How national culture impacts on the level of public support for policy measures in road safety

Wouter Van den Berghe & Michael Schachner
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Wouter Van den Berghe\textsuperscript{1} and Michael Schachner\textsuperscript{2}

\textit{October 26, 2019}

1 Understanding and operationalising culture

1.1 What is national culture?

Hofstede defined culture as the “programming of the human mind” by which one group of people distinguishes itself from another group (G. H. Hofstede, Hofstede, & Minkov, 2010). “Programming of the human mind” refers to norms, beliefs, values and practices that are found more frequently among some people compared to others. Hence, \textit{national culture} is about norms, beliefs, values and practices that distinguish the citizens of one country to those of another country.

The country as the unit for measuring culture can be criticized as, in some cases, quite different cultural groups live within one country. Nonetheless, the country has proven to be an excellent anchor for measuring culture. People within a country tend to share one educational system, one legal system, the same institutions, etc. (Herk & Torelli, 2017). Moreover, a major advantage of measuring culture at the country level is that most statistical data are also available at national level, allowing researchers to detect associations between culture and other indicators, such as those used for measuring road safety.

Hofstede’s assumption was that all societies are facing similar basic challenges, like the existence of inequality, how to deal with an unknown future, the relationship between individuals and groups, etc. (G. H. Hofstede, 2001). However, societies deal differently with these challenges. These different attitudes and practices are, simply put, culture. Culture, in turn, has a regulatory role in the sense that it controls what kind of behaviour is considered normal and accepted within a country. It therefore has an impact on the behaviour of everyday life. For example, in what situations is it accepted for a pedestrian to cross the road when the light is red? Always/never? If no kids are around? If there is not much traffic? If no police can be seen? The decision of whether to cross the road or not at a red light is an example of a situation where most people are strongly influenced by the norms and behaviour of others. If everybody always crosses the road, people are likely to follow suit. When travelling to other countries, one may notice that the typical behaviour in this situation of a simple red light at a pedestrian crossing differs between countries, even if the legislation is identical.

Clearly, culture has an impact on our behaviour. Moreover, it also determines how and to what extent our behaviour can be changed. Public institutions seek to increase the quality of life of their citizens, but this may require them to adapt their behaviour. There is a natural resistance of people to policy measures of which they doubt the relevance and/or
which may require them to change their habits. The level and nature of support for new policy measures is strongly determined by the national culture.

One of the goals that are shared throughout the world is making roads safer and reducing road traffic deaths – currently 1.35 million a year. Globally, road traffic injury is the leading cause of death for children and young adults aged 5–29 years (WHO, 2018). Many of these deaths could be prevented, but this requires appropriate policy measures (drunk driving laws, speed limits, etc.) and changes in the behaviour of road users. Further on in this paper we will see that the willingness to change behaviour and level of support for various policy measures, such as wearing a bicycle helmet when cycling, differs largely between countries. This is, at least to some extent, due to culture. We argue therefore that also the strategy on how to implement new policy measures needs to be attuned to culture.

1.2 Operationalising national culture

Hofstede’s greatest achievement was the quantification of culture through the introduction of cultural dimensions, making it possible to compare the culture of countries numerically. For each basic challenge, such as inequality, there is a cultural dimension. Hofstede initially introduced four dimensions and later expanded these to six. Other approaches and studies, such as the Schwartz Value Survey (Schwartz, 1999), the World Value Survey (see www.worldvaluessurvey.org) or the GLOBE study (House, Javidan, Hanges, & Dorfman, 2002), produced many more cultural dimensions – but despite their different perspectives they often led to similar cultural clusters of countries.

The number and, to some extent, the composition of dimensions is not set in stone but depends on the perspective of the researchers or the stakeholders involved in the study. While Hofstede started from measuring culture in the workplace in general, the GLOBE study was mainly interested in the effect of culture on leadership styles, and the World Value Survey evaluates the effect of culture on political attitudes and changes thereof over time.

Hofstede Insights recently partnered up with Mediacom, an advertising agency, and developed new measures of culture with the purpose of predicting consumer behaviour. The typical quantitative way of measuring cultural dimensions is through surveys. A cultural dimension is formed by a consolidation of question items that are found to go together conceptually and statistically when people answer surveys. For example, in countries where a relatively large number of people respond “I would like to be a boss” there is also a relatively large number who respond “I would make people follow all laws” and “I am religious”. These are examples of questionnaire items that constitute the cultural dimension “Individualism versus Collectivism” in one of Hofstede Insights’ latest research project (Minkov et al., 2017).

One needs to be careful when interpreting these dimensions, since they are only valid and to be used at country level. The people who say they are religious and those that say “I would like to be a boss” don’t need to be the same people, but there tends to be a larger proportion of both in the same country, in comparison to other countries. National culture dimensions are national indicators that are suitable for the comparison of countries, not individuals. This holds also for other national indicators. Think about GNI (Gross National Income) per person – the figure says something about the wealth of the country. If you meet an individual from that country, you cannot use the GNI per person as an indicator for the wealth of that individual.
So, what is the purpose of national culture dimensions, if they cannot be applied to individuals? National culture dimensions are useful when establishing relationships between culture and other national phenomena. Even if cultural scores cannot be applied to individuals, all individuals are members of national cultures and under the influence thereof.

Hofstede Insights partnered up with the ESRA network, a global initiative led by Vias institute that produces data useful for road safety policy making at national and international level, in order to explore the relationship between culture and road safety, and in particular the public support for policy measures in this area.

2 How national culture is associated with road safety

2.1 Using the traditional Hofstede dimensions of national culture.

Road safety is a complex phenomenon which can be measured in various ways. Important indicators for road safety performance are the number of road injury accidents and the number of people killed on the road in accidents. One of the most used indicators in international comparisons, such as in the WHO Global Status Report on Road Safety (WHO, 2018), is the number of road fatalities per 100 000 people. When disregarding the values for some very small countries this indicator currently varies between 2.7 (Switzerland and Norway) and 35.9 (Liberia) (WHO, 2018). It should be noted that some of the national values are WHO estimates that are based on advanced statistical modelling. In particular in low and middle income countries, these estimates are considerably higher than the national official statistics on road traffic fatalities.

In the past, researchers have examined the relationship between Hofstede’s cultural model and the road fatality rate, for varying sets of countries – see for instance Hofstede (2001), Özkan & Lajunen (2007), Melinder (2007) and Gaygisiz (2010). In these studies the dimensions Uncertainty avoidance, Individualism, Masculinity and Power distance have been found to be correlated with the relative number of road traffic fatalities (but not all of these together in one particular study).

We have undertaken a new analysis of the relationship between Hofstede’s six traditional cultural dimensions (see here for a definition of all six dimensions) and road safety, by using the most recent versions of Hofstede’s national cultural values and the number of road safety fatalities per 100 000 people in 2016 (WHO, 2018). Correlations could be calculated for 96 countries for 5 dimensions and for 90 countries for the dimension Indulgence. As far as we know, such a high number of countries has never been examined together. The correlation coefficients and their significance are given in Table 1.

<table>
<thead>
<tr>
<th>Cultural dimensions</th>
<th>Number of countries</th>
<th>Pearson correlation</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power distance</td>
<td>96</td>
<td>0.516</td>
<td>0.000</td>
</tr>
<tr>
<td>Individualism</td>
<td>96</td>
<td>-0.593</td>
<td>0.000</td>
</tr>
<tr>
<td>Masculinity</td>
<td>96</td>
<td>-0.001</td>
<td>0.992</td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>96</td>
<td>-0.120</td>
<td>0.245</td>
</tr>
<tr>
<td>Long term orientation</td>
<td>96</td>
<td>-0.517</td>
<td>0.000</td>
</tr>
<tr>
<td>Indulgence</td>
<td>90</td>
<td>0.070</td>
<td>0.514</td>
</tr>
</tbody>
</table>
Clearly, for this group of countries (together representing over 80% of the world population) one can observe a strong correlation between the fatality rates and three of Hofstede’s cultural dimensions: Power distance, Individualism and Long term orientation. The higher the power distance, the more collectivistic and the more short term oriented a country scores on Hofstede’s model, the higher the road fatality rates of the country. On the other hand, Masculinity, Uncertainty avoidance and Indulgence are not associated with road safety performance.

2.2 Using the revised values for Individualism and Long Term Orientation

Two of the dimensions found in Hofstede Insights’ latest research project resulted in revised scores for Individualism-Collectivism (Minkov et al., 2017) and Long term orientation (Minkov et al., 2018). The novelty of the study was the sampling method through online panels, which are typically used for market research. This made it possible to recruit respondents that correspond to the national census regarding gender and age of the countries concerned. This probabilistic sampling differs greatly from Hofstede’s original research. Hofstede applied a matched sampling, comparing groups (certain employees of IBM) that were as similar as possible to each other across countries.

For the 51 countries for which both data on these dimensions and fatality rates were available, we calculated Pearson correlations. While the updated Individualism dimension was even stronger correlated (-0.751) with fatality rates than with the original version (-0.593), the correlation of the updated Long term orientation dimensions was slightly lower (-0.488) than with the original version (-0.517). These differences between the old and new measures of the culture of the correlations with fatality rate could be due to the revised scales, to some cultural evolutions over time, and/or to the lower number of countries involved.

The strong association between the new Individualism construct and relative fatality rate for the 51 countries considered is well displayed in Figure 1. As can be seen, the dimension Individualism on its own can statistically explain over 50% of the variance between countries.
It should be noted that both Individualism and Long Term Orientation (in the updated version also called “Flexibility versus Monumentalism” or simply “Flexibility”) are strongly correlated with the prosperity of a country. The values for these dimensions tend to be higher in high income countries and wealthier societies. We have therefore also calculated partial correlations for both dimensions, controlling for Gross National Income. As expected, the correlation coefficients decrease for both dimensions, but are still fairly high (-0.437) and statistically significant for Individualism (p= 0.001). For Flexibility, the corrected correlations are lower (-0.249) and marginally significant (p=0.081). In other words, in countries with similar levels of wealth, the more collectivist ones have a lower road safety performance (higher number of fatalities).

This may sound a bit paradoxically at first. In more individualist societies individual freedom is valued high and one might expect that people accept more the safety risks that come with the freedom of individual mobility. This ought to result in a higher relative number of road crashes. But Figure 1 illustrates that this is clearly not the case. The hypothesis we put forward is that an individualistic culture also implies a high sense of responsibility for the well-being, health and quality of life – both for oneself as for fellow citizens. This might make people drive more safely and also make them more respect rules which decrease the risk of being involved in a road crash and hence to incur personal damage and injuries. As we will see later on in this paper, there is some evidence to support this hypothesis.

Observing Figure 1, one may note that most European countries are clustered together in the lower-right corner. One could wonder whether the correlation still holds if only European countries would be considered. This is indeed the case, as shown in Figure 2.
Thus, a first conclusion is the existence of a strong relation between the culture, wealth and road safety performance of countries. In particular the updated Individualism-Collectivisms dimension can ‘explain’ (statistically speaking) over half of the variance between countries. It is important to note that the effects of culture are not simply a reproduction of differences in wealth between countries. Our analysis has shown that countries with a high score on collectivism have more road traffic deaths than countries with a similar level of prosperity but which are more individualistic.

An example is the difference between Denmark and the USA, which have a similar level of GNI. However, Denmark scores much higher on individualism than the USA and its fatality rate is only 1/3 of that of the USA. Figure 3 shows some middle-income countries with similar levels of GNI. As one can see, those that are most individualistic have in general a better road safety performance.

Figure 2. Scatterplot of European values for Individualism and Fatality rate
3 The association between national culture and support for policy measures in road safety

3.1 The global ESRA initiative

As mentioned in the introduction, national culture influences strongly the behaviour of people, including how they behave as road users. Strong differences can be observed in terms of risky behaviour on the road – e.g. drunk driving, speeding, not wearing a seatbelt, etc. – across countries around the globe (see e.g. Meesmann, Torfs, & Van den Berghe, 2017). But in this paper we focus on another perspective: the impact of the national culture on the level of public support for policy measures in the field of road safety.

Data on public support for road safety policy measures is available through the ESRA initiative. ESRA (E-Survey of Road users’ Attitudes – see esranet.eu) is a joint initiative of road safety institutes, research centres, public services and private sponsors from all over the world. The aim is to collect and analyse comparable data on road safety performance, in particular road safety culture and behaviour of road users. The ESRA data are used as a basis for a large set of road safety indicators. As was the case for the revised Hofstede dimensions, ESRA data are collected through online panel surveys, using a representative sample of the national adult populations in each participating country (typically N = 1000 per country). At the heart of this survey is a jointly developed questionnaire, which is translated into national language versions. The methodology is described in Meesmann, Torfs, & Van den Berghe (2019). In the first wave of ESRA2 data was collected in November and December 2018 for 32 countries, and the analyses which follow are based on that dataset.
One of the questions in the survey was:

“Do you oppose or support a legal obligation to ...

1. install an alcohol “interlock” for drivers who have been caught drunk driving on more than one occasion (technology that won’t let the car start if the driver’s alcohol level is over the legal limit)
2. have zero tolerance for alcohol (0,0 ‰) for novice drivers (licence obtained less than 2 years)
3. have zero tolerance for alcohol (0,0 ‰) for all drivers
4. install Intelligent Speed Assistance (ISA) in new cars (which automatically limits the maximum speed of the vehicle and can be turned off manually)
5. install Dynamic Speed Warning signs (traffic control devices that are programmed to provide a message to drivers exceeding a certain speed threshold)
6. have a seatbelt reminder system for the front and back seats in new cars
7. require all cyclists to wear a helmet
8. require cyclists under the age of 12 to wear a helmet
9. require all moped drivers and motorcyclists to wear a helmet
10. require pedestrians to wear reflective material when walking in the streets in the dark
11. require cyclists to wear reflective material when cycling in the dark
12. require moped drivers and motorcyclists to wear reflective material when driving in the dark
13. have zero tolerance for using any type of mobile phone while driving (hand-held or hands-free) for all drivers
14. not using headphones (or earbuds) while walking in the streets
15. not using headphones (or earbuds) while riding a bicycle

Respondents could indicate their answer on a scale from 1 to 5, where 1 was “oppose” and 5 was “support”. The answers were dichotomized into support (= score 4-5) and oppose/neutral (= score 1-3).

3.2 Link between current road safety performance and support for measures

One could imagine two different logics when trying to predict the relation between road safety performance of a country and the support for policy measures. Two logics can be imagined.

In the first logic one assumes that the better the road safety performance in a country (i.e., the lower the number of road traffic accidents) the higher the resistance against new policy measures in road safety. The main argument for such an assumption is that because of the relatively good road safety performance people don’t feel the need to improve it any further – and/or because they believe that the expected additional gain would come at a too high burden or cost.

The second logic is the opposite, i.e. the better the road safety performance in a country, the higher the support for new policy measures in road safety. This attitude would rather reflect a national safety culture in which avoiding road traffic accidents is very important, and in which new measures continue to be welcomed, as long as people believe that these measures will improve road safety.

The information in Table 2 below provides support for the first logic, i.e. the better the road safety performance, the lower the support for new policy measures in that area. The second column includes the correlation coefficients between the relative number of
road fatalities on the one hand, and the 15 policy measures that were included in ESRA2 on the other (in the table, the names of the policy measures have been shortened). The results are based on 32 countries.
Table 2. Pearson correlation between national public support for policy measures and relative number of road fatalities, without and with controlling for Individualism.

<table>
<thead>
<tr>
<th></th>
<th>Number of road fatalities per 100 000 inhabitants</th>
<th>Idem, but after controlling for individualism</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation</td>
<td>Significance (p)</td>
</tr>
<tr>
<td>Alcohol interlock for recidivists</td>
<td>0.436*</td>
<td>0.013</td>
</tr>
<tr>
<td>Zero alcohol novice drivers</td>
<td>0.154</td>
<td>0.400</td>
</tr>
<tr>
<td>Zero alcohol all drivers</td>
<td>0.518**</td>
<td>0.002</td>
</tr>
<tr>
<td>Install ISA system</td>
<td>0.610**</td>
<td>0.000</td>
</tr>
<tr>
<td>Install Speed Warning signs</td>
<td>0.648**</td>
<td>0.000</td>
</tr>
<tr>
<td>Seatbelt reminder all seats</td>
<td>0.526**</td>
<td>0.002</td>
</tr>
<tr>
<td>All cyclists wear helmet</td>
<td>0.473**</td>
<td>0.006</td>
</tr>
<tr>
<td>Children cyclists wear helmet</td>
<td>0.194</td>
<td>0.286</td>
</tr>
<tr>
<td>PTW wear helmet</td>
<td>0.054</td>
<td>0.767</td>
</tr>
<tr>
<td>Pedestrians wear reflective material</td>
<td>0.088</td>
<td>0.630</td>
</tr>
<tr>
<td>Cyclists wear reflective material</td>
<td>0.275</td>
<td>0.128</td>
</tr>
<tr>
<td>PTW wear reflective material</td>
<td>0.294</td>
<td>0.102</td>
</tr>
<tr>
<td>No use mobile phones in cars</td>
<td>0.496**</td>
<td>0.004</td>
</tr>
<tr>
<td>No use headphones by cyclists</td>
<td>0.321</td>
<td>0.073</td>
</tr>
<tr>
<td>No use headphones by pedestrians</td>
<td>0.694**</td>
<td>0.000</td>
</tr>
</tbody>
</table>

As one can observe, for 8 of the 15 measures the correlations with fatality rates are positive and (highly) statistically significant, for 3 measures the correlation is positive (about 0.3) but not significant, and for 4 measures the correlation is very low (below 0.2). In other words, in countries with lower numbers of fatalities the resistance against new measures is generally higher. Please note that several measures with low correlations – like riders of Powered Two Wheelers needing to wear helmets – are supported by a very large majority of people, independent of the road safety performance of the countries. For such measures with high support it would be difficult to find any correlations with other national indicators.

In Section 2 we illustrated that better road safety performance is correlated with higher levels of Individualism. Hence it is to expected that the correlations between the relative number of fatalities and the support for policy measures will become lower, when the associations are controlled for Individualism. This is indeed the case, as illustrated by the fourth column in Table 2. All correlations decrease – some even become negative – and except for one measure, no correlation is significant anymore. The difference between column 2 and column 4 of Table 2 shows the importance of national culture, and in particular Individualism, as a factor explaining the support for policy measures.

Figure 4 below shows the drop and even reverse of sign of the correlations for the 6 measures where the decrease is highest.
Let us therefore examine this phenomenon more closely.

3.3 Association between individualism and support for policy measures

Table 3 shows the correlation between the percentage of people supporting the 15 ESRA-measures and the updated values of the Hofstede dimensions “Individualism” and “Long Term Orientation/Flexibility”. The results are based on 29 countries.

As can be seen, there is a (very) strong correlation between 11 of the 15 policy measures and Individualism, and a strong correlation between 9 of the 15 measures and Flexibility. These results illustrate, overall, that national culture is a strong indicator for the support for road safety policy measures.
Table 3. Pearson correlation between national public support for policy measures and Individualism and Flexibility

<table>
<thead>
<tr>
<th>Measure</th>
<th>Individualism Correlation</th>
<th>Significance</th>
<th>Long Term orientation / Flexibility Correlation</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol interlock for recidivists</td>
<td>-0.539</td>
<td>0.003</td>
<td>-0.229</td>
<td>0.233</td>
</tr>
<tr>
<td>Zero alcohol novice drivers</td>
<td>-0.256</td>
<td>0.181</td>
<td>-0.281</td>
<td>0.140</td>
</tr>
<tr>
<td>Zero alcohol all drivers</td>
<td>-0.711**</td>
<td>0.000</td>
<td>-0.362</td>
<td>0.054</td>
</tr>
<tr>
<td>Install ISA system</td>
<td>-0.782**</td>
<td>0.000</td>
<td>-0.467*</td>
<td>0.011</td>
</tr>
<tr>
<td>Install Speed Warning signs</td>
<td>-0.828**</td>
<td>0.000</td>
<td>-0.580**</td>
<td>0.001</td>
</tr>
<tr>
<td>Seatbelt reminder all seats</td>
<td>-0.586**</td>
<td>0.001</td>
<td>-0.480**</td>
<td>0.008</td>
</tr>
<tr>
<td>All cyclists wear helmet</td>
<td>-0.615**</td>
<td>0.000</td>
<td>-0.635**</td>
<td>0.000</td>
</tr>
<tr>
<td>Children cyclists wear helmet</td>
<td>-0.328</td>
<td>0.082</td>
<td>-0.570**</td>
<td>0.001</td>
</tr>
<tr>
<td>PTW wear helmet</td>
<td>-0.261</td>
<td>0.172</td>
<td>-0.230</td>
<td>0.229</td>
</tr>
<tr>
<td>Pedestrians wear reflective material</td>
<td>-0.089</td>
<td>0.645</td>
<td>-0.153</td>
<td>0.427</td>
</tr>
<tr>
<td>Cyclists wear reflective material</td>
<td>-0.411**</td>
<td>0.027</td>
<td>-0.462*</td>
<td>0.012</td>
</tr>
<tr>
<td>PTW wear reflective material</td>
<td>-0.413*</td>
<td>0.026</td>
<td>-0.461*</td>
<td>0.012</td>
</tr>
<tr>
<td>No use mobile phones in cars</td>
<td>-0.500**</td>
<td>0.006</td>
<td>-0.360</td>
<td>0.055</td>
</tr>
<tr>
<td>No use headphones by cyclists</td>
<td>-0.424*</td>
<td>0.022</td>
<td>-0.264</td>
<td>0.167</td>
</tr>
<tr>
<td>No use headphones by pedestrians</td>
<td>-0.718**</td>
<td>0.000</td>
<td>-0.515**</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Table 3 also shows that for all measures the correlation coefficients of the support for measures with Individualism are negative. This is not unexpected and it means that the higher the level of individualism, the higher the opposition is against these measures. People in individualist societies have a strong desire to determine themselves which rules to follow (e.g. whether to wear a helmet or not) but also let others decide for themselves – as long as it does not affect themselves negatively. Collectivist societies, on the other hand, don’t think that people should be left to decide for themselves as they are afraid that this would result in chaos. In individualistic societies, any of the 15 possible measures in the list are perceived as an infringement of personal freedom, and hence it is fairly self-evident that in countries where individualism is high, there is opposition against such measures.

So why do then, in individualistic countries, road safety policy measures get implemented?

One possible explanation has already been given in Section 2: the concern of individualists for their own safety and health, makes them accept measures which are, intrinsically, a limitation of freedom. Indeed, one realises that the limitation of freedom of the others will be a better guarantee for preserving the quality of one’s own life, even at the price of restricting somewhat one’s own freedom.

A second possible explanation starts from the observation that for most of the measures included in ESRA, the support amongst the population is actually very high. In Europe, the percentage of people supporting the 15 measures is on average over 70%. In other words, the “social norm” and the predominant thinking is that road safety is important
and that there is a general willingness to accept policy support measures which are believed to improve road safety. Higher levels of individualism reduce the level of support in a country, but it is still high enough so that measures eventually get approved.

Let us look in some more detail at some of the policy measures considered. The next figure shows a scatter plot for the relationship between “Install ISA systems” and “Individualism”, which had a very high negative correlation (-0.782).

Figure 5. Scatterplot of Individualism versus Installation of ISA systems

One can observe from Figure 5 that most support is found in some less developed countries with high degrees of collectivism. But even when these countries would be left out, the strong negative correlation would persist. One can also see that the USA is almost an outlier, with very low support for the measure.

The next example is the level of support for an obligation that all cyclists should wear a helmet (Figure 6). One can observe again that the higher the individualism, the higher the opposition against the measure. The level of support for this measure is also remarkably high, in particular when one realises such an obligation only exists in a few countries and in most countries the majority of cyclists is not wearing a helmet (in particular when it concerns recreational cycling). The Netherlands are an outlier, with extremely low support – but is (a) a country with the top score in Individualism as well as the highest number of cyclists per capita in the world.
Of course, cultural characteristics of a country are not the only factors that explain the level of support for measures, and for some measures they may not be the most important ones. For instance, based on a construct from ESRA data (in essence, the percentage of people almost never riding a bicycle) we found a negative relationship between the amount of cycling in a country and the support for a measure requiring that all cyclists wear a helmet (see Figure 7).
As Figure 7 illustrates, in general the lower the proportion of people in a country cycling regularly, the higher the support for helmet use. In other words, people who are little affected by a measure are not very worried that the measure would be implemented. In this case “cycling culture” and “cycling habits” are a key explanatory factor for explaining the level of support of mandatory cyclist helmets.

Let us also consider an example of a policy measure for which no significant correlation exists with Individualism: “Zero alcohol for novice drivers” (Figure 8).
One should note that such legislation already exists in many countries (including most European countries) and that the support for this measure is already very high, in almost all countries (except Italy). Because of these two phenomena, national culture does not really play a role in differentiating between countries.

On the other hand, if a measure is not yet implemented and the level of support varies a lot across countries, one can expect culture to play a more important role.

4 Implications for the implementation of new policy measures

Road safety performance in a country is heavily determined by two factors: the level of prosperity and the national culture. Individualistic countries have in general a better road safety performance than collectivist countries but, interestingly, at the same time the resistance against new measures is higher in individualistic countries.

Our analyses have illustrated that differences in the support for policy measures are largely associated with cultural differences between countries, in particular the level of individualism. The importance of individualism depends on the type of policy measure and other factors, such as the number of people affected, the expected safety benefits and whether the measure is actually already in place or not.

What does this mean for the implementation of road safety measures?

When assessing possible new measures, people from individualistic societies will in the first place think of the impact on themselves. This is associated with restrictions, which are unpleasant. Therefore, they are more inclined to reject new policy measures.

However, as the fatality statistics shows, opposing new policy measures does not mean that they will behave in an irresponsible manner. In individualistic countries, safety conscious behaviour does, in the first place, not come from rules and regulations, but from
self-restriction. The introduction of new safety measures will therefore require a lot of awareness building, providing evidence from thorough research and convincing people that the new rules will be beneficial to them. This can happen through billboards, social media campaigns, etc. Fines for people who do not obey the new rules will help the implementation process.

In collectivistic societies, people will think about how these new safety measures are restricting their compatriots and have people more behave collectively in the same way. Therefore, they will tend to resist less new measures that are intended to benefit society as a whole. However, unless there are severe control mechanisms (fines and police controls) in place, they often will not abide to the new rules themselves. Collectivist societies are conformist societies – they do follow the rules of their society. However, the rules that are being followed are traditional rules, not traffic rules, which are fairly new and not incorporated to the traditional culture. Awareness campaigns will help, but not to the same extent as in individualistic societies. The only way to ensure the rules are kept is through law enforcement. For good or bad, it is not possible to have surveillance everywhere, hence the fatality rates in collectivistic societies will remain higher despite the higher support for new policy measures.
References


