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Research Article



Road Courtesy: A Prerogative of Gender, Age and Car Size

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Abstract. This study addressed the hypothesis that courtesy on busy Maltese roads was dependent on, or influenced by, independent factors relating to the driver and car, or both. Courtesy was defined when a driver with the right of way 'allowed access' to another car onto a main road leading to a congested roundabout, whereby 'courteous passage' was the only reasonable means of access for the second car. 'Allowed' access to the same car (British Vehicle Classification [BVC] class 2, 17.5 years old in poor condition), with one driver aged 50+ and one passenger aged 17 years, approaching the same junction between 07:15 and 07:45 on school days was assessed. Details of all cars including BVC group that refused or allowed access, their drivers' gender and age $(\pm 10 \text{ years})$, any accompanying passengers and the prevailing weather was recorded onto a standardised proforma. Data from 88 schooldays over 6 months resulted in 141 refusals plus 44 courteous passes (analysed), and 46 access events through gaps in traffic (not analysed). The weather conditions and presence/absence of any copassengers, whether adult or children, had no bearing on road courtesy. Courtesy was significantly enhanced with family saloons (BVC Groups 4–6) when compared with small cars (Group 1–3, p = 0.04), and luxury or work vehicles (Group 7–11, p = 0.0065), especially in those with male drivers aged 40+ (p=0.022). Drivers of large and work vehicles, almost exclusively male (92%), were significantly less courteous (p = 0.025).

Keywords: Road courtesy, gender, car size

1 Introduction

Courtesy on roads is probably an important contributor to a pleasant driving experience and may encourage better driving and road safety. Conversely, it is clearly absent in extreme cases of road rage (SafeMotorist.com, 2016; DailyMail, 2015). Like road rage, road courtesy may be more prevalent in certain countries (Intelligence for Your Life, 2017) and in certain regions within countries and, amongst others, this may be a factor related to the local culture, population behaviour and educational level. Within Europe, for example, it is commonly accepted that the standard of driving and associated courtesy on the road is higher in northern countries and less so in southern and Mediterranean states. This may be a phenomenon linked with driving alone and may not translate to general courtesy 'off the road'. Indeed, many non-European and southern European countries with a reputation for poor driving have a well-earned reputation for excellent hospitality, Malta included (MaltaUncovered.com, 2017; Greenfield, 2012). It is difficult to generalise results and behaviour may vary widely even within the same country, and when comparing one subpopulation with another. Variations in courtesy on the road was observed between different groups in Malta over a number of years and, at face value, appeared to be linked to specific characteristics of the drivers involved. Hence, for example, it was noted subjectively that drivers of large vehicles, buses, taxis and luxury cars appeared to be less courteous, and the same was observed for younger drivers and, to varying degrees, mothers on the school run. This study set out to explore the hypothesis that this observation was objectively reproducible and that courtesy was, indeed, associated with the driver and/or vehicle characteristics.

$\mathbf{2}$ Methods

For the purposes of this study, courtesy was defined when a driver with the right of way on a main road leading up to a congested roundabout, 'allowed access' to another car approaching from a secondary feeder road, whereby 'courteous passage' was the only reasonable means of access for the 'secondary' car (i.e. there

was no other facilitating option such as traffic light control). The scenario, road junction and the secondary car remained constant throughout the study. Courtesy afforded to the same 'secondary' study car, a 1.1 litre 1998-model Opel Corsa, British Vehicle Classification class 2 (Wikipedia, 2015a, 2015b; carhirecentre.co.uk, 2016), and 17.5 years old in poor condition, with the same driver (SAM, 50+ years) and one passenger (EAM, 17 years), approaching the same junction from the same secondary road between 07:15 and 07:45 on school days was assessed. Care was taken by both driver and passenger in the study car not to coerce or attempt to influence the approaching driver on the primary road in allowing access. 'Events' involving any driver that was known to (and recognised) either EAM or SAM were excluded from the analysis. Details of all cars on the primary road (and, therefore, with the right of way) that refused/allowed access to the secondary car, were recorded by EAM on a standardised proforma. This included the car type and model, grouped according to the BVC. The drivers' gender and age were also recorded, the latter estimated by agreed consensus by both EAM and SAM, and categorised into six age-groups incremented in blocks of 10 years from $< 20, 20-29, 30-39, \dots$ to > 60 years). Finally, the presence of any passengers (by number, adult or children), and the prevailing weather, categorised into sunny, cloudy or rainy, according to the official meteorological daily report were noted.

The study was carried out on Monday to Fridays over the school semesters spanning autumn 2014 to spring 2015. Weekends, school holidays and any days when EAM was not a passenger in the study car at the designated journey time were excluded. Study days were noted and dated at the start of the journey on a hand held clip-chart by EAM and the inclement weather recorded. A pilot test run was first carried out using the identical study scenario over one week. This confirmed that all the above details could not be recorded and memorised accurately in the event of fast flowing traffic. As a result, the method was altered such that, once the study car was positioned at the appropriate junction in the front of the queue awaiting courteous access, all cars that drove past refusing access as well as the first car that allowed access were recorded discretely by EAM using a mobile phone video. Once afforded access, this video was stopped and played back by EAM to extract details required for completion of the proforma. Once completed, the video was permanently deleted. This process was found to be feasible in practice, and adopted for the rest of the study.

Data was transferred onto an excel spreadsheet with refusals and allowed access 'events' compared with car type, driver (age and gender), presence or otherwise of accompanying passengers, and weather. The Chi Squared test was used to identify significant associations between the categorical variables and Fisher correction was used to account for small frequencies. Moreover, a 0.05 level of significance was adopted and taken to assess statistical significance.

3 Results

Data obtained from 88 schooldays over a 6 month period resulted in 231 study events. These included 141 refusals by individuals unknown to the driver, 48 courteous passes (but only 44 were analysed as 4 drivers recognised SAM and were discounted). An additional 42 access events arose through gaps in the traffic and were not included in the analysis, leaving a total of 185 analysable 'events'

Up to 89 male drivers in all car groups refused access whilst 24 afforded courteous passage, compared with 53 refusals and 19 'passes' by female drivers, ($\chi^2(1) = 0.65$, p = 0.42). Similarly, weather conditions had no bearing on road courtesy, with 40 refusals versus 15 passes during sunny days, 26 versus 8 on cloudy days and 75 versus 21 on rainy days, respectively ($\chi^2(2) = 0.56$, p = 0.76). Of the 185 analysed 'events', 143 involved a solo driver whereas 42 had one or more co-passengers in the primary vehicle (25 children, 17 adults). The presence or absence of any co-passengers had no bearing on courtesy as 35 of 143 solo drivers, 6 of 25 with children and just 4 of 17 with adult co-passengers afforded courteous passage ($\chi^2(2) = 0.009$, p = 0.99).

Upon analysing courtesy with the type of vehicle, from a total of 48 driving medium-sized saloons (British Vehicle Classification Groups 4–6), courtesy was afforded by 18 drivers compared with 30 who did not, whilst of 101 drivers in small cars (Group 1–3), 22 gave way and 79 refused ($\chi^2(1)=4.1,\ p=0.043$). Similarly, 18 from 48 cars in Groups 4–6 afforded access compared with just 4 from 36 luxury or work vehicles in Groups 7–11 ($\chi^2(1)=7.41,\ p=0.0065$). This difference was highlighted if cars in Groups 4–6 were compared with those in both small (Groups 1–3) and luxury/large/work categories together (Group 7–11): 18 from 48 allowed access versus 26 from 137, respectively ($\chi^2(2)=6.72,\ p=0.0095$).

The drivers' age alone did not determine the likelihood of being courteous as defined in this study, with 32 from 104 drivers aged over 40 allowing access, compared with 17 from 81 younger drivers ($\chi^2(1) = 2.23$, p = 0.14). However, if the driver's age was combined with both gender and car type, male drivers aged above 40 years driving medium sized cars (Groups 4-6) were significantly more courteous than all other groups. Indeed, 10 males from a total of 24 aged 40+ driving medium sized cars (Groups 4-6) showed courtesy, compared with 33 from 89 who did not ($\chi^2(1) = 5.25$, p = 0.022).

Drivers of large and work vehicles, mostly male (92%), were significantly less courteous with just 2 from 28 drivers showing courtesy versus 40 from 149 drivers in smaller vehicles ($\chi^2(1) = 5.06$, p = 0.025).

4 Discussion

This study confirms objectively the previously subjective impression that, in Malta, some drivers are more courteous than others. The study design whereby the scenario, location and secondary car were kept constant allowed for a reasonable comparison. The key finding that males over 40 years driving family saloons were the most courteous, whilst luxury car, truck and van drivers were the least likely to afford courteous access, was in line with the previous subjective personal experience of the driver (SAM). The study was performed for a limited period during school days and did not trawl enough female drivers to demonstrate any association between this subgroup and road courtesy. Driver age was 'estimated visually' to the nearest decade by two independent observers but errors may still have arisen in this regard, and a broader categorisation into 'young' or 'middle-aged adult' or 'senior citizen' may have been more practical. Likewise, the study was statistically underpowered to show any association with taxis and buses, and there was insufficient data to demonstrate any association between heightened or diminished courtesy and the prevailing weather. The latter is a clear determinant in road accidents (Perrels, Votsis, Nurmi & Pilli-Sihvola, 2015; Bergel-Hayat, Debbarh, Antoniou & Yannis, 2013) and, given that weather may affect driver mood, may influence the likelihood of courtesy, or otherwise. Finally, the presence of any co-passengers also had no bearing on courtesy afforded by the drivers involved.

This study has confirmed an interesting observation but is limited by the relatively small number of events analysed and possible bias (for and against) a middleaged driver with one teenage passenger in a beat up small car. Indeed, the results may have changed significantly with the same scenario but with a driver in his (or her) 20s and, likewise, may have changed again if the 'decoy secondary car' was new and 'flashy'. A far larger study utilising a similar 'set' scenario but with different 'decoy' secondary car-driver combinations may demonstrate widely different courteous attitudes between different groups e.g. young male in sports car toward older women in SUV, male taxi driver toward elderly gentleman in a small car, etc. The relative age of the cars involved was not recorded and this may have had a bearing on the results, which may have shown that drivers of newer cars would tend to be more courteous. Different results may have been observed if an identical study was carried out in the afternoon rather than in the height of the morning rush hour, when drivers may be more relaxed and more courteous. The possible combinations are numerous but this study would require a very large number of car-encounters to identify any particular patterns of courteous behaviour.

Interestingly, would the result obtained have been different if the study was conducted in a different location on the island? Given the same scenario, would drivers from one part of the island afford more or less courtesy than others? Again, this question can only be answered by means of a larger, longer study run over several locations. Although blinded to the study, participants did not give consent (although this itself would have negated the impartiality of their behaviour), and unwittingly, may have been influenced by subtle changes in facial expressions and body language of the authors. Ideally, therefore, any future study should deploy covert independent observers outside the cars involved to exclude bias in this regard.

How does Malta compare with other countries in regards to courtesy on the road? This is a difficult question to answer as there is no data from comparable studies performed in other countries, and very little reference to road courtesy whatsoever, other than in general 'common-sense' articles (Jackson, 2012). MaltaUncovered.com (2017) lists "hot-headed and ignorant drivers" as the third biggest challenge to driving experience in Malta. Although this study does not support or refute this bold and rather negative generalisation, it also suggests a lack of courtesy on Malta's roads. In this regard, in contrast to Malta's general reputation for friendliness and hospitality, there appears to be room for improvement.

5 Conclusion

This study has shown that courtesy on Maltese roads does vary according to who is behind the wheel and what car is being driven. Certainly, middle-aged gentlemen driving rather tired old cars can expect to be allowed access even when they don't have the right of way by similarly aged males in family saloons, but have little hope if confronted by larger, work or luxury car drivers.

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