#49 “Are We All Less Risky and More Skillful Than Our fellow Drivers?”

By Ola Svenson (1981)

A Critique by George Sanders
Newcastle University

This article was selected from the online list of options made available to us at:

http://www.staff.ncl.ac.uk/mike.cox/PsyFin/assbiblio.pdf

Disclaimer:
The author is a Combined Honours student with no background in Psychology modules involving Statistics.
Introduction

Svenson’s study is concerned with risk in association with drivers. Yates digests risk as follows:

“Risk is pervasive and seemingly inescapable in contemporary life. Moreover, the positive and negative consequences of people’s actions in the presence of risk are often dramatic. That is why risk taking has been studied by so many different scholars within so many different fields, from business and engineering to health care and developmental education.”

We must be able to assess the threats and opportunities that face us, as probability and risk increasingly permeate our lives. With regards to driving, risk and more specifically overconfidence in one’s skills can have major implications. Svenson has replicated Näätänen & Summala’s study in order to investigate the assertion that most drivers believe that they are better than the average driver. 81 American students and 80 Swedish students participated in a self-report questionnaire indicating their driving skills in comparison to the group. The results showed that 93% of the US sample thought they were more skilful drivers than the median driver and 69% of the Swedish drivers believed the same in comparison to their group. This article intends to critically analyse this study and provide recommendations for future research.

Critique

Is the study question relevant?

Although Svenson’s study is largely replicating the study by Näätänen & Summala, it can be considered to be relevant. This is ultimately because Svenson succeeded in demonstrating that participants considered themselves as “more skilful and less risky” than the typical driver. The personality trait that can be held responsible for this is overconfidence. Overconfidence is relatable to risk taking, a behaviour that can have many consequences – both good and bad. In the context of driving, Quimby & Watts found that when measuring human factors affecting driving performance, risk taking had the highest correlation. It is applicable to many other circumstances; for instance, Valec argued that
risk taking is the integral component in any entrepreneurial enterprise. Therefore, it is clear that this study question is relevant.

**Does the study add anything new?**

The results of Svenson’s study do not contribute any fresh evidence to Näätänen & Summala’s research. However, the method used to carry out the experiment was slightly different and did add a new approach. Svenson’s study asked the participants to compare their own driving skills to the other participants in the experiment, whereas Näätänen & Summala’s participants were asked to compare themselves to drivers in general. Furthermore, Svenson’s participants were judging their *skill* and how *safe* they were as drivers. This brings a new dimension to Näätänen & Summala’s study because their participants were only judging how *safely* they drove.

**Did the study address the most important potential sources of bias?**

Numerous sources of bias were not accounted for in this study, making it hard to replicate the study as reasons were not provided for certain aspects of the experiment’s design. The subjects only consisted of students and there was no reason given for this. These students were from only two universities, one of which was Svenson’s. Svenson may have consequently had a preconception when interpreting the results of the subjects from the University of Stockholm. Interestingly, it was found that the Swedish students were slightly less overconfident in their driving skills than the US students. However, this source of bias cannot be verified, as the median age for the two groups of subjects is different, making it unfeasible to compare the groups fairly.

The age appears to represent fairly young drivers, especially in the US where the median age of the subjects was 22 years. Svenson did not provide the range or the average age of the participants, which could have embodied a different age group. As Deery claimed, young drivers “overestimate their own driving skill”. Therefore, it could be argued that the subjects may have had a predisposition in assessing their own skill as a driver and this would confound the results of the experiment, as they are purely indicative of young drivers. With regards to safety, Farrow found adolescent drivers to be regularly involved in hazardous drink-driving circumstances and some of these subjects may fit into this category, which
could diminish the viability of the results. Besides the age of the subjects, both the sample size and the fact that participants were only from two countries fail to represent the majority of drivers.

The study failed to recognise whether the participants were experienced drivers or not as they were only required to have a driving licence. This may have been problematic because an older driver could be less experienced than a younger driver. The results from de Craen et al.’s study in 2008 showed that novice drivers performed worse on the Adaptation Test (less often reporting a lower speed in the more complex situation). However, Mayhew et al. discovered that novice drivers’ skills improve considerably in a reasonably short time frame, implying that the age of the driver matters more than the experience as “crash rates drop most dramatically during the first 6 months of driving”. Furthermore, Svenson does not stipulate the ratio of males to females. This would have been interesting to see because DeJoy established that when females assessed their driving in comparison with the average driver they were more inclined to be less optimistic.

The method for the study may present a source of bias, as Lajunen & Summala ascertained that questionnaires are susceptible to “socially desirable response tendencies”. Additionally, the method is inconsistent because the Swedish subjects were not given other judgment tasks in addition to the questions, as was the case with the US subjects. A source of bias could have transpired from the way the question was formulated as it may have imposed framing effects on the subjects. An enhancing feature of Svenson’s experiment is that it was in a controlled environment because, as Cox concluded, the most convincing proof of overconfidence has materialised from “carefully controlled experiments”.

**Does the data justify the conclusions?**

It is clear from the results that the subjects are inclined to report that they are more skilful and less risky than the other drivers in their group. It must be considered though, as Svenson described, that this could reflect either cognitive mechanisms or be due to a shortage of information regarding the other subjects in the group. However, Lajunen & Summala explained how research insinuates that people are overly optimistic when considering their own driving capability and accident risk.
**Future research**

As emphasised in the critique, there are many sources of bias in this experiment. Future research should aim to account for these. The research question implies that the study is representing all drivers, whereas the experiment fails to demonstrate this with a small cohort and only two countries used. Future research should aim to overcome this by vastly increasing the sample size and using subjects from a wider variety of countries. This could be achieved by doing the questionnaire online. Subjects could then be compared between different countries. Accordingly, this may be useful to prevent the participants comparing themselves to the people they see in the room and letting stereotypes affect their judgements.

Further to this, participants should be asked to state how long they have been driving, rather than just having a driving licence. Gender should also be noted in order to make a comparison afterwards. The method could be improved further by requiring subjects to take a driving test and then comparing their self-reported driving skill to the examiner’s results. Despite being more expensive and challenging to consider subjects across multiple countries, the results would be more viable, as this way, sources of bias are limited and more useful evidence can be gathered.

In addition to a driving test being compared to an online questionnaire from a significantly larger sample-size, it would be thought provoking to measure whether or not the evidenced overconfidence in the participants’ driving ability translates to other matters such as investing. This could be recorded by measuring the same participants’ investing activities over the next 12 months. Although correlation does not accurately represent causation, it would be noteworthy to document how correlated the participants’ overconfidence is between the two tasks.

**Conclusions**

This study holds too many probable sources of bias for it to be repeated. The results do not accurately reflect the research question, as the results are not indicative of drivers as a whole. Despite this, there are some relevant findings and the future research that could stem from this is valuable.
References