# Conclusion

## Improvements

To further improve the quality of the results obtained by the simulation, several adjustments can be made:

* In the game, dogs were used to represent all animals. Adding other animals, such as cats, might have changed the results;
* Groups were limited to five persons of the same category, whereas by having groups of different sizes, new scenarios could be taken into consideration. For example, if a scenario included four children on one side and five old women on the other side, a new statistic could be introduced comparing age and group numbers;
* Using other tools such as Virtual Reality can make the game more immersive and realistic, leading to more accurate results;

## Observations and Further Implications

These results shed a great light on how people think that autonomous cars should handle such scenarios. Further research could determine whether participants would want to buy or use autonomous vehicles, and the extent of autonomy that they would want such cars to have. Taking into consideration the presented scenarios as an example, would self-driving car users want their car to take the final decision, or would they prefer if the car waits for the user’s decision?

Findings from this experiment also showed that people would prefer saving a child or a young adult rather than an older person, a reason behind this dilemma might be that the younger generation has more to give in life. Moreover although animals are becoming important as well for humans, a distinction could still be made when a choice on which specie to kill is given to the driver. Since the dog which represents different animals was mostly killed to save a human life, this portrays the fact that for most people humans are more important than animals and should therefore be saved.

On the contrary to the above it could also be the case that some of the participants although they like animals they do not like dogs and for this reason they choose to kill it, in such cases the findings might not be accurate enough.

In the case of people upholding the law, results showed that there was not much difference between those people who were obeying the law and those who were not and still got killed. In real life people try to avoid any casualties and at that moment it is slightly hard to observe everything and kill the ones not obeying the law in those couple of milliseconds or seconds where the driver must make a crucial decision. Although this was a simulation and not in real life, we think that in real life this gap between people upholding the law and those who are not but still being killed would be negligible or at least much smaller than the one obtained as in some real life accidents there is not enough time to calculate and reason everything.

Additionally although not much reasoning can be done at that time there would still be room for some calculations, for example if there is a person and a car the probability of a slow moving vehicle to not get killed is higher than a person walking. In most cases this logic was made. Some other logic which was also present was to either kill a person and save a group of people or vice versa. We did not delve into the detail of a relative member being one of the choices so these 2 possible decisions represent people who the driver does not know. If possible the group is always saved and in this case people chose to take the utilitarian choice. At this point in time participant could have also thought that although either of the decision taken has a consequence the more people killed the worse the consequence will be. This could also be the logic being those people who chose to kill themselves, in some countries after an accident happens there is this mentality that the driver who might have followed the law unlike the pedestrians or other vehicles who were involved in the accident be accused and blamed for the accident.

Finally, according to “The Human Benchmark: Reaction Time Statistics”, the average reaction time of a human being is: 279 ms, this shows that those participants having the average time for a decision to be taken of 1.18 seconds took less than 1 second to decide. Additionally it also states that as time goes by the reaction time is also increasing which implies that there could be the case where some participants took even less time to decide when the reaction time was deducted.