Is Billboard a Visual Pollution In Pakistan?

Nusrat Azeema¹ & Ayesha Nazuk²

¹Research Student MS, Mass Communication, S3H, National University of Sciences and Technology, NUST, Pakistan.

²Assistant Professor, S3H, National University of Sciences and Technology, NUST, Pakistan.

Abstract—There is an alarming situation that roadside billboards creates a factual threat for driving safety, with some traditional measurements putting exterior distractors accountable for equal to 10% of all mishaps. In this paper we quantify the impact and effect of billboard on drivers, passersby and citizens through survey. The outcome express that billboards which place on the roadside has an obvious damaging cause on tangential power, raises intellectual work-load, visual pollution and observing obsessions, and on various transportation can illustrate concentration missing from second important highway signage. In-depth analysis of the data recommends that the outcomes of visual pollution may in reality be more substantial in this situation where population of drivers and passengers are increasing day by day.

Keywords: Visual Pollution, Billboard, Road Accident, Environmental Degradation, Survey

INTRODUCTION:

Visual pollution, it can introduce to the existence of visual projection power cables, public road billboards, defected road conditions, open storage of garbage or public waste (Plattenberg, 2007). Diversion in driving is a regularly mentioned aspect in accidents and crashes. Though, even as there has been an affluence of investigating researches in-vehicle disturbances, comparatively little point out about distraction or diversion from entities outside the vehicle (Mark, Young & Mahfoud, 2007). The pollution that is slowpoisoning our world, annihilate its defenseless life forms; diminish its assets and mutilate its natural attractiveness is a visual pollution (Weitzman, 2011). Pollution doesn't generally need to be about weighty issues that will decide the destiny of the planet. It is generally related with air, water and harmful desecrates. Once in a while, pollution is about the easily overlooked details that figure out if we have a decent day or an awful day. We know about water, air and noise pollution but the new upcoming pollution which creates distraction and visual discomfort is called visual pollution. The impact of this pollution increase tremendously from day to day. Visual pollution generally considered to those elements which is unattractive landscape, badly maintained buildings, billboards, electric poles, garbage dumps and waste materials (Muthukrishnan).

Dr.Weitzman (2011) said, Visual Pollution means ruination of the environment through extra visuals. It can be in the course of advertisements, notice, publications, brochures, and panels of commercials as well as of show's set-up. Each association is engaged in benefiting throughout

ads and in favor of this point every road side are full by catching massive statements. These industry statements assist in informing few industries though they are a foremost obstacle in environment. Broadcast and print media is in contention among each other and in this battle visual pollution is elevate slowly. It creates inconveniences for individuals over and above unsafe for the society on the earth that these billboards divert the thought of driver (Principe, 2015). Young, Lee & Regan (2008) says that for driver's distraction there are two basic factors one is internal factor like mobile, stickers, music etc and the second is external factors like billboards, hoardings, pamphlet etc. In this study they also describes that any driver who want to save their society's life he/she must try to reduce the internal factor which distract them from smooth driving but the external factors are too risky and difficult to stop.

Most of the studies directly tells us that these billboards, signboards and hoarding which create visual pollution but side by side they benefited the society in term of their economic status and till now no research give significant results that these visual polluted factors increase pollution than their economic status or condition in society. In his book he perfectly defined a +ve or -ve influences of commercial billboards in historic city centers (Portella, 2016). The significant mistake is that advertiser or billboard owners picked busiest streets for the publicizing announcements. Among the various visual forms, uncontrolled creation of billboards is the worst. Today, a rise of billboards intimidates to go round our landscape and societies into an incessant open-air advertisement and to advance it disconnect us from our natural heritage. Overloaded billboards cause negative mental and physical effects. The term billboard in this study refers to any outdoor advertising that is constantly erected beside a roadside and communicates visual information. This research deals with the billboard's impact on citizens due to their placement, size, discomfort, disturbance issue, road condition, negative feature, harassment feelings etc.

2 LITERATURE REVIEW:

Billboards have been blamed by disturbing drivers, undignified open state, encouraging unwanted utilization, and damage the countryside. Billboard also demonstrates the growing nature of visual pollution, for the scene of solitary demonstrates that highway's billboards are more horrible than a simple road (Nagle & Matthews, 2009). Although billboard advertising business would reminiscent of you to believe billboards are safe, their -ve chattels on society's health along with its life safety have been successfully documented. In 1980 Federal Highway Administration (FHA) research originates +ve correlation among accident rates with billboards. According to report overloaded billboards become many causes of negative mental and physical effects. It also discuss on that argument which is the billboards are a safety hazard for driver, passenger or citizen of any society (Scenic America).

In the openly study whether recovery from stress differ if roadside billboards are functioning. Generally, it was expected that contributors who analysis electronic billboards, relative to

contributors who normal observation, would show greater indication of stress their blood pressure is elevated, as well as this research shows greater negative effect of altered somatic activity. In adding up, it was anticipated that contributors who observed natural view and drives would practice faster resurgence from anxiety than participants who viewed electronic signboards in drives (Parsons, Tassinary, Ulrich, Hebl & Alexander, 1998). The main cause of stress diseases like burnout which is a state of emotional and physical exhaustion where someone lose their interest and motivation in life due to prolong stress which created by billboards and different road signs on citizen of every society (Smith, 2016).

It is recognized that Billboards are detractors and supporters. Virginia Tech Transportation Institute (VTTI) articulates that transporters or drivers can have different mishaps or accidents while they are distracted to the transporting task for two seconds or more (Crawford & Esquire, 2010). As Victorian Road Safety Committee specially inquires a research about driver's distraction, in this research they says that a lot of scantily billboard can create visual confusions, follow-on in one type of driver diversion. Driver's interruption can also be caused by advertising signs. They also found that evidence exposes that travelers are the furthermost basis of possible driver disturbance; more than use of cellphones or other digital devices (Parliament of Victoria, 2006)

Generally, there were significant facts that on the subject of 10-20% of all glimpses at billboards were greater than equal to 0.75 s, that dynamic billboards illustrate additional glimpses and extra elongated glances (≥ 0.75 s, ≥ 2.0 s) than print

billboards however it didn't draw a lengthy standard glimpse. In present study it was an alarming facts that billboards did not influence Glance Pattern Activity (GPA), glimpses on probable appropriate to driving stimuli. They influenced vertical gaze variability (GV) and unpredicted glimpses are drive-relevant stimuli (Decker, Stannard, McManus, Wittig, Sisiopiku & Stavrinos, 2015).

A study Scenic Kentucky point out 10 points which become the reason of billboard's negative impact on society some of them are; billboards are a form of pollution - visual pollution. Billboard workers entirely are unsuccessful to regulate themselves in their position of billboards. Billboard workers clear, cut, and demolish many trees on public ground every year. Billboards are unproductive and extraneous (Scenic Kentucky, 2016). But though the most recent European and U.S. researches fail to give a decisive respond to the issue of whether digital signboards become a reason of accidents or crashes, the investigators found in a study that near the positions where the digital billboards are fixed, there was no statistically significant change in the frequency of road accidents (Traffic Injury Prevention, 2013).

In Pakistan, Punjab government has developed a policy titled "Outdoor Advertisement Signboards Policy-2013", sanction the local to administration determine the position, dimension, nature and solidity of outdoor advertisements and billboards in agreement with the nature of the prevalent land of an area which is used (Hasnain, 2013). In Pakistan a study finding shows that people didn't aware from this term "visual pollution". Several writers, road safety or traffic management departments and different environmentalist recommended many solutions but most of them unswerving mistake by catering the problems alone with lacking of overall effects consideration (Azeema & Hashmat, 2015). As Jana & De (2015) shows in their 4th figure that other kind of pollution that is associated with visual pollution due to billboard is health hazards (31.33%), signaling problem due to electronic billboards (37.33%), Driver's problem (42%) and problems for birds (24%).

This research explains the Islamabad/Rawalpindi citizen's altruism level and its connection among the billboard's size and placement along with driver's distraction in the Pakistan, with the suggestions of such disturbance for road security, by limited existing studies on the consequences of billboards as a driver's visual distraction. Implications of results for Pakistan's road safety guiding principle and future study on billboard or any visual distraction, over and above outdoor disturbance in general or internal disturbance like car stickers, are discussed.

3.0 HYPOTHESIS 1

H0: Altruism level is independent of billboard discomfort.

H1: Altruism level is dependent of billboard discomfort.

This hypothesis was developed to check the Altruism level of participant. Altruism means the unselfishness or care about society and surroundings.

3.1 HYPOTHESIS 2

H0: Billboard size and placement is independent of billboard discomfort.

H1: Billboard size and placement is dependent of billboard discomfort.

This hypothesis was developed in order to see whether billboard's size and placement also create discomfort for citizen of Rawalpindi and Islamabad

3.2 HYPOTHESIS 3

H0: Billboard's negative or harassing feelings are independent of billboard discomfort.

H1: Billboard's negative or harassing feelings are dependent of billboard discomfort.

This hypothesis was developed to check that is billboard's discomfort depend on the negative or harassing feeling.

3.3 HYPOTHESIS 4

H0: Evidence of billboard's glance is independent of billboard discomfort

H1: Evidence of billboard's glance is dependent of billboard discomfort.

Development of this hypothesis would help to determined that is billboard's discomfort depend on the level of billboard's glance evidence.

4 METHODOLOGY

4.1 DATA COLLECTION

This study conducted a survey planned to get information about Visual pollution of billboard and its impact on society and on drivers. Pakistan's men and women are selected for this purpose. The research focused on the relation between visual

pollution of billboard and road accidents, the study also explore which factors of society not like this visual pollution, mostly.

4.2 SAMPLING TECHNIQUE

Purposive sampling method was used to select students. Questionnaires were filled from Rawalpindi and Islamabad citizen. 400 citizens were selected from different educational background. Citizen was selected at Random within twin cities to collect data with no distinction of gender. Data was collected on paper and questionnaires were filled manually by students. Total 351 students completed the questionnaire.

4.3 DEMOGRAPHICS

Participatory citizen were asked to tell about their gender, age, city, year of schooling, educational classification, driving experience, vehicle type, and road condition.

5 RESULTS AND DISCUSSION

Several fundamental issues about billboard's placement, size etc were move up to the survey respondents and the results was accumulated that 351 participants fill the survey in which 187 males and 164 females with 3 age groups like 18 – 33 year's respondent are 282, 34-49 year's respondents are 64 and 50 year to above age group's respondents are 5 in numbers. With 176 Rawalpindi residents and 175 Islamabad residents participate in this survey. The survey was circulated arbitrarily in the city of Rawalpindi/Islamabad. Simple descriptive statistics were generated from survey's responds.

58.4% people who are more than 16 years of educational background with 11.7% social science and environmental science subjects and 27.1% 1-6 years driving experience show that 80.3% Print Billboard have create 63.5% discomfort level in Pakistan ... The findings also shows that 112 respondents agree (31.9%) on that print billboard's mid of the road placement create more disturbance and 77 respondents (21.9%) said that whatever the side placement is it creates 21.1 % visual pollution issues, with 27.9% environmental issue, 28.5% road issues and 22.5% accidents issues. Under these findings where just 1.4% respondents say their road condition is excellent but approximately an average people say that their road conditions are just good and 28.5% people says that it's just fair.

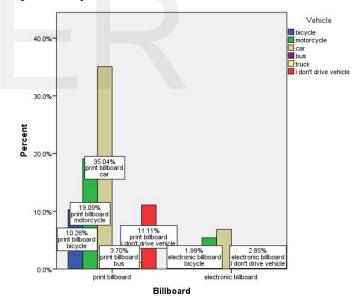


Figure 1 shows that, 123 respondents who are 35.04% car driver think that print billboard is more dangerous than electronic billboard. And we see because Pakistan is an underdeveloped country so the concept of electronic billboard is new and

upcoming fashion now. 11.11% people who didn't know how to drive or didn't drive in their life by themselves also think that print billboard is a main cause of road accidents and visual pollution.

159 respondents (45.3%) feel harassment issues when they saw Billboards on road.13% of results show that those who have Impairment issues feel more discomfort and disturbance. On the other side 25.1% respondents show 1 Altruism level and 74.9% respondent show 0 Altruism levels which means that at the time of survey which is April-May they are less concerned about other people's help and show their selfish behavior that's why our survey results didn't show any correlation between any dependent and independent variables. In the mean while, we find our hypothesis and test them to check the acceptance or rejection of individual variables.

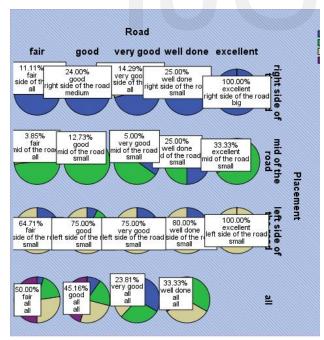


Figure 2 shows the percentage of respondents who says that according to their road conditions which size and placement of billboard create discomfort

in their lives. Respondents say that big size and right side of the road's billboards are more dangerous for them beside this that their road condition is excellent. 33.33% respondents say that small size and mid of the road's billboards are the main cause of discomfort beside this that their road condition is excellent.3.85% respondents says that their road condition is just fair and every size of billboard which fixed or hanged in mid of the road create more distraction. But 64% people agree that on left side small billboards on fair road condition become a major cause of road accidents.

Before discussing hypothesis test we tells that null hypothesis is rejected if Zcal>Ztab or -Zcal<-Ztab. So in H1 results we find that Zcal=4.526 which is greater than Ztab=1.96 it means we reject H1 that shows our Altruism's level is dependent on discomfort of billboards because P1≠P2 we can say that P1^ is significantly greater than P2^ hence we calculate that lower altruism level cause higher discomfort due to billboards.

With H2 results we find that Zcal= -0.227 which is greater than Ztab=-1.96 it means we accept H2. This means that P1=P2 we say P1^ is significantly less than P2^ hence we conclude that proportion of those individuals who are evident of any discomfort due to billboards are higher for the group who have billboard placement issue due to size of billboards.

With H3 results we find that Zcal=0.4216 which is smaller than Ztab=1.96 it means we accept H3. This means that P1=P2 we can say that P1^ is significantly higher than P2^ hence we conclude that proportion of those individuals who deem billboard as a negative feature or feel any ignite feeling of harassment due to billboard explicit

picture are higher for the group who have evident of any discomfort due to billboards.

With H4 results we find that Zcal= -0.9859 which is greater than Ztab=-1.96 it means we accept H4. This means that P1=P2. We can say that P1^ is significantly lower than P2^ hence we conclude that proportion of those individuals who are evident of any discomfort due to billboard are higher for the group who have disturbance due to size of billboard.

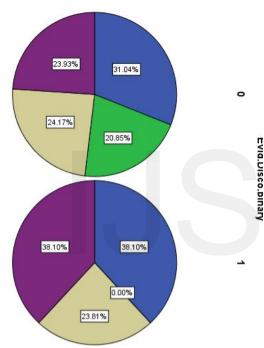


Figure 3. shows that those who are not evident of any discomfort due to billboard but they have 31.04% issues of billboard's placement and size, 24.17% feel ignite feeling of harassment due to explicit pictures on billboards and deem billboards as –ve feature, 23.93% disturb due to billboard size and 20.85% show their desire to help their people for the betterment of the society. On the other side, those respondents who are evident of any discomfort due to any billboard are 38.10% disturb and discomfort due to billboard size and placement both. 23.81% respondents agree that

they deem billboards as a negative feature and face ignite feeling of harassment due to explicit picture of billboards. Through our results and the whole survey time experience researcher feels that their respondents didn't bother to know about any new term of 'visual pollution' those who are interested just because they want new knowledge about this new term.

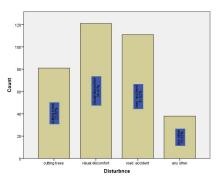


Figure 4. Shows that most of the percentage of respondents agrees on that fact that billboard are a main factor of visual pollution and a major cause of road accidents. These results shows that respondents are not happy when a billboard is place after cutting many trees it is another cause of degradation of trees life, shortage of oxygen and shadow in summer. And land orison is also occurring when trees are cutting. Other disturbances due to billboard are sun light glare which effect on eye's tension and tiredness. As we know that billboard is a colorful exhibition of any product or service and these colors reflect sun light with different side effects.

In Pakistan, where people are missing from their basic needs of livings, poverty rate is on peak, and the illiteracy rate is very high they didn't know about what visual pollution is and how they save their environment from this pollution. On 2-6-

2016, after 9:30 p.m. when a strong windstorm started and every men try to stay at home except those who are on the roads. On that day, billboards formed a trouble for public in Rawalpindi/ Islamabad. Several billboards put up with a lot of damages and some were even deracinated (Igbal, 2016). Many pedestrians were also hurt due to falling billboards. A billboard which fell on Mall Road, Rawalpindi becomes a cause of a university wall felling (APP, 2016). Cars and other vehicles were severely damaged after billboards fell on them. Flying billboards injured at least one person (Asgha, Raja, Anwar & Siddiqui, 2016). But after all that happening no one raise a voice about billboards, hoardings and any road side hangings which not only create visual pollution but also cause an environment disturbance issues. Despite efforts to do so, the paper have its limitations.

First limitation of this study is its narrow area of research because this research is limited on Rawalpindi/Islamabad's citizens therefore for further research on other countries and cities is required. Second limitation is time specification, as this study is conducted in 2016. At last the final limitation in this research is quantitative study; therefore for further research other qualitative methods can be applied.

6 CONCLUSIONS AND RECOMMENDATIONS

From the above results and discussion it is clearly indicated that visual pollution not only disturbs a society environment it also affects drivers attention too. It creates unsafe circumstance for a society, their natural beauty and their citizen's freedom of vision. This pollution escorts to a failure of sagacity of individuality and homogenizes the society

owing to the existence of akin visual poison in a lot of cities. It may escort to weakening of the community sagacity, visual appeal and other community actions of the residents. Constant visual pollution's effects have cavernous shock and could terminate to personality-changing special effects on the residents. Kids rising up being used to such awful sites could have their visual sanity dulled and may not feel the requirement to live in an enjoyable location. That type of experience could escort to the demolition of the core of individual artistic taste. These kids may not grow up their intellectual planned properly nor programmed to agreement with a lot of youth problems. These cause a constant deprivation in the system of living.

In Pakistan, results become little surprising, people will consider billboard as pollutant factor but they don't understand or recognize it in term of visual pollution. People think print billboard is more in numbers than electronic but they didn't aware of its negative or any distracting impacts. People think billboards are the cause of environment degradation specially when 3 or 4 trees are cutting down due to 1 placement of billboard but they didn't stop it. Respondent who have driving experience agree that billboard is the cause of road accidents but no one report it because of unawareness and low expectation from law and justice department in that matter. Respondents agree that their road conditions also increase the effect of visual pollution and road accidents but they didn't do any step for the betterment of their road conditions and for decreasing the accident's cases. People consider billboards are the main cause of natural

distraction but they didn't come forward to save the nature. People will considered that billboard destroy the freedom of vision but due to the money factor they didn't stop to hanging billboard on any house roof or at front of a house.

In spite of its limitations, this study does suggest that no doubt billboard is a good, easy and more effecting tool of advertising but with the passage of time the intensity of billboard increases, which create depression, aggression, frustration, irritation, and disturbance and distraction issues. It

REFERENCES

- APP. (2016). Massive thunderstorm hammers twin cities. Islamabad: DAWN.
- Asgha, Raja, Anwar & Siddiqui. (2016). Seven dead, 94 hurt as qusty winds lash twin cities. Islamabad: The Express Tribune.
- Azeema & Hashmat. (2015, june 25). Billboard Advertisement as a Visual Pollution. Retrieved MAY 21, 2016, from Academia:
 - $\label{lem:https://www.academia.edu/21495980/Billboard_Advertiam ent_A_Visual_Pollution} \\$
- Crawford & Esquire. (2010). Inside the Wachtel 2009 Digital. United States: United States Sign Council.
- Decker, Stannard, McManus, Wittig, Sisiopiku & Stavrinos.
 (2015). The Impact of Billboards on Driver Visual Behavior: A Systematic Literature Review. Traffic Inj Prev.
- 6. Edquist, Horberry, Hosking & Johnston. (2011). Effects of advertising billboards during simulated driving. Applied ergonomics, 619-626.
- 7. Hasnain, K. (2013). Regulations on outdoor advertising. Lahore: Pakistan Press Foundation.
- 8. Iqbal, K. (2016). Windstorm damages power lines, uproots billboards. Rawalpindi: The News.
- Jana& De. (2015). VISUAL POLLUTION CAN HAVE A DEE PDEGRADING EFFECT ON URBAN AND SUBURBAN COMMUNITY: A STUDY IN FEW PLACES OF BENGAL, INDIA, WITH SPECIAL REFERENCE TO UNORGANIZED BILLBOARDS. European Scientific Journal, 1.
- Lindlof. (2010). Qualitative Communication Research Methods. SAGE Publications.
- Mark, Young & Mahfoud. (2007). DRIVEN TO DISTRACTION: DETERMINING THE EFFECTS OF ROADSIDE ADVERTISING ON DRIVER ATTENTION. Uxbridge: Ergonomics Research Group School of Engineering

is a vicious circle; today you fix a visual polluted factor like billboard tomorrow you face a natural disastrous situation in this world. It degrades your property value and economic value as well. Today in Pakistan it is unnoticeable pollution but it's like slow poison. It is a time to stop this pollution today because after some time when global temperature increases drastically and environmental threats become on its peak then we try to stop this pollution too and time goes from our wrist...

- and Design.
- 12. Muthukrishnan, N. Visual Pollution More Dangerous than You Think It Is. India: C.P.R. Environmental Education Centre (CPREEC).
- Nagle & Matthews. (2009). Cell Phone Towers as Visual Pollution. Notre Dame Journal of Law, Ethics & Public Policy , 3 537
- Parliament of Victoria. (2006). Report of the Road Safety Committee on. Victoria: Victorian Government.
- Parsons, Tassinary, Ulrich, Hebl & Alexander. (1998). THE VIEW FROM THE ROAD: IMPLICATIONS FOR STRESS RECOVERY AND IMMUNIZATION. Journal of Environmental Psychology, 113-140.
- 16. Plattenberg, R. H. (2007). Environmental Pollution: New Research. New York: Nova.
- Portella, A. (2016). Visual Pollution: Advertising, Signage and Environmental Quality. New York: Routledge.
- 18. Principe, D. (2015). Understanding Pollution: Visual Pollution Is More than Just a Bad View. Understanding Pollution.
- Scenic America. Billboards Endanger Health and Safety. Washington, DC.
- 20. Scenic Kentucky. (2016). Top 10 reasons. Louisville.
- Traffic Injury Prevention. (2013, January 13). News; Digital signs "are dangerous, except when they're not". Retrieved may 21, 2016, from Screenmediamag.com: http://www.screenmediamag.com/screenmedianews/4259digital-signs-are-dangerous-except-when-theyre-not-
- 22. Weitzman, D. B. (2011). Visual Pollution. elephantJOURNAL.
- 23. Young, Lee & Regan . (2008). Driver Distraction: Theory, Effects, and Mitigation. CRC Press .
- Yussen & Steven.R. (1973). Determinants of Visual Attention and Recall in Observational Learning by Preschoolers and Second Graders. Wisconsin Univ., Madison. Dept. of Educational Psychology.

APPENDIX A: Questionnaires

Are Billboards a Visual Pollution or not? Researcher: Nusrat Azeema / Supervisor: Ayesha Nazuk

This survey is part of project by MS-Mass Communication student at National University of Sciences and Technology Islamabad. Data collected for this survey will remain confidential and will only be used for academic purpose by researcher. Through this survey researcher want to investigate the impact and effect of billboard on drivers, passerby and citizens. Your input will help us in understanding the issue in detail. The contribution from your side will be highly appreciated! If you have any queries then please contact us on this email address: (nusratazeemaraja@gmail.com)

Gender								
Fen	nale	Male						
Name (Option	al)							
Where do you	live?							
	Rawalpii	ndi				Islamaba	ad	
Age								
18 above but less than 26 years	26-33 yea	rs 34-4	11 years	42-49	years	50-57 year	rs	58- above years
Years of Schoo	ling?							
Less than 5		ore than	8 or Mor	n hut	12 or	More but	16	or more
	Age 18 above but less than 26 years Years of Schoo	Name (Optional) Where do you live? Rawalpin Age 18 above but less than 26 years Years of Schooling?	Female Male Name (Optional) Where do you live? Rawalpindi Age 18 above but 26-33 years 34-4 years Years of Schooling?	Female Male	Name (Optional) Where do you live? Rawalpindi	Female Male Name (Optional) Where do you live? Rawalpindi Age 18 above but less than 26 years less than 26 years Years of Schooling?	Name (Optional) Where do you live? Rawalpindi Islamab Age 18 above but 26-33 years 34-41 years 42-49 years 50-57 years 50-	Name (Optional) Where do you live? Rawalpindi Islamabad

IJSER © 2016
http://www.iiser.org

Lawyer

Economics

Marketing and

Advertisement

Civil

Engineering

Civics

5- Classify your education from one of these categories

Energy

related

Environmental

science

Social

in

science

general				

l	Jrban	Communication	Medical	ENT	Psychologist/	Fine	Political	Other
P	Planning	Science	Doctor	Doctor/	Psychiatrist	Arts	science	(specify)
			any type	Neurologist				
				or closely				
				related field				

6- In general your actions are based on the repercussions/effects of your action on;

yourself	Your friends and family	Society as a whole	Your close social circle	None of these

7- In general I like donating in charities.

Never	Rarely	Sometimes	Most of the time

8- In general I participate in funds donations campaigns/drives for various charitable organizations

Never	Rarely	Sometimes	Most of the time

- 9- Can you recall any event on social media that organized special funds/facilities for the deprived segments of society? If yes please mention name or describe roughly ------
- 10- What type of billboard you mostly see on roads?

Print Billboard	Electronic Billboard

11- How much driving experience do you have?

Under 1	1 or more	6 or more	11 or more	16 or more	21 or more	None
year	but less	but less	but less	but less		
	than 6	than 11	than 16	than 21		

12- What type of vehicle do you drive?

Bicycle	Motorcycle	Car	Bus	Truck	I don't drive

13- Do you feel Billboard is a cause of any discomfort?

Yes	No	Not Sure
. 55		

	any discomf	T				I		1-4	
Yes			Γ	No				lot sure	
- Which type of disco	omfort do yo	ou experie	ence?						
Cutting trees Visual disc		comfort	comfort Road accide					Any other, please specify	
· In your opinion whi	ch type of B		s the m	ain cause of	f Visua		tion? Billboa	rd	
Electi	OHIC BIHDOA	ıu				PIIII	DIIIDUa	li d	
- Do you have any vis	sual impairm	nent?							
	Yes			No					
- Which size of billbo	ard creates	discomfo	,						
Big			me	dium				small	
- Which placement o	f billboard c Mid of the		Left s	rt for you? ide of the		None		All	
Right side of the road	(on bridge))	road						
-	(on bridge)			rassment bo		<u> </u>	olicit pi	ctures/contents Not sure	
road - Do you think Billboa	(on bridge) ards can igni	te feelinç No	gs of ha	No comme	ents or	nit		Not sure	

23- How you rate your road condition? (1 is bad-5 is well constructed and managed road)

Fair	Good	Very Good	Well done	Excellent

For contact: email; (ayesha.nazuk@s3h.nust.edu.pk)/(nusratazeemaraja@gmail.com)

