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# ''EXAMINING ATTITUDES TOWARDS SAFE SPEED TO GUARD PEDESTRIANS''

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## ABSTRACT

Share of nighttime pedestrian fatalities has been related to human factors for several years. the main focus of the current paper aims to look at the choice of introducing a 40km/h night zone regulation. Particularly targeting the 60km/h limit roads to further protect pedestrians. Questionnaires of the study were distributed to a random sample of 4 groups. Australians (born in Australia) and three other, Australians born in numerous countries and belongs to Africa, Asia, and Europe. The Questionnaires were associated with the preference of introducing 40km/h during the night (Night Zone) and also associated with the delay concerns of introducing 40km/h during the day (Day Zone). The full number of participants within the study is 300 of the four groups. Each group has 75 participants. The study utilized age, gender, and legal status as independent variables. Literature search has found different pedestrian fatality trends of the four cultural groups some are ascending and therefore the others are descending. Therefore the study hypotheses that cultural groups living in Perth are different in terms of their attitudes towards the preference Night Zone and also the delay concerns of the Day Zone. Acceptance of the Night Zone preference reached 64 % whereas; the mean rate responses reached 74 you look after the Day Zone delay concerns. it had been learned from results that attitude differences existed between the cultural groups on both Night Zone and Day Zone options as hypothesized. The result showed that the Asian group recorded very cheap rate for the Night Zone preference and cluster analysis depicted that clearly. There was a statistically significant difference in drivers obeying the sign limit, between Asian and two groups namely African and Australian. Similarly, cluster analysis performed for the Day Zone indicated that the ecu group was far from the remainder of the clustered groups showing fewer concerns of implementing the Day Zone option on a selected issue which is, “European group don't believe that the delay is caused by the 40km/h regulation but rather they believe it's thanks to the traffic

signals". The Australian group was the foremost concerned about implementing the Day Zone limit, as they recorded the best mean rate response 77 %. There was a statistically significant difference between singles and non-singles on the preference of Night Zone differences. A statistical difference was also found between male drivers who believe that 40km/h during the day is simply too slow compared to female drivers. The 18-29 years age bracket was the foremost concerned about the Day Zone implementation compared to other age groups. Surprisingly, they also recorded the bottom mean response rate for the implementation of the 40km/h Night Zone limit of all age groups. They reveal their attitudes against implementing the 40km/h limit together and preferring to depart the 60km/h regulation unchanged. Details of statistical procedure of Variance (MANOVA) are included throughout the analysis. Some analysis, results, and conclusions of this paper are valuable and useful for practitioners for exposing the ideas of drivers. Knowing that the Arab Gulf Countries particularly the dominion of Asian country are a bunch to several expatriates who are road users (drivers or pedestrians) contributing to pedestrian fatalities.

**Keyword:** Safe Speed to guard Pedestrians, nighttime pedestrian,

## 1. INTRODUCTION

Nighttime pedestrian fatalities are related to human factors for several years. Many authorities have made an extended stretch of successes in road safety, particularly in reducing pedestrian fatalities and clearly in developed countries i.e. USA, Europe, and Australia. This issue is continuous to be of alarming concern for several Asian countries, India, Pakistan, many countries in Africa, and therefore the geographic area. One common cluster concern that's persisting for many of the countries is nighttime pedestrian fatalities. There are 200,000 pedestrians killed at midnight every year worldwide, [1]. These forms of accidents showed resilience to reduction [2] & [3]. Recent research on time of the day, reported that the primary few hours of the night are when most pedestrian fatalities occur, [4]. A more specific literature search found that pedestrian fatalities vary from continent to the opposite and from country to the opposite. Figure 1 below

shows four places each belongs to 1 of the four groups under study and are having a special pedestrian share of mortality rate and trends.

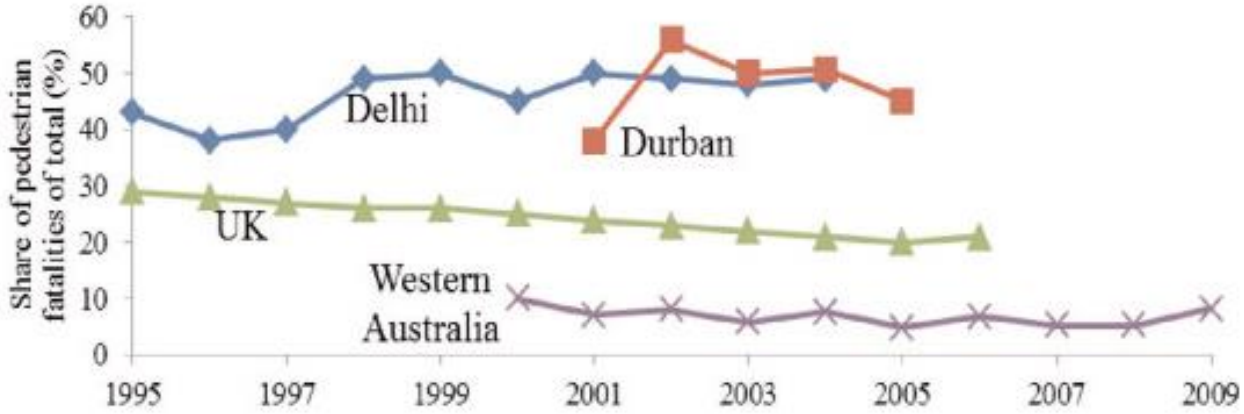


Figure 1. Share of pedestrian fatalities of total [5], [6], [7] & [8]

The current study sought to realize a greater and a wider understanding of the attitudes of drivers from the various backgrounds on certain variables mentioned below. the concept of the multicultural groups was to induce a more realistic random sample of the population as possible. Australia like other countries within the world is understood to own a multicultural society and cultural group involvement in pedestrian accidents is inevitable, as an example [1] found that 42% of all traffic fatalities in Asia are pedestrians. Similarly [9] was reported that foreign-born are 36% of recent York City's residents but comprising 51% of fatalities.

A comprehensive literature search also found that studies didn't pander to or examined the likelihood of introducing an evening zone ordinance like the college zone ordinance, but restricted other relevant issues to boost pedestrian safety e.g. on visual contrast, [10], biological motion [11] and manipulating traffic signals [12]. Many researchers round the world have emphasized one common concern which is to cut back the speed of the vehicle ([13]; [14] & [15]. Since speeding behavior is wide-

spread and maybe socially acceptable, [16]. This study, therefore, employed a self-report methodology to look at attitudes on 40km/h speed zones.

According to [17], there are some safety concerns thanks to the rise in fatalities from 9 percent within the years 2007 and 2008 years compared to 14 percent in 2009. the foremost recent concern was reported by [18] thanks to the high number of fatalities in 2011 [18]. consistent with data collected from the Western Australia Police, it indicated that the share of dark to day time ratio of pedestrian fatalities has increased from - 9% in 2007 to 57% & 45% in 2008 & 2009 respectively. In a shot to focus on speed reduction, Main Roads authority found one stretch of road that had higher pedestrian accidents than the other roads within the metropolitan area.

This road had a posted speed of 60 km/h limit and that they decided an endeavor. They installed 40 km/h electronic speed signs along that road, see Figure 2 below.


Figure 2. Electronic 40 km/h signs at the identical location at day and night

The purpose was to introduce a variable speed zone by lowering travel speeds from 60 km/h to 40 km/h during peak periods of pedestrian activities. The initiative could be

a trial to enhance safety for pedestrians and other road users The signs stayed displaying 40 km/h from 7.30 am till 10.00 pm (except Friday and Saturday they're extended till 1:00 am rather than 10:00 pm). the identical signs will display 60 km/h outside the above mentioned time. As enforcement began during this road and plenty of others of 40km/h limits, concerns were raised because of the high number of speeding fines [17]. the foremost severe increase came within the number of speeding motorists in 40 km/h (non-school zone) areas where 96 drivers were caught daily within the 40 km/h zone compared to 83 the previous year. If drivers' speeding behaviors continued to the same level therein zone, it'll have a rise by 4745 speeding fines annually.

It is paramount to pick out the suitable ordinance to suit road user's behaviors. By understanding the causes of a maladaptive behavior to speeding, it can help within the development of methods to pick out the foremost appropriate [19]. Concerns were also voiced by the RACWA (Royal Automobile Club of Western Australia) about such changes within the regulation which can increase travel times and cause confusion when changing speed limits [20]. in step with a recent survey by the TAC (Transport Accident Commission) in Victoria, Australia, it had been reported that only 46 percent of drivers believe that driving 50 km/h in a very 40 km/h zone is unacceptable. this implies that there still appears to be some tolerance of low-level speeding on regulation like the 40 km/hr. Despite all the TV advertisements and campaigns, the top of the community relation of the TAC said it absolutely was most concerning that tiny had changed in people's attitudes towards speeding from the previous year, [21].

In addition to the above, the study sought to look at the night zone option and to check the strain associated behaviors with the 40 km/h limit imposed during the day. There was a requirement to raised understand the factors that contribute to driver attitudes and behavior when the 40km/hr limit was imposed during the day (Day Zone) and through the night (Night Zone).

## 2.. PARTICIPANTS

Submission and collection of questionnaires were administered in Perth to four groups of Australians from different cultural backgrounds and in step with their country of birth i.e., Africa, Asia, Australia, and also the EU countries. Participants from Australia were born in Australia et al was added to at least one of the three cultural groups per their birthplace. as an example, participants from Africa were from African nation, Zambia, Kenya, and Egypt. Participants from Asia were from China, Singapore, Malaysia, Indonesia, Japan, India, and Pakistan. Participants from EU countries were from England, Macedonia, Czech, and Holland. Respondents were also stratified in keeping with gender, legal status, and cohort (18-29, 30-44, 45+years) including their country of birth. Each cultural group had 75 participants. Singles were 153 (51%). the common age was 33, 27, 36 & 37 years for Africans, Asians, Australians, and Europeans respectively.

Respondents were recruited through the planned network from the research team. A slow process involved face to face contact to confirm exclusion or inclusion within the survey. Some participants who haven't visited their country of origin within the last 5 years were excluded from the study. the foremost important criterion for inclusion within the study was that participants held a current Australian driving license. in line with the ethics panel of Curtin University, all participants were to be given a consent form and knowledge letter attached to the questionnaires.

## 3.APPROACH

A ten-item questionnaire was accustomed collect demographic data. It used a variety of things constructed specifically for this study and are used as dependent variables (items) were divided and targeted the 2 options. Firstly, the preference to implement the 40 km/h limit during the night (Night Zone). This can be a 5 – item questionnaire with their abbreviation shown in Table 1 below. It relates to the acceptance of the thought, obeying the flashing sign, contributing to fewer fatalities, safety, adopted in other similar locations, and eventually, it may be almost like School Zones in terms of safety. It's measured on a five-point Like r t scale utilized (1 = strongly disagree, 2 = disa-

gree, 3 = neutral, 4 = agree, 5 = strongly agree). The study conducted a reliability test and located Cronbach's alpha to be acceptable 0.76.

Table 1. Items on preferring the employment of 40km/h Night Zone

| Item | Questionnaire | Abbreviated |
|---|---|---|
| 1 | Drivers are more likely to accept the idea of a 40 km/h Night Zone around entertainment venues. | Accept the idea |
| 2 | Driver are more likely to observe and obey flashing 40 km/h Night Zone signs. | Obey the sign limit |
| 3 | There may be less pedestrian fatalities if 40 km/h Night Zones are introduced around entertainment venues. | Less fatality expected. |
| 4 | 40 km/h Night Zone may need to be adopted other Weeknights for safety of pedestrians. | Adopt it other weeknights |
| 5 | Night zone is similar to the 40 km/h School Zone limit in terms safety for pedestrians. | Safe as School Zone |

Item Questionnaire Abbreviated

Secondly, the delay concern if the 40km/h during the day (Day Zone) is implemented. this is often a 5 – item questionnaire with their abbreviated terms shown in Table 2 below.

Table 2. Items on delay concerns on the employment of 40km/h Day Zone

| Item | Questionnaire | Abbreviated |
|---|---|---|
| 1 | Drivers may find a 40 km/h limit too slow during the day. | Too slow speed |
| 2 | Drivers may find it stressful to drive at 40 km/h limit during the day on roads not busy with pedestrians. | Stressful speed |
| 3 | Drivers may show less tolerance during the day if driving on roads with a 40 km/h limit. | Less tolerance |
| 4 | Drivers are likely think that a 40 km/hr limit during the day will slow the flow of traffic. | Slows traffic |
| 5 | Drivers may think that delays in the CBD are due to a 40 km/h limit during the day rather than the traffic signals. | Speed delays not signals |

Item Questionnaire Abbreviated

The approach used here has examined the vital variables managing the delay issue within the 40 km/h during the day. The study explored five variables. It's supported two concepts the direct delays as in items 1, 5, and therefore the stressful effect on behavior because of delays, as in items 2, 3 & 4. Cronbach's alpha is.76 which is taken into account important for the reliability of the analysis. Like r t scale was utilized (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree).

## 4. STATISTICAL METHODS.

The study adopted the ten dependent variables discussed in Section 3 above. The study also included age, gender, and legal status as independent variables. For this research study, statistical method of Variance (MANOVA) was employed to go looking for differences amongst the dependent variables. This study is using 75 cases in each cell and consistent with [22], if any violations of normality do exist, it'll not affect the robust-

ness of the analysis as long because the cases in each cell exceed 20. Details are discussed in Section 5.1 for the Night Zone option and Section 5.2 for the Day Zone delay concerns. To further test the groups for differences, Cluster analyses were performed for the info in Section 5.1 and 5.2. it had been appropriate to check the info of those two sections separately. Section 5.3 was added to research differences in age groups. Researchers utilized SPSS software to perform statistical data analysis.

## 5.. RESULTS

### 5.1. Night Zone option

Data analysis indicated that the preference for the Night Zone option was 3.57 (64 %) for all groups. to look at responses, a between-group MANOVA was performed to research group differences in response to the five dependent variables used as shown in Figure 3 below.

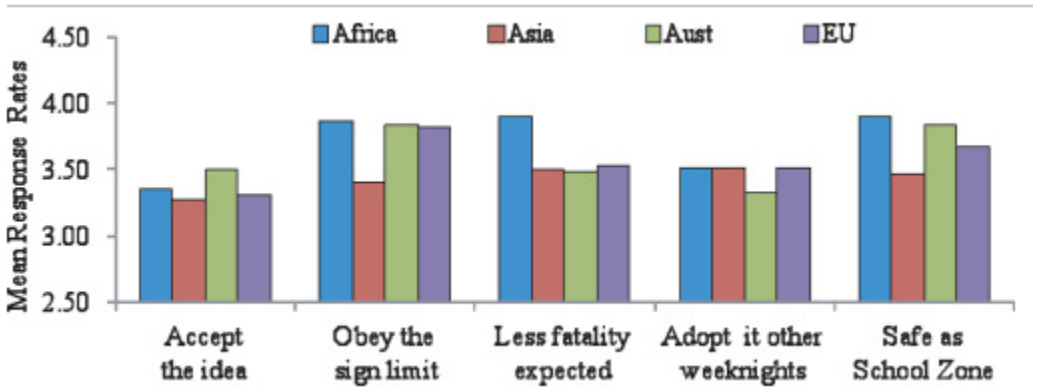


Figure 3. Examining five-item variables for the preference of Night Zone option

Results indicate that there was a statically significant difference between the groups on the combined dependent variables. F (15,882) = 3.32, p =.000, Wilks' Lambda =.85; partial eta square =.05. When the results were considered separately, the sole items to succeed in statistical difference using Bonferroni adjusted alpha level of.010, were two items. “Obey the sign limit” and “Less fatality expected”. In terms of “Obey the sign limit”, an inspection of the mean response rates indicated that Africans reported higher mean response rates on “Obey the sign limit” (M= 3.87, SD =.66) than Asians (M= 3.40,

SD =1.08).

In terms of the "Less fatality expected" item, African groups reported a better rate (M= 3.89, SD =.73) than other groups particularly Australian (M=3.48, SD=.92). Further analysis in Table 3 below shows details of great differences found between groups on the 2 dependent variables mentioned above.

Table 3. Group differences for the preference of Night Zone limit

| Variables | Between groups | | Mean Response Rates | | SD | | $F(5,144)^*$ | Partial Eta $^2$ |
|---|---|---|---|---|---|---|---|---|
| Obey the sign limit | Asians - | Africans | 3.40 | 3.87 | 1.08 | .66 | 10.19 | 06 |
| | = - | Australians | = | 3.84 | = | .68 | 8.95 | .06 |
| Less fatality expected | African - | Asians | 3.89 | 3.49 | .73 | 96 | 8.23 | .05 |
| | = - | Australians | = | 3.48 | = | .92 | 9.31 | .06 |
| | = | Europeans | = | 3.53 | = | .83 | 8.00 | .05 |

*

P <.01

There was no significant difference found in gender (male vs. female) despite the marginally higher mean response rates of males on Night Zone preference than females on all five variables. When examining legal status (single vs. Non-single) as an variable quantity, on the preference of the Night Zone option, one-way MANOVA using categorical variable quantity was performed. Results revealed that there was a statically significant difference between the groups on the combined dependent variables. F (5, 194) = 3.47, p =.005, Wilks' Lambda =.82; partial eta square =.08. When the results of the dependent variables were considered separately, single and non-single reached statistical difference using Bonferroni adjusted alpha level of.01, and particularly on two items. Firstly on accepting the thought of the Night Zone option and secondly on believing that

the Night Zone option are going to be as safe because the School Zone. See Table 4 below.

| Variables | Between singles & Non-singles | Mean Response Rates | | SD | | $F(5,294)^*$ | Partial Eta $^2$ |
|---|---|---|---|---|---|---|---|
| Accepting the idea | Singles Non- Singles | 3.03 | 3.69 | 1.11 | .78 | 35.38 | .11 |
| Safe as School Zone | Singles Non- Singles | 3.46 | 3.98 | .98 | .61 | 29.34 | .09 |

*

P <.01

When the common linkage between groups was performed, the Dendrogram in Figure 4 depicted that the Asian group clearly separated from the remainder of the clustered groups. They recorded very cheap mean response rates 3.43 of all groups showing the smallest amount favorite for the Night Zone preference. The second distanced group is that the African group recorded the best mean response rates of all cultural groups, preferring the Night Zone limit as an option. The Australian and therefore the European groups are the closest indicating some similarity between their mean response rates.

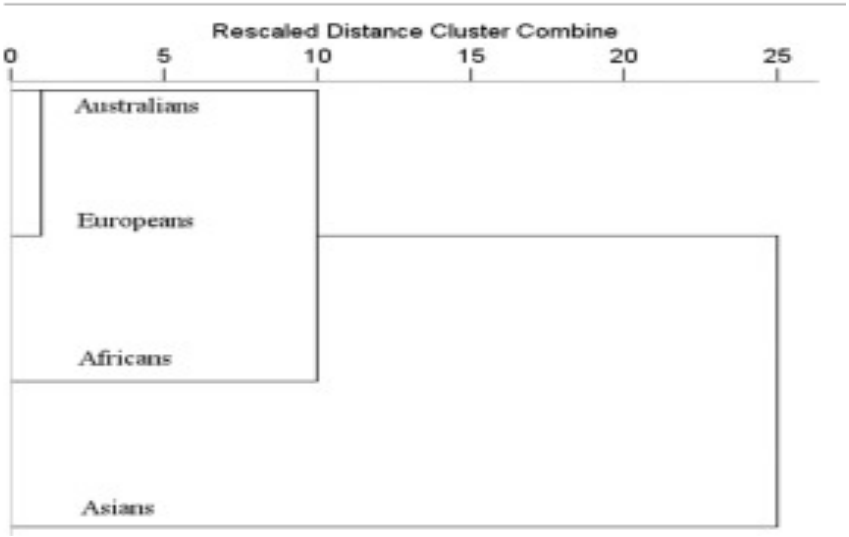


Figure 4. Dendrogram depicts the Asian group aloof from the opposite three groups.

**5.2. Day Zone Delay Concerns**.

The study found that the general mean response rates for the delay concerns of the Day Zone were 3.97(74%). it's shown in Figure 5 that a number of the differences between the mean response rates thereon concerning delay. This was further examined by looking for significant differences of groups by performing MANOVA.

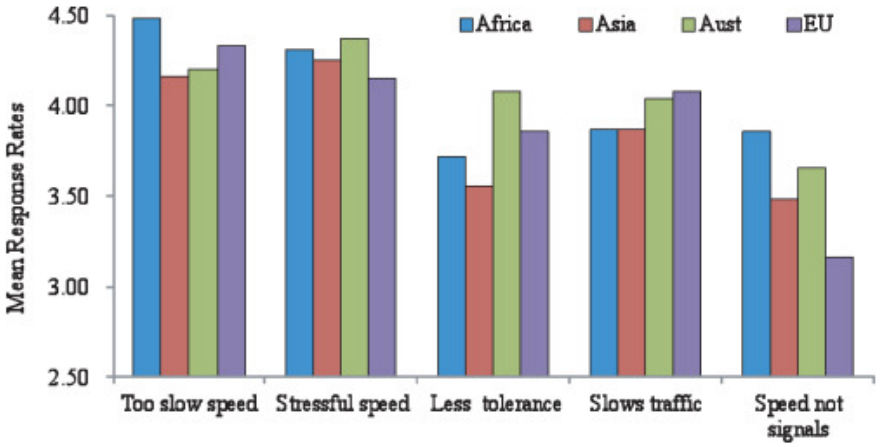


Figure 5. Examining group differences on Day Zone delay concerns

Results indicate that there was a statically significant difference between the groups on the combined dependent variables. F (15,806) = 4.2, p =.000, Wilks' Lambda =.81; partial eta square =.07. When the results were considered separately, the sole item to suc-

ceed in statistical difference using Bonferroni adjusted alpha level of.010, was “Speed delays not signals”, an inspection of the mean response rates indicated that the eu group recorded all-time low mean response rate (M= 3.16, SD =.92) of all groups. it absolutely was statistically different and far below the African mean response rates (M= 3.87, SD =.87).

A one-way between-group MANOVA was also performed to research gender differences within the delay concerns of the Day Zone. There was a statically significant difference between the groups on the combined dependent variables. F (5, 294) = 7.42, p =.000, Wilks' Lambda =.89; partial eta square =.11. When the results of the dependent variables were considered repeatedly, the sole item to succeed in statistical difference using Bonferroni adjusted alpha level of.01, was the “Too slow speed” item. That difference had F (1,298) = 8.98, p=.003 and partial eta square =.03. An inspection of the mean response rates scores indicated that male drivers reported higher mean response rates (M= 4.43, SD =.72), compared with female drivers (M=4.16, SD =.82). There was no statistical difference found on legal status as an experimental variable.

When the common linkage between groups was performed, cluster analysis revealed that the eu group was clearly separated from the remainder of the clustered groups, See Figure 6. Another separated cluster is that the Australian group, because it will be seen from Figure 5, that the Australian group has had two highest mean response rates than other cultural groups. within the meantime, the Dendrogram in Figure 6 shows that the Australian group is in a very common cluster with the Asians and therefore the African groups

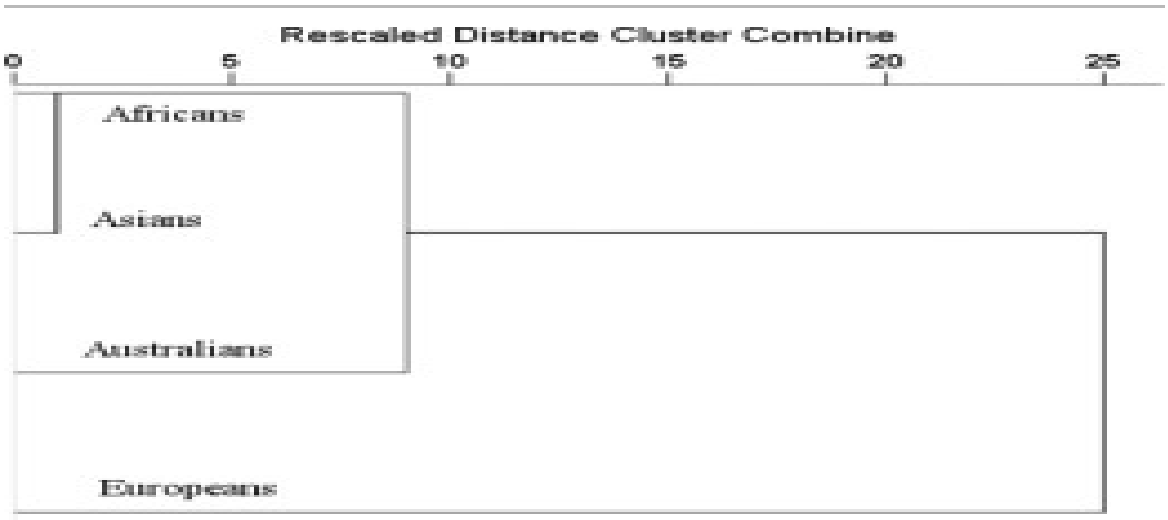


Figure 6. Dendrogram depicts European group is separated from the opposite three group

### 5.3. Night Zone preference vs. Day Zone delay.

The overall mean response rates and percentages of every cultural group are shown in Table 5 on the preference of the 40km/h Night Zone option and therefore the delay concerns of the 40km/h Day Zone option. It may be seen from Table 4 that the general mean response rate of the 40km/h Night Zone preference is 3.57 (64%). this can be compared to three.97(74%). of the delay concerns of the Day Zone option. this is often indicating that the respondents are more in favor of implementing the 40km/h limit during the night instead of during the day.

Table 5. Group responses rates & percentages for the 2 zones

| Group | Mean Night Zone Preference Rate | % Response Rate of the group | Mean Day Zone delay Rate | % Response Rate of the group |
|---|---|---|---|---|
| African | 3.71 | 68 | 4.05 | 76 |
| Asian | 3.43 | 61 | 3.86 | 72 |
| Australian | 3.59 | 65 | 4.07 | 77 |
| European | 3.57 | 64 | 3.91 | 73 |
| Mean | 3.57 | 64 | 3.97 | 74 |

It may also be seen from Figure 7 that African and Australian groups are in less favor of the Day Zone option and therefore the African group strongly in favor even quite the Australian of the Night Zone option. The Asian group had all-time low mean response rates of all cultural groups on both the Night Zone preference and Day Zone Delay. the eu group means response rates are low and particularly not up to the group's average on the delay concerns of the 40 km/h Day Zone delay limit.

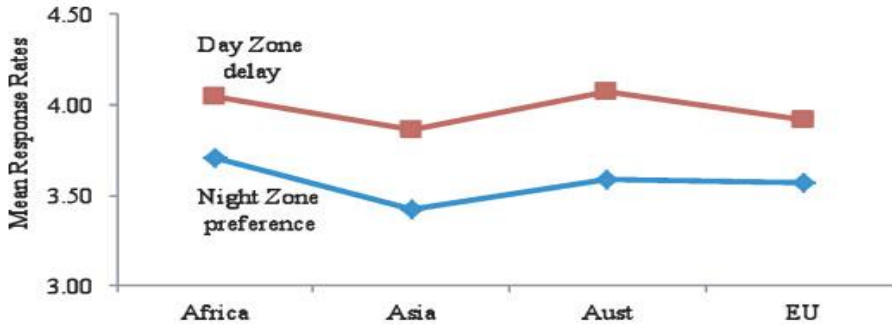


Figure 7. Trends from responses of the 2 zones by multicultural groups.

The attitudes of the age groups on the preference of the Night Zone preference vs. delay concerns of the Day Zone showed that the younger group (18-29) years was less favorable for the Night Zone option and reported strong rejection of the Day zone option. See Figure 8 below. Another important thing to be learned from Figure 8 is that the older the cohort, the upper the acceptance of the 40km/h Night Zone option.

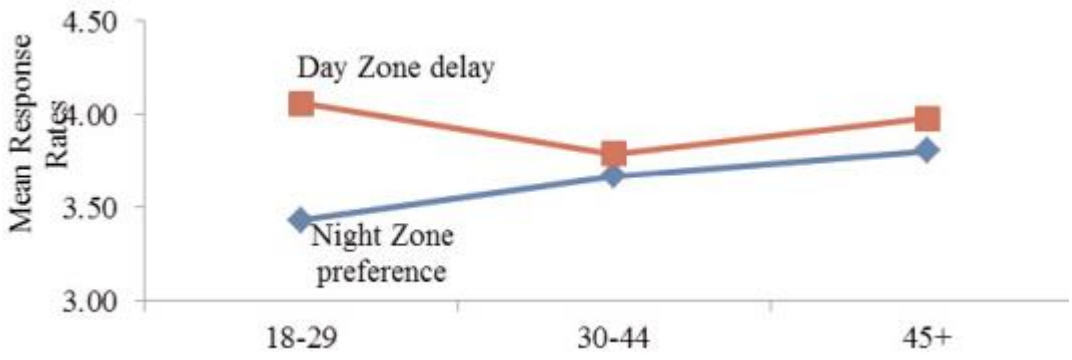


Figure 8. Age groups differences on the preference of the Nigh Zone option & the delay concerns of the Day Zone options.

Further analyses in Table 6 below, showed details of the numerous differences found between the younger age bracket 18-29 years cohort and therefore the older age groups on three items of the Night Zone option. Similarly, it showed the center cohort statistically different from the opposite two age groups on one item of the delay concerns of the Day Zone.

Table 6. cohort differences on both Night Zone preferences & Day Zone delay

| Zone Type | Variables | Between Age groups | Mean Response Rates | SD | F(4,123)* | Partial Eta$^2$ |
|---|---|---|---|---|---|---|
| Night | Accept the idea | 18-29 & 30-44 | 3.11 & 3.63 | 1.1 .84 | 13.25 | .05 |
| | | = & 45+ | 3.11 & 3.64 | 1.1 .83 | 11.52 | .05 |
| | Adopt it other | 18-29 & 30-44 | 3.33 & 3.73 | .91 .88 | 8.79 | .04 |
| | weak nights | = & 45+ | 3.33 & 4.02 | .90 .85 | 10.92 | .05 |
| Day | Speed delays | 30-44 & 18-29 | 3.08 & 3.74 | .95 .96 | 24.67 | .10 |
| | not signals | = & 45+ | 3.08 & 3.60 | .95 .97 | 11.04 | .08 |

* P <.01

## 6.DISCUSSION

It was learned from results that the general preference for the Night Zone option was 64 attempt to reached 74 you look after the delay concerns of the Day Zone option. This revealed the general strong rejection of the Day Zone as an option and shows the respondent's preference for the Night Zone as a far better option.

As was hypothesized, differences of attitudes existed between cultural groups on some dependent variables of both the preference of the Night Zone and therefore the delay concerns of the Day Zone options. Two cluster analyses were conducted for every option following MANOVA analysis. the primary Dendrogram regarding the Night Zone showed the Asian groups a distance faraway from the remainder of the groups followed by the African group. The Asian group recorded very cheap mean response rates for the Night Zone preference 3.43 compared to the eu and also the Australian groups 3.57 and 3.59 respectively. The Asian group has less belief about drivers to obey the flashing sign limit if the 40 km/h Night Zone option is implemented. There was a statistical difference between them and therefore the African and Australian groups. this could be reflected within the road mortality rate in Asian cities like China, India, and Thailand. In Bangkok-based professor, for example, agree that drivers can avoid accidents if they're careful, obey the laws, and not speed", [23]. The Asian group had all-time low mean response rate of all the cultural groups on both options. this could also indicate their cautious responses on introducing the 40km/h scheme irrespective of day or night, and further may prefer the 60km/h to stay.

Unlike Asians, the African group had the best mean response rate for preferring the 40km/h Night Zone in particularly on their belief that such a zone will reduce pedestrian fatalities. This belief is statistically significant compared to the remainder of the groups. A literature search found that almost all pedestrian serious casualties occur in Africa during the night. A recent study in Ghana by [24] compared fatality rates between daytime and night-time showed that pedestrian casualties were significantly higher within the night-time than the daytime period ($p < 0.001$) at each severity level closer to 70 to

check out night compared to day time. While pedestrian deaths in African nation, peaked during the evenings, with the best incidence between the hours 18:00- 21:00, [3]. this could also reflect the concerns of the African respondents to the preference of the 40km/h option at nighttime to cut back pedestrian fatalities. From another point of view, some African respondents commented that 40km/h within the daytime is slow and might be stressful as most drivers are in a very hurry to end some tasks, unlike the evening time which is taken into account to be less pressure on drivers. A study found that the reduction within the stress differs in keeping with the type of knowledge from slow-moving vehicles ahead, [25]

The second Dendrogram of Figure 6 regarding the Day Zone, indicated that the ecu group was faraway from the remainder of the clustered groups reporting fewer concerns of implementing the 40km/h Day Zone limit than the opposite cultural groups., particularly on the item of “Speed delays no signals”, reported a lower mean response rate of three.16. this suggests that the ecu group doesn't believe the delay is caused by the 40km/h ordinance but rather they believe, it's thanks to the traffic signals timing which is contributing to the traffic delays. European cities have for an extended time researching and adopting speed reduction and have shown to saved many lives. The Austroads report revealed that EU countries have utilized harm minimization principles because the basis for setting EU standards. It added that Australian speed limits cared-for be more than those found elsewhere including in Europe [26]. They recommended that to scale back road injury rates further, more must be done to scale back driving speeds in Australia, and lowering speed limits could also be a critical component in achieving this outcome. European Parliament is currently calling for speed limits on residential roads and single-lane roads without cycle tracks throughout the ecu community to be reduced to 30km/h within the interests of road safety. that might equate to 20m/h within the UK and therefore the move has been welcomed by the campaign group “20's plenty for us”, which lobbies for that limit to be put in situ, [27]. In fact, 20m/h speed limits have already been introduced in several cities in Britain including Bristol and Liverpool, other cities gazing 20mph limits include Cambridge, Norwich,

Brighton, and Bath, the report added.

As for the Australian group, this study found that they're most concerned about the 40km/h Day Zone limit implementation. They recorded the very best mean response rate of 4.07 (77%). This result may suggest that the Australian might not make sure of the protection benefit for the pedestrians if Day Zone is implemented as an option round the city et al.. The regime Authority is suggesting that such a regulation because the 40km/h have to be proven before implementation, [28].

In terms old group influence, the study found that the younger group (18-29) years was less in favor of the Night Zone option and reported strong rejection of the Day Zone option. this can be revealing their intention to stay the 60km/h as a limit instead of introducing the 40km/h limit. it's well documented in literature about the speeding involvement of male drivers, particularly the (18-24) years group. In support of this, the study found that there was a statistical difference between male drivers who believe the 40km/h is “too slow speed” during the day than female drivers.

In addition thereto, the study also found that the older the people the upper the acceptance of the 40km/h for the Night Zone option because the older age groups are more committed teenage children who wish to attend clubs and other entertainment venues which might make them more concerned about their children safety as pedestrians. during this study, non-single drivers were more towards “Accepting the idea” of the Night Zone option and believing that the Night Zone option are as safe because the School Zone compared to the only drivers. this could also explain that non-single drivers could also be having children attending schools and are well educated about the danger of upper speed and particularly around school areas, unlike the one drivers. A recent study by [29], found that 40km/h school zones in Australia have reduced children fatalities compared to the high number of Malaysian children fatalities, despite the stringent engineering measures by the latter.

To conclude, the paramount importance of knowing how road users think in terms of speed reduction may result in further understanding of a number of the unsafe behaviors that relate to risky speed against pedestrians. In fact, pedestrian crashes are of concern to several authorities in Asia including the Arab Gulf Countries. the dominion of Saudi Arabia isn't only the biggest but also plays a number to several expatriates who may or might not understand the road rules including the ordinance. they will must be educated about the advantage of speed reduction as drivers and therefore the importance of exposing the tangible advantage of avoiding a crash when a lower ordinance is adopted.

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