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WHO CAN SUPPORT THE INTRODUCTION OF SELF-DRIVING MILITARY VEHICLES?

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ABSTRACT: *The aim of the current paper is to map attitudes towards self-driving vehicles along eight key questions, which look at the challenges of the technology, risk perception, and potential civil and military uses. The results show that trust in the cybersecurity of self-driving cars is strongly correlated with fear of new technologies, privacy concerns, and fear of failure. Respondents with confidence towards self-driving technology are more open to military applications, while those without confidence have higher concerns about controllability. The cluster analysis identified three distinct clusters of attitudes: negative perceptions, cautiously open, and technology-friendly. The results highlight the diversity of trust patterns and contribute to a better understanding of the social acceptance of autonomous vehicles.*

KEYWORDS: *autonomous vehicles, cybersecurity, military applications, regulation, terrorism risks*

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SELF-DRIVING CARS

Self-driving cars represent one of the most divisive areas of technological development, as they raise a number of social, legal, and ethical issues. The operation of self-driving cars is based on different levels of automation. SAE International[1] distinguishes six levels, ranging from full manual control to full autonomy. However, the introduction of such systems faces a number of legal and ethical hurdles, particularly in the European Union, where the Vienna Convention requires all vehicles to have a human driver (United Nations, 1968).[2] In contrast, the uptake of self-driving cars in the United States is proceeding at a faster pace, with the National Highway Traffic Safety Administration (NHTSA) setting strict safety standards for these vehicles.[3] In China, the development of self-driving technology is also proceeding at a rapid pace, encouraged by extensive government support for research and development.[4]

One of the biggest challenges for autonomous vehicles is gaining public trust. Studies have shown that people's attitudes are significantly influenced by age, gender, education, and attitude towards technology.[5] While the economic interests of manufacturers make it crucial to achieve widespread uptake of the technology as soon as possible, an interpretative approach can help to gain a deeper understanding of people's reactions and concerns.[6]

1 Brooke 2016.
2 United Nations 1968; see more: https://net.jogtar.hu/jogszabaly?docid=98000005.tvr.
3 Atiyeh 2021.
4 Li et al. 2022.
5 Jaradat et al. 2020; König – Neumayr 2017.
6 Gál et al. 2024.

Industry players try several strategies to increase user confidence, such as demonstration programmes and educational campaigns for the public.[7] Surveys have shown that the majority of people are sceptical about the introduction of self-driving cars, mainly because of their price and reliability. A 2014 study found that people in the US, UK, and Australia did not feel prepared to use fully autonomous vehicles. In contrast, research by Kyriakidis and colleagues showed that people are more open to self-driving cars, especially when those are introduced in public transport.[8] Research by Kettles and Van Belle, on the other hand, found that the majority of people would not use these vehicles for at least six months after their introduction.[9] Another study found that 67% of people feared software failures in self-driving vehicles.[10] Other research has shown that people are more likely to adopt autonomous transport devices if they are used in situations where they could reduce the number of accidents, such as in severe weather conditions or during long-distance driving.[11]

One of the key ethical challenges for self-driving cars is the need for vehicles to be able to make decisions in accident situations. People generally accept the principle that the vehicle should make decisions with the least possible sacrifice, but when it comes to their own lives, they take a different view.[12] For this reason, the continuous development of self-driving car software and addressing ethical dilemmas are essential to increase the reliability of the technology.[13] According to some philosophical schools of thought, the application of such technologies can only be ethical if they follow the principles of human decision-making.[14] Part of the debate on the ethics of self-driving cars centres on the extent to which the manufacturer, the programmer, or even the user of the car can be held liable in the event of an accident.[15] In conclusion, the development of self-driving car technology poses not only technological but also social and ethical challenges. Gaining public trust, legal regulation issues, and ethical decision-making are all factors that will have a significant impact on the future uptake of autonomous vehicles. As the technology develops, it will become increasingly inevitable that society finds a clear answer on how to integrate these vehicles safely and ethically into everyday transport.

SELF-DRIVING CARS AND TERRORISM

The development of autonomous systems in the automotive and military sectors raises new questions of responsibility and security. Bo draws attention to the fact that the role of programmers in the development of autonomous systems is not limited to their creation, but also extends to the ongoing monitoring of their operation.[16] According to the principle of Meaningful Human Control (MHC), programmers may be liable for crimes committed by autonomous systems if they could have foreseen the risks and failed to take appropriate steps to minimise them.

[7] Schoettle 2016.
[8] Kyriakidis et al. 2015.
[9] Kettles – Van Belle 2019.
[10] Howard – Dai 2014.
[11] Cavoli et al. 2017.
[12] Servin et al. 2023; Goodall 2014.
[13] Woollard 2023.
[14] Borenstein et al. 2019.
[15] Gogoll – Müller 2017.
[16] Bo 2022.

The link between cybersecurity and terrorism is also of growing importance. According to Perger, cyberterrorism includes cyberattacks that may be aimed at crippling infrastructure or achieving political goals.[17] The use of military drones raises new issues in international law, while cyber defence and information security play a key role in threat reduction. Kumar concludes that terrorist organisations can use technology to coordinate their attacks more effectively, and therefore, defence strategies must include both human and technological elements.[18]

Several studies in the field of autonomous vehicles have highlighted security and societal challenges. According to Viktor and Fodor, self-driving technology is not developing as fast as many expected, mainly due to gaps in V2V communication and data security.[19] The research highlights that self-driving cars are less of a threat from a terrorism perspective, but the potential for group attacks makes the development of secure communications essential. Human factors also play a key role in the operation of autonomous systems. According to Kovács, Hőgye-Nagy, and Kurucz, situational awareness is essential for the success of interactions between autonomous vehicles and humans.[20] Psychological research suggests that increasing user awareness can improve the safe use of autonomous vehicles. Chougule and colleagues investigated the causes of accidents involving self-driving cars and found that weather conditions, cybersecurity threats, and infrastructure deficiencies are significant barriers to the development of the technology.[21] Ethical and legal regulations require further research to ensure that autonomous systems can be safely integrated into transport.

Social acceptance is also an important factor for the uptake of autonomous vehicles. Research by Othman has shown that accidents involving self-driving cars have a negative impact on public opinion, especially in Europe.[22] However, demographics show a greater interest in autonomous vehicles in developing countries. Szatmáry and Lazányi sought to answer the question of whether self-driving cars are actually safer than conventional vehicles.[23] Their research suggests that the advanced sensing and response capabilities of autonomous vehicles can help reduce accidents, but that infrastructure, regulation, and public confidence remain challenges to the widespread uptake of the technology. Further investigation into the development of autonomous systems is needed to ensure that the issue of liability is clearly defined for both developers and users.

The use of artificial intelligence and machine learning brings the capabilities of autonomous systems to new levels, but also increases the potential risks. The ethical dilemmas arising from the operation of autonomous vehicles and weapon systems generate serious legal and societal debates. Technological advances have a significant impact not only in transport and warfare, but also in healthcare and industrial automation. Artificial intelligence-led diagnostic systems play an increasing role in medicine, while in industry, autonomous robots can increase productivity and reduce the risks of human labour. Social

17 Perger 2022.
18 Kumar 2019.
19 Viktor – Fodor 2024.
20 Kovács et al. 2021.
21 Chougule et al. 2023.
22 Othman 2023.
23 Szatmáry – Lazányi 2022.

acceptance and regulation will remain key factors in the development of autonomous systems, and future research will aim to integrate these technologies into everyday life in a safe and ethical way.

RESEARCH METHOD

The research methodology relies exclusively on primary data and thus provides a comprehensive picture of the acceptance of self-driving cars directly through the opinions and experiences of the respondents. The research was conducted using convenience sampling, adapted to the resources available. Examining age, gender, education, and technological affinity helps to reveal the correlations behind individual attitudes. Descriptive statistical methods, Spearman correlation, and independent samples t-test were used to present the research findings using SPSS 25 software. Although the research is not representative of the whole population, the results point to important correlations. Statistical conclusions should take into account the limitations of the sample, as generalisability is not guaranteed. There are several reasons to investigate the adoption of self-driving cars: firstly, the influence of the regulatory environment and secondly, to understand individual attitudes towards the use of the technology.

SAMPLE PRESENTATION

The data for the survey was collected using an anonymous online questionnaire, which proved to be an ideal tool to ask for opinions on sensitive or divisive topics. Ensuring anonymity helped respondents to share their opinions honestly, as they did not need to fear being identified, which is particularly important in issues such as the public perception of self-driving cars, where views may differ. An additional advantage of the online format was that it allowed for a quick and efficient collection of responses and the immediate digitisation of the data obtained, which also greatly facilitated and accelerated the analysis process.

The self-completion format used in the online survey allowed respondents to complete the questionnaire at their own pace, in a comfortable environment, at any time, which could not only increase the willingness to respond but also contribute to the thoughtfulness of the responses. While this type of data collection does present some methodological challenges, such as response rates or representativeness, the aim of the survey was not to provide a representative sample of the population as a whole, but to gain insight into the social acceptance of self-driving vehicles through a broad sample, reflecting a wide range of opinions. This objective was well served by the methodology used.

The sample of respondents after the cleaning steps, before data processing, was 277. This was a sufficient number of respondents to draw reliable statistical conclusions. The age distribution of the sample is illustrated in Figure 1. The age of the respondents ranged from 10 to 78 years, which gives a wide age coverage. The mean age was 27.79 years and the median age was 21 years, indicating that the sample was predominantly over-represented in younger age groups. This may be particularly useful as the views of the younger generations may be of particular importance for the future social acceptance of a technology.

The research explored attitudes towards self-driving technologies along eight targeted questions, covering perceived challenges, risks, and potential uses of autonomous vehicles. The dimensions surveyed provide a comprehensive picture of respondents' views on

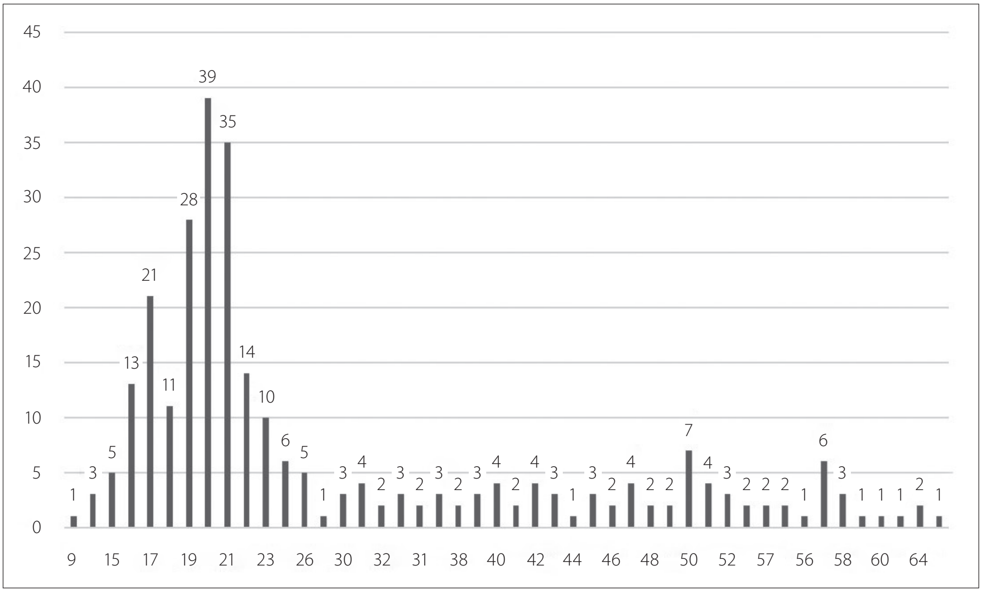

Figure 1 *Age distribution of respondents (n = 277)*

both civilian and military applications. The following variables formed the basis of the analysis:

- Biggest technological challenge: The question aims to find out what respondents consider to be the biggest technological challenge in the development and deployment of self-driving vehicles. The responses will help identify the main barriers limiting technological adoption.
- Cybersecurity of self-driving cars: This question explores concerns about the cybersecurity risks of self-driving vehicles. The answers provide an indication of the extent to which respondents feel vulnerable to hacking and unauthorised access.
- Communication between drivers and pedestrians: This question measures the importance respondents attach to the establishment of effective communication between self-driving vehicles and human road users. This issue is particularly relevant in the context of urban transport, where implicit human interaction is common.
- Need for regulation: This question addresses the need for a regulatory framework for autonomous vehicles. Respondents express their views on the importance of regulating responsibility, ethics, and safety at the level of legislation.
- Most challenging traffic environment: This question asks respondents which traffic environment (e.g., city, motorway, extreme weather) they consider most challenging for self-driving systems. The results highlight socially perceived technological barriers.
- Combat use of self-driving military vehicles: This question explores societal attitudes towards the use of autonomous vehicles for combat purposes in the military. It focuses on the acceptability of military decision-making without human intervention.
- Most suitable military tasks for self-driving vehicles: This question explores which military tasks (e.g., logistics, reconnaissance, surveillance, combat) respondents consider most suitable for autonomous vehicles. The results contribute to the societal perception of autonomous military technology developments.

– Likelihood of terrorist use: This question assesses the extent to which respondents fear that self-driving vehicles could be used for malicious purposes, such as terrorist attacks. The answers reflect societal perceptions of the technological threat.

RESULTS

Table 1 *Correlation table*

		Biggest technological challenge	Cybersecurity of self-driving cars	Communication between drivers and pedestrians	Need for legal regulation of self-driving cars	Most challenging transport environment	Combat applications of self-driving military vehicles	The most suitable military tasks for self-driving vehicles	Likelihood of terrorist use of self-driving vehicles
Hackers hack into car systems	Correlation Coefficient	.084	-.316**	.200**	.204**	-.050	-.066	.006	.188**
	Sig. (2-tailed)	.164	.000	.001	.001	.410	.273	.924	.002
The self-driving car breaks down	Correlation Coefficient	.070	-.320**	.293**	.353**	-.207**	-.128*	-.044	.221**
	Sig. (2-tailed)	.245	.000	.000	.000	.001	.034	.470	.000
Fear of new technology	Correlation Coefficient	.151*	-.288**	.120*	.066	-.046	-.171**	-.091	.103
	Sig. (2-tailed)	.012	.000	.045	.270	.444	.004	.131	.088
People lose their jobs because of it (e.g., taxi drivers)	Correlation Coefficient	.101	-.278**	.139*	.124*	-.143*	-.118*	-.085	.059
	Sig. (2-tailed)	.092	.000	.020	.039	.017	.049	.160	.326
Control cannot be taken back	Correlation Coefficient	.020	-.341**	.231**	.232**	-.059	-.139*	-.041	.126*
	Sig. (2-tailed)	.736	.000	.000	.000	.326	.020	.501	.037
Too expensive	Correlation Coefficient	.033	-.116	.135*	.105	-.127*	-.032	.001	.108
	Sig. (2-tailed)	.582	.055	.024	.082	.034	.593	.983	.072
The driving experience is lost	Correlation Coefficient	.057	-.153*	.168**	.283**	-.102	.049	-.104	.052
	Sig. (2-tailed)	.348	.011	.005	.000	.089	.421	.084	.393
Lack of security of personal data	Correlation Coefficient	.131*	-.367**	.143*	.244**	-.093	-.053	-.084	.131*
	Sig. (2-tailed)	.030	.000	.017	.000	.124	.383	.162	.030

		Biggest technological challenge	Cybersecurity of self-driving cars	Communication between drivers and pedestrians	Need for legal regulation of self-driving cars	Most challenging transport environment	Combat applications of self-driving military vehicles	The most suitable military tasks for self-driving vehicles	Likelihood of terrorist use of self-driving vehicles
Gender	Correlation Coefficient	.042	-.209**	.127*	.125*	-.078	-.146*	-.119*	.129*
	Sig. (2-tailed)	.482	.000	.035	.037	.198	.015	.048	.032
Age	Correlation Coefficient	.148**.*	-.212**	.230**	.228**	-.107	.099*	.004*	.294**
	Sig. (2-tailed)	.014	.000	.000	.000	.076	.099	.941	.000
Residence	Correlation Coefficient	-.013	.121*	-.049	-.011	.020	-.040	-.026	-.088
	Sig. (2-tailed)	.830	.044	.417	.858	.742	.507	.663	.143
Education	Correlation Coefficient	.160**	-.228**	.113	.196**	-.090	.027	.059	.254**
	Sig. (2-tailed)	.007	.000	.060	.001	.135	.656	.327	.000
Studies	Correlation Coefficient	-.117	.094	-.055	-.045	.065	-.018	.095	-.052
	Sig. (2-tailed)	.053	.118	.360	.458	.280	.765	.116	.392

There is a medium-strong negative relationship between trust in the cybersecurity of self-driving cars and fear of hacker attacks (correlation coefficient: -0.316; p: 0.000). This means that the more one fears hacker attacks, the less one trusts the cybersecurity of self-driving cars. There is a medium-strong positive relationship between the need for legal regulation of self-driving cars and fear of self-driving car failures (correlation coefficient: 0.353; p: 0.000). This suggests that those who are more concerned about technological failures see a greater need for the development of a legal framework. There is a negative relationship of medium strength (correlation coefficient: -0.288; p: 0.000) between trust in the cybersecurity of self-driving cars and fear of technological innovations. This suggests that those who fear new technologies are less confident in the security of self-driving cars. There is a weak negative relationship between confidence in the cybersecurity of self-driving cars and fear of job losses (correlation coefficient: -0.278; p: 0.000), suggesting that those who fear that self-driving technology will eliminate jobs are less confident in the safety of self-driving cars. There is a weak positive relationship between the need for legal regulation of self-driving cars and the fear of not being able to take control back (correlation coefficient: 0.232; p: 0.000), suggesting that those who fear that they would not be able to take control back in an emergency would give more importance to improving legal regulation. There is a negative relationship of medium strength (correlation coefficient: -0.367; p: 0.000) between trust in the cybersecurity of self-driving cars and lack of security of personal data, indicating that those who are concerned about the protection of personal data are less trusting of the cybersecurity of self-driving cars. However, there is a weak positive relationship between the lack of personal data security and the need for legal regulation of self-driving cars (correlation coefficient: 0.244; p: 0.000), indicating that those with greater privacy concerns consider it more important to strengthen legal regulation. There is a weak positive relationship between the need to improve communication between self-drivers and pedestrians and age (correlation coefficient: 0.230; p: 0.000), indicating that older people feel a greater need for this type of improvement. Similarly, there is a weak positive relationship between age and the need for legal regulation of self-driving cars (correlation coefficient: 0.228; p: 0.000), suggesting that older people consider it more important to clarify liability issues. Finally, there is a weak positive relationship between the highest educational attainment and the need for legal regulation of self-driving cars (correlation coefficient: 0.196; p: 0.001). This indicates that more highly educated people perceive a greater need for clarification of legal regulation.

In analysing the data, a t-test was used to see whether there is a significant difference between those who trust self-driving technology and those who do not. The results show a significant difference in several cases, supporting the previous correlation analysis. The t-test shows a significant difference between those who distrust and those who trust in several aspects, such as fear of new technology. Those who trust less in self-driving technology have a higher fear of the risks of new technologies (mean=3.22) than those who trust (M=2.32). The difference is significant ($t=2.502$; $p=0.019$). The possibility of taking control back: the distrustful (mean=4.12) are more concerned about not being able to take control back in case of an emergency than the trustful (M=3.09). The t-test result indicates a significant difference ($t=3.977$; $p<0.001$). Combat deployment of self-driving military vehicles: those less confident in the technology (M=2.57) are less likely to consider the combat deployment of such vehicles acceptable than those who are confident (M=3.05). The difference is significant ($t=-2.166$; $p=0.032$). Likelihood of terrorist use: those who lack confidence (M=2.92) are less likely than those who have confidence (M=3.36) to believe that terrorists could use self-driving vehicles for attacks. The t-test result in this case also shows a significant difference ($t=-2.633$; $p=0.013$). The results, therefore, suggest that the distrustful are more fearful of new technologies, failures, and loss of control, while the confident are more open to the use of self-driving systems, but also more sensitive to the potential for misuse.

In order to get a deeper and more nuanced picture of the groups of people who distrust and trust self-driving cars, I used cluster analysis. This statistical method allowed me to group respondents into clusters based on similarities, so that I can not only examine individual opinions but also reveal underlying patterns and attitude groups. In the clustering process, I used the perceived advantages and disadvantages of self-driving technology as a grouping criterion. The reason is that these factors – such as safety, convenience, reliability, or even privacy concerns – fundamentally shape people's attitudes and have a significant impact on whether one adopts or rejects self-driving systems. The method has therefore allowed me to identify not only general opinions but also typical attitude profiles.

The results of the ANOVA table show that each of the variables included contributed significantly to the separation of clusters, confirming the relevance of the variables for clustering. The clusters that result from K-means clustering give the following pattern along the cluster-forming variables. Based on the patterns shown, we can place the cluster members under three names: **negative perception** cluster, because all potential positives are rated low and all potential negatives are rated high (92 people). Next is the **positive perception** cluster, where the opposite is true, i.e., positives are rated higher and negatives are rated lower. They are the easiest to convince to engage in self-driving technologies (74 people). There is also an intermediate cluster, the **control freaks**, who could be said to be an insecure layer, but in fact, it is not a uniform intermediate layer, as there is an outlier pattern of fear of self-driving cars failing, lack of control feedback, or that the hackers from outside could interfere with the system. All of these fears are viewed in terms of control over the system, hence, they are called **control freaks** (111 people).

Table 2 *ANOVA table*

	Cluster		Error		F	Sig.
	Mean square	df	Mean square	df		
Self-driving cars will have a positive impact on emissions	4.013	2	1.221	274	3.287	.039
Self-driving cars will have a positive impact on society	12.616	2	1.137	274	11.096	.000
Self-driving cars reduce car accidents	22.136	2	1.434	274	15.439	.000
Hackers are hacking into your car's system	91.255	2	1.204	274	75.774	.000
The self-driving car breaks down	91.756	2	.724	274	126.773	.000
Fear of new technology	83.439	2	1.296	274	64.387	.000
People lose their jobs because of it (e.g., taxi drivers)	83.861	2	1.279	274	65.542	.000
Control cannot be taken back	112.437	2	.823	274	136.628	.000
Too expensive	78.613	2	1.423	274	55.248	.000
The experience of driving is lost	74.335	2	1.374	274	54.085	.000
Lack of security of personal data	130.453	2	.979	274	133.192	.000

The distribution is not even, with a very high number of respondents interested in the control, with nearly a quarter of respondents in favour, and roughly a third against. In other words, nearly 40% of respondents who could be persuaded to use self-driving technologies may be able to trust it, but are not yet confident. In the following, I examine the clusters formed along the lines of attitudes towards the use of self-driving technologies in combat.

As can be seen in Figure 2, there are differences between the clusters in terms of the exploratory variables, which I compared pairwise using a partial independent samples t-test to check whether they are significant. When comparing the negative and positive perception groups, the Levene test showed that the equal variance condition was met for several variables. As for the Communication between drivers and pedestrians ($F=0.749$; $p=0.388$), the Need for legal regulation of self-driving cars ($F=0.299$; $p=0.586$), and demographic factors – age ($F=0.335$; $p=0.564$), place of residence ($F=0.417$; $p=0.519$), and education ($F=0.244$; $p=0.622$) – the "equal variances assumed" principle held, i.e., the variance of the responses of the two groups did not differ significantly. This suggests that the responses to these questions were relatively uniform regardless of the level of perception, or at least that there was no significant difference in the within-group variances.

In contrast, for Cybersecurity of self-driving cars ($F=7.027$; $p=0.009$) and Likelihood of terrorist use of self-driving vehicles ($F=6.143$; $p=0.014$), the difference in variances was already significant, and the "equal variances not assumed" condition had to be applied to these variables. This indicates that there was greater variation within groups on these questions – for example, there was greater variation among those with negative perceptions –, but this did not always result in significant differences between group means on the given population. This may be due to the different intensity of perceptions or the degree of uncertainty associated with perception on a given topic.

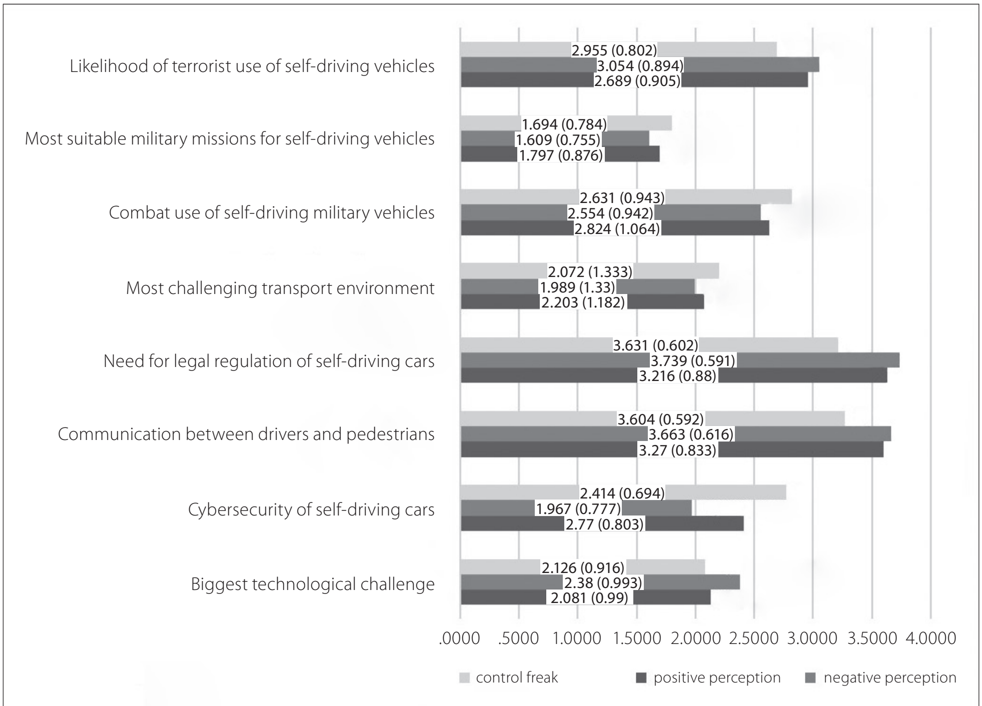

Figure 2 *Mean and Std of clusters*

Based on the results of the t-tests conducted to compare the control freak and negative perception clusters, Levene's test showed that for most of the variables tested, there was no significant difference in the within-group variances, so the condition of equal variance was met. This was also true for the variables of Communication between drivers and pedestrians ($F=0.287$; $p=0.594$), Need for legal regulation of self-driving cars ($F=1.042$; $p=0.310$), Likelihood of terrorist use of self-driving vehicles ($F=1.132$; $p=0.290$), and Education ($F=0.221$; $p=0.639$). This suggests that, for these factors, the opinions of the two clusters, although they may differ in content, showed a similar distribution in terms of variance, i.e., the variance of the responses did not differ significantly. However, for the variable of Cybersecurity of self-driving cars ($F=5.147$; $p=0.025$), the result "equal variances not assumed" was obtained, indicating that the variance of the responses within the clusters differed significantly for this question. This may indicate that respondents with a greater fear of loss of autonomy (control freaks) had more divergent views on the importance of cybersecurity, while the group with negative perceptions may have had a more consistent perception of risk. However, in the present population, this divergence was not always associated with a significant difference in group means. In the comparison between the control freak and positive perception clusters, the Levene test for equal variances was satisfied for the age variable ($F=23.758$; $p<0.001$), so the "equal variances assumed" principle was applied. The t-test result ($t=-3.989$; $df=201$; $p<0.001$) shows a significant difference between the two clusters, i.e., they differ in age: members of the control freak cluster are typically younger or older than members of the positive perception cluster. However, the difference in variances for the education variable was significantly close ($F=3.106$; $p=0.080$), so the "equal variances not assumed" condition was applied. The result of the t-test ($t=-2.343$; $df=188.687$; $p=0.020$) also indicates a significant difference, suggesting that there is also a difference in the level of education between the members of the two clusters, i.e., the educational background of the control freak and positive perception clusters may be statistically different.

SUMMARY

The research used a questionnaire-based approach to investigate social attitudes towards self-driving vehicles. Eight key areas were analysed: technological and transport challenges, cybersecurity, human interaction, regulatory needs, military applicability, and the potential for terrorist use. K-means clustering identified three attitude clusters: the **negative perception cluster**, which is dismissive of all technological advances but sensitive to risks; the **positive perception cluster**, which is open to self-driving technologies; and the **control freak cluster**, which is specifically concerned about loss of controllability, traceability, and control over the system. The t-test analyses showed no significant variance within clusters in several cases, such as perceptions of control or communication challenges, indicating a relative consistency of responses. However, for **cybersecurity** and the **possibility of terrorism,** there is a stronger dispersion and different patterns, especially for the negative and control-sensitive groups. Demographic factors (age, place of residence, education) did not result in significant differences in within-group variance, i.e., they did not show a prominent role in shaping perceptions. The results highlight that social trust and the management of security concerns may be key to the acceptance of technology.

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