Cultural Differences and Traffic Safety.

Useless knowledge or the key to the solution?

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Insert stupid joke about psychologists here
What cultural characteristics really influences safe driving behavior?

Risk perception
Religion
Experience
Socio-economic level
Social norms
Quality of police enforcement
Need for sensation
Terror / war
Drivers in all countries overestimate their own driving skills.

In Japan, aggressive behaviour seems to be manifested through tailgating with 70% of respondents declaring that they have been aggressively pursued whereas in Argentina, verbal abuse is the most common form of aggression, being personally experienced by seven in ten respondents.

Economic situation and societal and cultural factors partly explain the differences between countries in traffic safety.

Traffic safety records are much worse in Southern Europe and the Middle East than in Northern and Western Europe. Drivers from “dangerous” Southern European countries and Iran scored higher on aggressive violations and errors than did drivers from “safe” Northern European countries.
The factorial agreement for driver behaviour (i.e., aggressive driving) and performance (i.e., safety skills) was unsatisfactory in Greece, Iran, and Turkey, where the lack of social tolerance and interpersonal aggressive violations seem to be important characteristics of driving.

Israeli drivers cause less road traffic accidents and drive more safely during wars and intifadas.

In China age or quality of driving training are not correlated with risky driving behavior but driving experience is with the peak risk at six to eight years.

Novice drivers in Finland do not overestimated their level of confidence compared to objective driving behavior but Swedes do. Males do not show more overconfidence than females.
In Australian and Finish samples you can see that the safer people think they drive the less fewer citations and accidents appear in their records.

Male drivers using hand held mobile phones [in Qatar] had a significantly higher rate than females, which is similar to earlier reported studies. Illiterate drivers use hand held mobile phones more often while driving than the educated drivers.

and A country with corrupt, inefficient ineffective institutions is also a country with a high RTA fatality rate.

Chinese and Arabic speaking parents or caregivers perceived the road environments as significantly less hazardous for their 4–12 year old children as pedestrians when compared with Vietnamese and English speaking parents.
Left-handers were found to commit more accidents in India but not in Japan. Reanalysis of data in terms of left-, mixed-, and right-handedness indicated that mixed handers committed more accidents than extreme left or right handers in Japan but not in India.

Rates of risk behavior were higher for American adolescents in the areas of automobile driving (high-speed and drunk driving) and minor criminal behaviour (shoplifting and vandalism), whereas Danish adolescents were higher in their rates of driving a bicycle or moped while intoxicated.

Social causes at the macro level – such as cultural differences – might account for the attitudes and behaviors of drivers and their relationship to road accidents on the micro-level.

Spanish drivers reported (perceiving) the highest risk, German drivers perceived medium levels while U.S. drivers reported the lowest risk.
West German subjects attempted fewer crossings, had a higher probability of success, and had greater safety margins than American or Spanish ones. Probability of attempted crossings was greater for males and younger subjects than for females and older subjects.

Young people in Brazil report to commit more violations and errors than adults. Men commit more violations than women. Contemplating these data specific strategies for the different groups are suggested focusing the responsibility of the pedestrians for their behaviors in traffic.

The recognition that traffic safety is a fundamentally cultural issue suggests the utility of deriving lessons from other culturally defined problems in order to inform and provide an analytical reference point for traffic safety cultural change approaches.

Casualty rates amongst residents from areas classified as relatively deprived were significantly higher than those from relatively affluent areas.
In comparison to white, non Hispanic drivers, higher rates of driving while impaired (DWI) arrests and alcohol-related crashes were found among Mexican Americans. This came together with less knowledge about the legal level of BAC permitted and less ability to assess, how many drinks are necessary to significantly impair ones driving.

African Americans are more sensitive than Whites to the enforcement of primary laws regarding use of seat belts. In secondary cities African Americans were less likely than Whites or Hispanics to be belted, among populations both with and without college degrees.

Traffic accidents are significantly more dreaded in Japan than in the US. Unlike American drivers, Japanese overestimate the risk of accidents and see themselves as more likely to be at fault than not. Japanese drivers take insurance in order to be able to protect others whilst US drivers want to protect themselves from law suits.

Accident rates of foreign drivers in Finland (mainly Russian) are higher than rates of domestic drivers.
Motor vehicle occupants identified as Black had significantly lower safety belt use than those occupants identified as White or Other.

We found no differences between African–American, White, and Hispanic drivers regarding red light running. Drinking and driving was the most important factor for red light running. Some Hispanic subgroups may be more vulnerable to red light running e.g. Hispanics who have no valid driver license and no record of previous driver license suspension.

In 66% of the cars driven by Hispanic farm workers (42% of whom learned to drive between the ages of eight and fourteen) in California where a single child was carried and where two children were carried, no car seats were used. In all of these cases there were other passengers and drivers who were not belted.

Inner city youth reported lower rates of parental seat belt use and less often being told by parents to use their seat belts, results indicate that less encouragement of seat belt use was an important cause of inner city youth’s lower rates of seat belt use.
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Low GNP countries report less accident fatalities than mid income countries do. Examination of countries which have significantly more, or significantly fewer fatalities than predicted for their numbers of vehicles and GNP per capita, will be extremely informative.

Seat belt use among American Indians, Alaska Natives and Non Hispanic Whites varied significantly by region and urban–rural residency in 2002. Primary seat belt laws appear to help reduce regional and racial disparities in seat belt non-use.
About 15% of all accidents are traffic-related among either permanent residents or Greek tourists, but they represent 40% among tourists of foreign nationalities.

In China the safety belt use ratio is about 64%, running light use is nearly zero during rainy and snowy weather, headlights use after sunset is substantially delayed, and only about 40% of drivers use turn signals.

Foreign drivers in Greece are at increased risk at being involved in accidents. Moreover, foreign nationalities corresponding to permanent residents (i.e. Greeks and Albanians) appear to be at lower fault risk compared to foreign nationalities corresponding to tourists and visitors. It was also shown that roadway features do not affect accident fault risk.

Cross-border regions were found not to be particularly likely to have similar road mortality risk levels where they shared a common national border. National borders have no specific effect on the distribution of road mortality across Europe.
Black and Hispanic adults travel less in motor vehicles than whites but may be at greater risk when they do travel. Reported belt use rates were lower among black men and women, even after controlling for SES, whereas Hispanic men and women had belt use rates similar to those of whites.

Amongst the Arab population in Israel 17% of the drivers buckled up according to the law (the national level is over 80%), and only 25% of the children were transported according to the law. 70% of the participants reported that they don’t use safety car seats for their children.

77% of respondents in Australia have been subject to aggressive or obscene gestures in contrast to only 9% in Japan.

There are differences among nationalities regarding target risk-level of performance.
Attention and Concentration

Functioning under stress conditions

Prepare a number of options

Choose one option based on...

Self esteem

STM

Belief systems

Gains and losses

Choose option and act

perception

interpretation

STM

Belief systems

Social pressure

Gains and losses

Temporary variables

personality

Stimulus

Attention and Concentration

Self esteem

STM

Belief systems

Gains and losses

Choose option and act
To speed or not to speed, that is the question
Be punctual
Make a good impression
Guarantee a positive self esteem
Social Pressure
Speeding is really fun
Influence of Cultural Factor(s)
Being punctual

Making a good impression

Guarantee a positive self-esteem

Social Pressure

Fun

Influence of cultural factors
Sum total of positive expectancies from dangerous behavior
Being cited or punished
Experiencing unpleasant risk
You might be injured or even killed
If you are caught and have your license evoked you will definitely look like an idiot
If you are caught and have your license evoked you will definitely look like an idiot
Influence of Cultural Characteristic
Possible punishment

Risk of injury or fatality

Unpleasant risk experience

Social punishment

Influence of cultural factors
Sum total of negative expectancies from dangerous behavior
Values and Needs
\[ D = \Sigma \left[ (P \, \text{😊} \ast V \, \text{😊}) - \Sigma (P \, \text{😢} \ast V \, \text{😢}) \right] \]
Comprehending and exploiting cultural differences permit:

- Planning effective programs to improve traffic safety
- Responsible use of funds
- Out of the box solutions for local problems
- Adapting efforts to changing reality
- Possibility to plan and perform preemptive interventions
- Evaluation of effectiveness of local, national or global efforts
Refrain from inserting a stupid joke about psychologists here

They have got the message!
Understanding Cultural Differences and Traffic Safety.

The map and the key to the real treasure of saving lives

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