and Treatment of High-Anger Drivers,*Journal of Counseling Psychology*, vol. 47, no. 1, pp. 5–17, 2000.

Deffenbacher, Jerry L., Rebekah S. Lynch, Eugene R. Oetting, and Randall C. Swaim., The Driving Anger Expression Inventory: A Measure of How People Express Their Anger on the Road,*Behaviour Research and Therapy*, vol. 40, no. 6, pp. 717–37, 2002.

Dula, Chris S., and E. Scott Geller., Risky, Aggressive, or Emotional Driving: Addressing the Need for Consistent Communication in Research,*Journal of Safety Research*, vol. 34, no. 5, pp. 559–66, 2003.

Gilbert, Maria, and Vanja Orlans., A Review of the Literature on Integration, *Integrative therapy; 100 key points and techniques*, Vol. 1968, pp. 19–39, 2011.

Goodwin, Arthur, Bevan Kirley, Laura Sandt, William Hall, Libby Thomas, Natalie O`Brien, and Daniel Summerlin., *Countermeasures That Work: A Highway Safety Countermeasures Guide for State Highway Safety Offices*, 2003.

Grey, Elizabeth M., Thomas J. Triggs, and Narelle L. Haworth., *Driver Aggression: The Role of Personality, Social Characteristics, Risk and Motivation*, 1989.

James, Leon J., Moral Reasoning in Driving Behavior,*Psychology and Cognitive Sciences*, vol. 3, no. 3, pp. 6–8, 2017.

Kalwar, Muhammad Ahmed, and Muhammad Ali Khan., Increasing Performance of Footwear Stitching Line by Installation of Auto-Trim Stitching Machines.*Journal of Applied Research in Technology & Engineering*, vol. 1, no. 1, pp. 31–36, 2020a.

Kalwar, Muhammad Ahmed, and Muhammad Ali Khan., Optimization of Procurement & Purchase Order Process in Foot Wear Industry by Using VBA in Ms Excel,*International Journal of Business Education and Management Studies*, vol. 5, no. 2, pp. 80–100, 2020b.

Kalwar, Muhammad Ahmed, Muhammad Ali Khan, Shakil Ahmed Shaikh, Abdul Salam, Muhammad Saad Memon, and Sarmad Ali Khaskheli., Aggressive Driving Behavior: A Case Study of Mehran UET, *Proceedings of the International Conference on Industrial Engineering and Operations Management Dubai,*pp. 2350–59, 2020.

Kalwar, Muhammad Ahmed, Sarmad Ali Khaskheli, Muhammad Ali Khan, Ali Arsalan Siddiqui, and Miskeen Ali Gopang., Comfortable Waiting Time of Patients at the OPD with Varying Demographics,*Industrial Engineering Letters*, vol. 8, no. 2, pp. 20–27, 2018.

Kalwar, Muhammad Ahmed, Sonia Irshad Mari, Muhammad Saad Memon, Anwaruddin Tanwari, and Ali Arsalan Siddiqui., Simulation Based Approach for Improving Outpatient Clinic Operations,*Mehran University Research Journal of Engineering and Technology*, vol. 39, no. 1, pp. 153–70, 2020.

Khaskheli, Sarmad Ali, Muhammad Ahmed Kalwar, Ali Arsalan Siddiqui, Muhammad Ali Khan Nagar, and Tamoor Hussain Wadho., Impatience Among Drivers With Varying Demographics,*Professional Trends in Industrial and Systems Engineering*. *UET, Peshawar,* pp. 465–69, 2018.

Khaskheli, Sarmad Ali, Hussain Bux Marri, Murlidhar Nebhwani, Muhammad Ali Khan, and Muhammad Ahmed, Compartive Study of Queuing Systems of Medical Out Patient Departments of Two Public Hospitals, *Proceedings of the International Conference on Industrial Engineering and Operations ManagementDubai, UAE,* Vol. 1913. pp. 2702–20, 2020.

Kim, Hae-young., *Statistical Notes for Clinical Researchers: Assessing Normal Distribution (2) Using Skewness and Kurtosis*,pp. 52–54, 2013.

Lajunen, Timo, and Dianne Parker., Are Aggressive People Aggressive Drivers? A Study of the Relationship between Self-Reported General Aggressiveness, Driver Anger and Aggressive Driving,*Accident Analysis and Prevention*, vol. 33, no. 2, pp. 243–55, 2001.

ManiKandan, S., Frequency Distribution,*Journal of Pharmacology & Pharmacotherapeutics*, vol. 2, no. 1, pp. 54–56, 2011.

Mizell, L., Aggressive Driving: Three Studies,*AAA Foundation for Traffic Safety* (March), 1997.

Montoro, Luis, Sergio Useche, Francisco Alonso, and Boris Cendales., Work Environment, Stress, and Driving Anger: A Structural Equation Model for Predicting Traffic Sanctions of Public Transport Drivers, *International Journal of Environmental Research and Public Health*, vol. 15, no. 3, pp. 497–409, 2018.

Novaco, Raymond W., Daniel Stokols, Campbell Joan, and Jeannette Stokols., Transportation, Stress, and Community Psychology,*American Journal of Community Psychology*, vol. 7, no. 4, pp. 361–80, 1979.

Oi, S. Popu Ş., and A. Holman., Driving Anger and Aggressive Tendency: The Moderating Role of Emotion Regulation Strategy,*Bulletin of the Transilvania University of Braşov*, vol. 9, no. 2, pp. 154–64, 2016.

Ostertagova, Eva, and Oskar Ostertag., Methodology and Application of One-Way ANOVA, *American Journal of Mechanical Engineering*vol. 1, no. 7, pp. 256–61, 2013.

Ostertagová, Eva, and Oskar Ostertag., Methodology and Application of Oneway ANOVA,*American Journal of Mechanical Engineering,*vol. 1, no. 7, pp. 256–61, 2013.

Paleti, Rajesh, Naveen Eluru, and Chandra R. Bhat., Examining the Influence of Aggressive Driving Behavior on Driver Injury Severity in Traffic Crashes,*Accident Analysis and Prevention*, vol. 42, no. 6, pp. 1839–54, 2010.

Priyanka, and Aditi Usha Tigga., Driving Anger and Mindfulness among Young Adults,*International Journal of Multidisciplinary and Current Research*vol. 3, (May/June2015), pp. 537–41, 2015.

Rensis, Likert., A Technique for the Measurement of Attitudes, *Archives of Psychology*, vol. 22, no. 140, pp. 55, 1932.

Saikalis, Christopher, John Cliburn, Cedric Portea, and Yi-Ching Lee., An Investigation of Measuring Driver Anger with Electromyography,*Tenth International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design*, pp. 126–32, 2020.

Sawyer, Steven F., Analysis of Variance: The Fundamental Concepts,*Journal of Manual & Manipulative Therapy,* vol.17, no. 2, pp. 27–38, 2009.

Schafer, Kathryn., *The Road Rage and Aggressive Driving Dichotomy: Personality and Attribution Factors in Driver Aggression*.

Shinar, David., Aggressive Driving: The Contribution of the Drivers and the Situation,*Transportation Research Part F*, vol. 1, no. 2, pp. 137–60, 1998.

Sullman, Mark J. M., Amanda N. Stephens, and Michelle Yong., Driving Anger in Malaysia, *Accident Analysis and Prevention*, vol. October, pp. 1–9, 2014a.

Sullman, Mark J. M., Amanda N. Stephens, and Michelle Yong., “Driving Anger in Malaysia.” *Accident Analysis and Prevention*, vol. 71, pp. 1–9, 2014b.

Sullman, Mark J. M., Amanda N. Stephens, and Michelle Yong., Anger, Aggression and Road Rage Behaviour in Malaysian Drivers,*Transportation Research Part F: Traffic Psychology and Behaviour*, vol. 29, pp. 70–82, 2015.

SWOV Institute for Road Safety Research., *Anger, Aggression in Traffic, and Risky Driving Behaviour, 2012*.

Underwood, Geoffrey, Peter Chapman, Sharon Wright, and David Crundall., Anger While Driving,*Transportation Research Part F: Traffic Psychology and Behaviour*, vol. 2, pp. 55–68, 1999.

Useche, Sergio A., B. Cendales, Francisco Alonso, Luis Montoro, and Juan C. Pastor., Trait Driving Anger and Driving Styles among Colombian Professional Drivers,*Heliyon, vol.* 5, no. 8, pp. 2259, 2019.

Vazquez, Jose Antonio.,*Personality Factors, Age, And Aggressive Driving: A Validation Using A Driving Simulator,*  University of Central Florida, 2013.

Wan, Ping, Chaozhong Wu, Yingzi Lin, and Xiaofeng Ma., Driving Anger States Detection Based on Incremental Association Markov Blanket and Least Square Support Vector Machine, *Discrete Dynamics in Nature and Society*vol. 2019, pp. 1–17, 2019.

Zhang, Tingru, Alan H. S. Chan, Hongjun Xue, Xiaoyan Zhang, and Da Tao., Driving Anger, Aberrant Driving Behaviors, and Road Crash Risk: Testing of a Mediated Model,*International Journal of Environmental Research and Public Health*, vol. 16, no. 3, pp. 1–13, 2019.