

Inclusive Smart Mobility: Global Licensing Frameworks for Commuters with Disabilities

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ABSTRACT

Accessible transportation ecosystems that support a range of human abilities are necessary to achieve equitable social inclusion in contemporary smart cities. However, typical driver license structures present systemic obstacles for those with neurodevelopmental problems and physical limitations. In order to find crucial operational gaps in licensing systems for individuals with disabilities, this systematic review assesses assistive technologies and international regulatory frameworks. In order to benchmark current institutional practices, vehicle adaptations, and specialized testing methodologies, we comprehensively analyzed 34 peer-reviewed publications using the PRISMA protocol. The results show that flexible, data-driven evaluation paradigms are urgently needed in place of strict, non-inclusive medical norms. Urban transit networks may greatly improve excluded groups' autonomy and access to jobs by including intelligent vehicle adaptations, specialized simulators, and inclusive digital governance rules. In the end, this study offers legislators and transportation planners a fundamental road map for creating intelligent, accessible, and equitable municipal mobility infrastructure.

1. Introduction

Obtaining a driver's license is more than just a bureaucratic process; it is a fundamental step towards independence and social inclusion [1-4]. However, for many people with disabilities, this process is fraught with significant challenges that go beyond those faced by people without disabilities [5]. From physical obstacles to legal and administrative barriers, people with disabilities often face a bumpy road when trying to obtain their driving license and drive safely [6].

Various types of impairments can affect a person's ability to drive safely. For example, disabilities related to the nervous system, such as epilepsy or multiple sclerosis, can affect coordination and reaction time. Neurodevelopmental disorders, such as autism or attention deficit hyperactivity disorder (ADHD), can affect the ability to concentrate and make quick decisions [7-10]. Visual impairments, such as partial or total blindness, present obvious challenges in perceiving and responding to the road environment [11]. Motor disabilities, such as cerebral palsy or amputations,

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can limit the ability to physically control a vehicle. Each of these conditions requires specific adaptations to both vehicle and roadworthiness tests to ensure safe driving [12].

In addition to physical challenges, people with disabilities face institutional and social barriers. Driver licensing systems are often not equipped to handle the specific needs of this population. Driving tests and medical requirements may not be adapted, often resulting in longer and more complicated processes, or even in the denial of licenses without sufficient justification [13, 14]. This lack of adaptability in processes not only creates a frustrating experience, but also contributes to broader social exclusion, limiting opportunities for employment, education and participation [15-17].

It is therefore crucial to examine these challenges and advocate for more inclusive policies and practices that enable people with disabilities to obtain a driver's license in a fair and efficient manner. Through a better understanding of their specific needs, the design of appropriate adaptations and the establishment of inclusive regulations, it is possible to foster an environment where mobility and independence are accessible to all, regardless of their condition. This article seeks to explore these challenges and seek solutions to ensure that all people, regardless of their abilities, can fully exercise their right to mobility [18-20].

This article aims to research and collect scientific information on the laws and regulations used worldwide to enable persons with disabilities to obtain a driver's license. This research aims to contribute in the following areas:

- i. A systematic review of policies and regulations on driver licensing for persons with disabilities will be conducted, thereby addressing the gaps identified in the current literature.
- ii. Various articles and studies identifying applicable laws and regulations in different countries will be examined in order to establish a comparative overview and assess best practices.

Overall, the main objective of this study is to deepen the understanding of regulations and laws affecting persons with disabilities in the context of driving. It is hoped that this contribution will not only improve understanding of the issue, but also encourage debate on equal access to this fundamental right.

This study is organized as follows: Section II details the methodology employed, including the systematic review approach and study selection criteria. Section III presents the results obtained from the research, including the main findings and trends identified. Section IV discusses the results in depth, analyses their implications and makes connections with previous research. Finally, Section V presents the conclusions of the study, highlighting the contributions made to the field and suggesting possible directions for future studies.

2. Methods

The methodology used in this document is based on the protocol known as Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). It is used to carry out systematic reviews [21]. This protocol allows the development of a checklist of requirements that should be the subject of a systematic review [22, 23]. The purpose of PRISMA is to assist authors of systematic reviews in documenting transparently the reasons for the review, the actions taken by the authors, and the findings obtained in the desk review process [23].

Peixoto et al. [24] through a systematic review, applied the PRISMA protocol to identify the characteristics, educational methods, technologies, and gaps of immersive virtual reality for the teaching of foreign and second languages. The study conducted by Martucci et al. [25] the PRISMA protocol was applied for a systematic review of motivation for gaming, including works that used a validated tool for this purpose and excluding those that only addressed the psychopathological aspect of gaming. Abelha et al. [26] studied using a systematic review and analyzed 69 papers using the PRISMA protocol, thereby analyzing graduates' employability and competencies' development.

For the systematic review of this study, several points were developed, including (1) the search strategies showing the advanced search in the databases (Scopus, Web of Science, and PubMed), (2) the admissibility criteria, where the inclusion and exclusion criteria are explained, and (3) the selection of studies.

2.1. Search strategies

A total of 165 articles were collected across two search phases. 165 articles were retrieved from Scopus, Web of Science, and PubMed databases. In order to accurately identify the articles, an advanced search was carried out using logic gates. Boolean terms, including AND, and OR, were used for this search. Table 1 shows the terms used in the different databases. In the Scopus and PubMed databases, the same terms were used. While in Web of Science, a different term was used.

Table 1

The combination of terms that produced the most favorable results in these databases

Database	Term
Scopus PubMed	SCOPUS ("disability" [title/abstract] AND "driver's license" [title/abstract]) AND ("laws" OR "obtain" OR "legal process")
Web of Science	TS=(disability AND ("driver's license" OR "driving license"))

2.2. Admissibility criteria

The eligibility criteria are divided into inclusion criteria and exclusion criteria. The articles included were in English, peer-reviewed, and focused on driver's licenses for people with disabilities. Review articles, book chapters, books, conference proceedings, editorials, and encyclopedias were excluded. Furthermore, duplicate articles were screened out. Finally, for the admissibility of articles in the systematic review, the titles and abstracts of each article were analyzed. Once the articles were identified, reviewed, and admitted, the total number of studies included in the systematic review was 34.

2.3. Selection of studies

In the first phase, 29 articles were collected from Scopus, 6 from PubMed, and 61 from Web of Science, resulting in 96 records. In the second phase, an additional search was conducted in Scopus, yielding 69 further records. Combined, both search phases produced a total of 165 records. After removing duplicate articles (n= 22), 143 articles were analyzed. In the third phase, 77 records were rejected because they were articles in a language other than English and were review articles, book chapters, books, conference proceedings, editorials, and encyclopedias. This produced 66 articles eligible for a comprehensive analysis. Then, 32 articles were excluded based on titles and abstracts,

leaving 34 full-text papers for further examination. After this process, Figure 1 presents a flow chart with a report of the results obtained at each stage. In addition, Figure 2 presents a word cloud representing the most commonly used keyword. The most used keywords in the articles are Driving with 18 occurrences, followed by Driver with 10 occurrences, and License, Epilepsy, and Autism with 6 occurrences each. Autistic and Dementia have only 2 appearances.

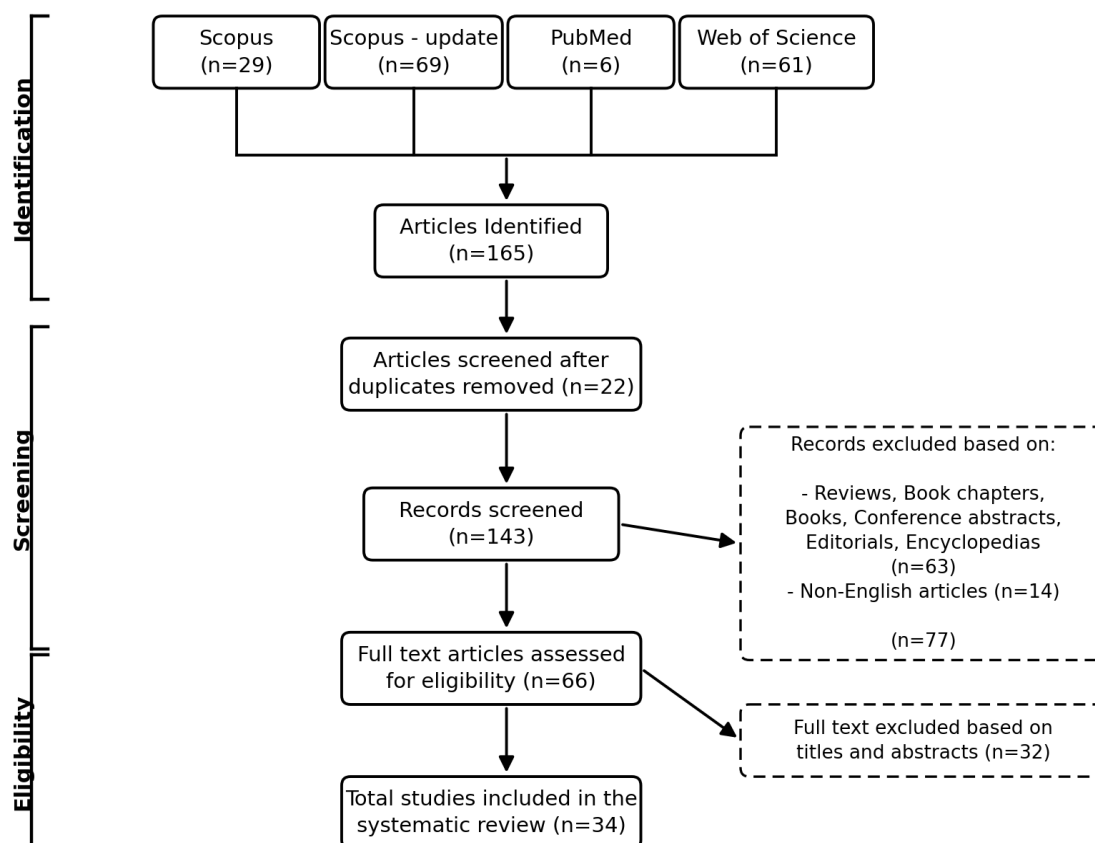


Fig. 1. Systematic review flowchart

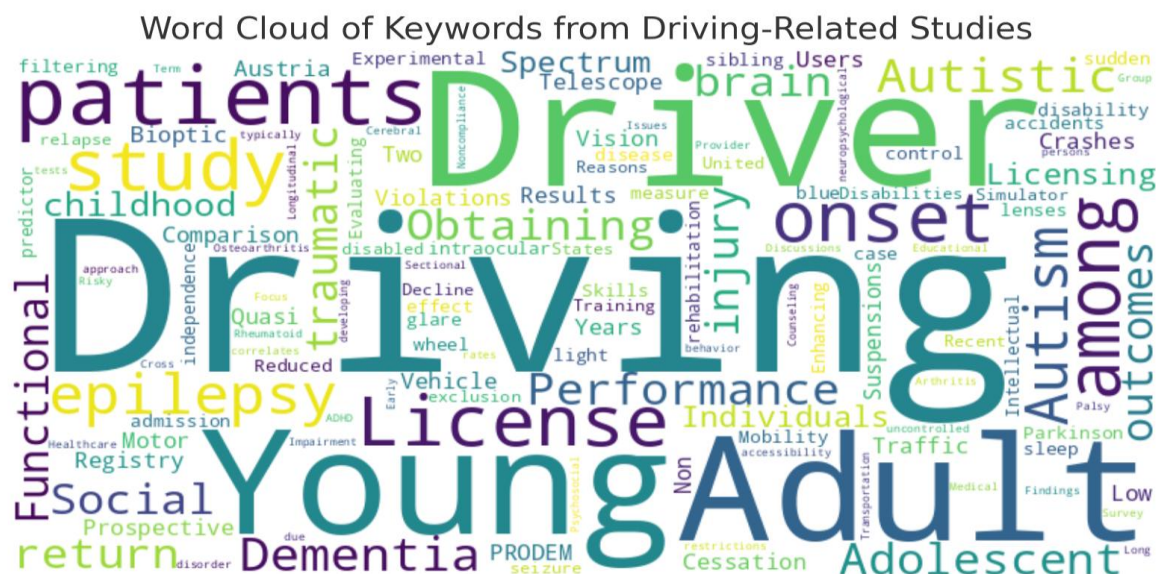


Fig. 2. Word cloud representing the most used keyword

3. Results

The analysis of the systematic review is mainly composed of the study characteristics, which are divided into A) Evaluation by year of publication, which includes all articles published up to the date of selection; B) Distribution of papers by journal, which presents a breakdown of publications according to academic sources; and C) Classification of papers by method, which examines the disabilities used in the reviewed studies.

3.1. Study Characteristics

Within the study characteristics, the results introduced in the data collection process respond to different data such as:

Evaluation by year of publication: The systematic review was carried out until July 2026. The results show that the years with the most papers on driving licenses and people with disabilities are 2010 and 2026, each with 4 papers, followed by 2005, 2014, and 2023 with 3 publications each. 2011, 2012, 2021, 2024, and 2025 each contributed 2 publications. Finally, only one paper has been published in 2007, 2015, 2016, 2017, 2018, 2019, and 2022. The rest of the years have no papers (See Figure 3.)

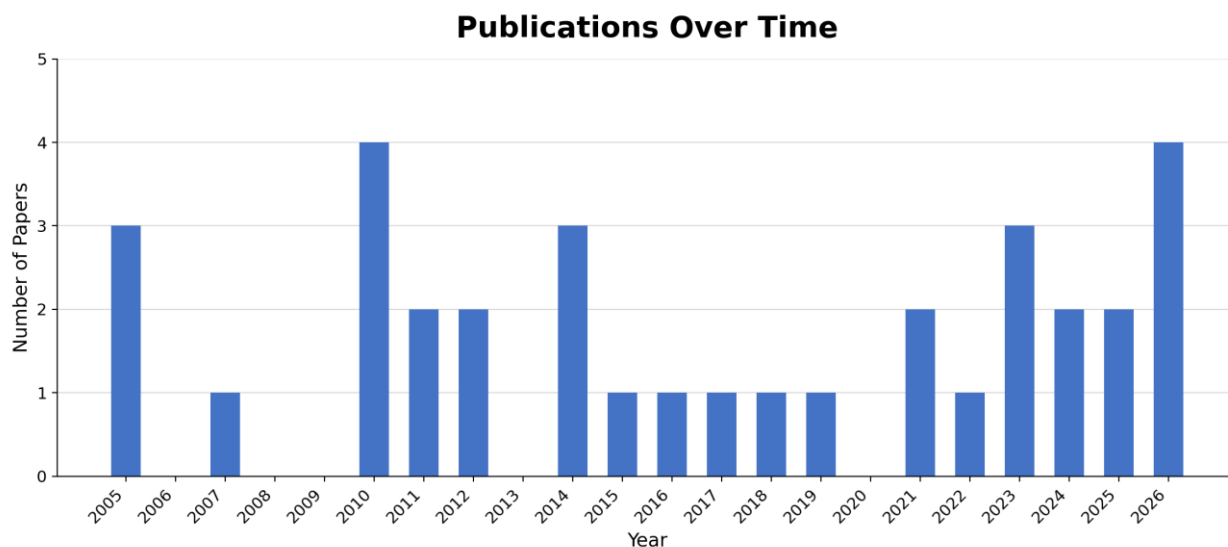


Fig. 3. Paper analysis by year of publication

Distribution of papers by the journal: The journals with the most publications related to driving licenses and people with disabilities are Brain Injury and PLOS ONE, each with 2 papers and 5.88% of the 34 articles included in the systematic review. In comparison, the other journals have only 2.94%, i.e., only one paper each. Furthermore, the majority of journals are in the Web of Science database, and only 3 journals (Brain Injury, Journal of the American Academy of Child and Adolescent Psychiatry, and Traffic Injury Prevention) are in 2 databases, PubMed and Web of Science (See Table 2).

Classification of papers by method: The studies included in the systematic review show that all papers within their methodology study various disabilities. The result indicates that vision impairment is now the most studied disability, with 14.71% (See Table 3), followed by epilepsy with 11.76%. Autism and motor disability each follow with 8.82%, as does the broader Multiple Disabilities category. Traumatic Brain Injury and Diabetes each represent 5.88%. In contrast, the remaining disabilities (Dementia, Parkinson's, Intellectual Disabilities, Cerebral Palsy, Oculo-Visual, Glare, Rheumatoid Arthritis and Osteoarthritis, Autism and Attention Deficit Hyperactivity Disorder, Dyscalculia, and Migraine) are each studied in only one paper (2.94%).

Table 2

Paper distribution by the journal.

Name of the Journal	Database	Number of publications	Percentage (%)
Accident Analysis and Prevention	Web of Science	1	2.94
Assistive Technology	Web of Science	1	2.94
Autism	Web of Science	1	2.94
Brain Injury	Web of Science and PubMed	2	5.88
Cureus Journal of Medical Science	Web of Science	1	2.94
Epilepsia	Web of Science	1	2.94
Epilepsy & Behavior	Web of Science	1	2.94
Focus On Autism and Other Developmental Disabilities	Web of Science	1	2.94
Journal Of Cataract and Refractive Surgery	Web of Science	1	2.94
Journal of Child Neurology	Web of Science	1	2.94
Journal of the American Academy of Child and Adolescent Psychiatry	Web of Science and PubMed	1	2.94
Movement Disorders	Web of Science	1	2.94
Neurology	Web of Science	1	2.94
PLOS ONE	Web of Science	1	2.94
Professional Geographer	Web of Science	1	2.94
Traffic Injury Prevention	Web of Science and PubMed	1	2.94
Transportation Research Record	Web of Science	1	2.94
Accident Analysis and Prevention	Web of Science	1	2.94
Transportation Research Part F	Scopus	1	2.94
Clinical Ophthalmology	Scopus	1	2.94
Austrian Journal of Clinical Endocrinology and Metabolism	Scopus	1	2.94
Presse Medicale	Scopus	1	2.94
Revista Medica de Chile	Scopus	1	2.94
Chirurgie de la Main	Scopus	1	2.94
Optometry and Vision Science	Scopus	1	2.94
Transportation Research Interdisciplinary Perspectives	Scopus	1	2.94
Epilepsia Open	Scopus	1	2.94
Electronics	Scopus	1	2.94
Clinical Spine Surgery	Scopus	1	2.94
Frontiers in Education	Scopus	1	2.94
Cephalalgia Reports	Scopus	1	2.94
Orthopaedics and Traumatology: Surgery and Research	Scopus	1	2.94
Cornea	Scopus	1	2.94
Total		34	100

Table 3

Distribution of papers disability.

Name of Disability	Percentage (%)
Dementia	2.94
Autism and Attention Deficit Hyperactivity Disorder	2.94
Autism	8.82
Epilepsy	11.76
Glare	2.94
Intellectual Disabilities	2.94
Cerebral Palsy	2.94
Motor Disability, Blind, Mental illness	2.94
Oculo-Visual	2.94
Parkinson's	2.94
Rheumatoid Arthritis and Osteoarthritis	2.94
Traumatic brain injury	5.88
Vision	14.71
Diabetes	5.88
Motor Disability	8.82
Multiple Disabilities	8.82
Dyscalculia	2.94
Migraine	2.94
Total	100

4. Discussion

Driver's licenses for people with disabilities have seen swift and significant change lately. Studies have discovered many impairments that might help identify individuals' challenges while obtaining driver's licenses. The study explores a broad range of strategies used in this domain. Furthermore, this study includes an assessment of each technique, offering scholars complete reference points for future research or academic endeavors.

Nervous System: Several authors agree that disabilities found in the nervous system (Dementia, Parkinson's, Traumatic brain injury, Epilepsy, and Cerebral Palsy) can cause difficulties when driving or getting a driver's license. Furthermore, driving behavior can be sudden and unpredictable and may cause risks to other drivers [27–34, 46, 47]. A 2026 case-control study also found migraine to confer a driving-accident risk comparable to epilepsy, reinforcing the need for individualized risk assessment in nervous-system conditions [59].

Neurodevelopmental Disorders: Neurodevelopmental disorders such as Autism, Attention Deficit Hyperactivity Disorder, and Intellectual Disabilities affect the development of the brain and nervous system. Besides, motor or cognitive abilities, such as driving, can be affected [35–39, 48]. A 2026 qualitative study of young adults with dyscalculia further highlighted numerical-processing and spatial-perception challenges in the licensing process, alongside compensatory strategies that support functional independence [58].

Visual Impairments: Visual impairments may be caused by several problems, such as injuries or congenital anomalies, resulting in blurred vision, spots, or difficulty seeing at night. Common tasks such as driving or getting a driver's license can be challenging. The risks of these impairments (Oculo-Visual, Vision, Glare, and Blind) in driving increase the risk of incidents and infractions [40–43, 49, 50, 51]. A 2026 driving-simulator study similarly found that patients with Fuchs endothelial corneal

dystrophy recognized significantly fewer nighttime hazards than controls, despite normal visual acuity [61].

Motor Disabilities: Rheumatoid arthritis and osteoarthritis are both conditions that can lead to functional impairments, which can affect activities of daily life such as driving [44, 52, 53, 54, 55, 56]. Likewise, a 2026 study of patients recovering from proximal humerus fracture surgery found that most resumed driving within about four months, with recovery time depending on fracture severity and post-operative complications [60].

Common everyday tasks can be a considerable challenge for people with disabilities. Tasks such as driving or obtaining a driver's license are challenges for people with disabilities. The systematic search shows that people with disabilities such as Nervous System, Neurodevelopmental Disorders, Visual Impairments, and Motor Disabilities face additional challenges in obtaining a driver's license. These challenges include control of spontaneous spasms, visual impairment, or motor coordination problems. In addition, they must demonstrate that they do not present a risk to other road users. Another systematic review finding is that if people with disabilities with a driver's license present or create risks while driving, licensing authorities may consider revoking their licenses, which would imply a significant loss in their mobility.

The updated review also highlights the growing body of evidence on diabetes mellitus as a driver's licensing challenge, with regulations varying significantly across countries regarding insulin-treated drivers [52, 53]. Furthermore, vehicle reconfiguration and adaptive technology are increasingly studied as means to enable safe driving for people with multiple disabilities [56]. There is a lack of regulations, laws, and standards for people with disabilities seeking to drive or obtain a driver's license. Future work should focus on these aspects in order that stakeholders can provide better services and opportunities to people who often feel alienated from society. Likewise, new technologies such as Autonomous Vehicles (AVs) should also be integrated into urban mobility planning and strategies. This technology (AVs) can imitate human driving and control capabilities [57]. AVs can help people with disabilities to mobilize without the risk of accidents or infractions.

In developing this paper, selecting publications from the PRISMA checklist was one of the restrictions that presented themselves. Additionally, filtering and assessing publications based on search terms may impact the review paper's comprehensiveness. Additional work that addresses these restrictions might be a potential expansion of this work that could be developed further.

5. Conclusions

Addressing the barriers that prevent people with disabilities from obtaining a driver's license and driving safely is an essential step towards building a more inclusive and equitable society. As has been discussed, disabilities related to the nervous system, neurodevelopmental disorders, visual impairments, and motor impairments present specific challenges that require personalized attention and adaptations to licensing processes. It is essential that driver licensing systems and transport policies evolve to be more inclusive, addressing both the physical and cognitive needs and administrative barriers faced by people with disabilities. This involves the implementation of adapted driving tests, the use of assistive technologies and modified vehicles, and the training of professionals in understanding various disabilities.

Adopting more flexible and comprehensive approaches not only improves access to driving licenses for people with disabilities but also strengthens their autonomy, broadens their opportunities for employment and social participation, and promotes a fairer and more accessible environment. It is the responsibility of governments, organizations, and society at large to ensure

that all individuals have the opportunity to fully exercise their right to mobility by removing remaining obstacles.

Ultimately, addressing these challenges effectively will require a joint effort and an inclusive perspective, where accessibility and equal opportunities are fundamental principles. This is the only way to make driving licenses and road safety truly accessible to all, regardless of their abilities.

Author Contributions

Conceptualization, all authors; methodology, all authors; formal analysis, J.O.; investigation, all authors; writing—original draft preparation, all authors.

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Data Availability Statement

The data will be provided based on request.

Conflicts of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

- [1] Hill, J.D.; Boyle, L.N. Driver Stress as Influenced by Driving Maneuvers and Roadway Conditions. *Transp Res Part F Traffic Psychol Behav* 2007, 10, 177-186. <https://doi.org/10.1016/j.trf.2006.09.002>
- [2] Khattak, Z.H.; Fontaine, M.D.; Boateng, R.A. Evaluating the Impact of Adaptive Signal Control Technology on Driver Stress and Behavior Using Real-World Experimental Data. *Transp Res Part F Traffic Psychol Behav* 2018, 58, 133-144. <https://doi.org/10.1016/j.trf.2018.06.006>
- [3] Louveton, N.; Montagne, G.; Berthelon, C. Synchronising Self-Displacement with a Cross-Traffic Gap: How Does the Size of Traffic Vehicles Impact Continuous Speed Regulations? *Transp Res Part F Traffic Psychol Behav* 2018, 58, 80-92. <https://doi.org/10.1016/j.trf.2018.05.030>
- [4] Lindsay, S. Systematic Review of Factors Affecting Driving and Motor Vehicle Transportation among People with Autism Spectrum Disorder. *Disabil Rehabil* 2017, 39, 837-846. <https://doi.org/10.3109/09638288.2016.1161849>
- [5] Brunnauer, A.; Buschert, V.; Segmiller, F.; Zwick, S.; Bufler, J.; Schmauss, M.; Messer, T.; Möller, H.-J.; Frommberger, U.; Bartl, H.; et al. Mobility Behaviour and Driving Status of Patients with Mental Disorders - an Exploratory Study. *Int J Psychiatry Clin Pract* 2016, 20, 40-46. <https://doi.org/10.3109/13651501.2015.1089293>
- [6] Koppel, S.; Bugeja, L.; Hua, P.; Di Stefano, M.; Charlton, J.L. Issues Relating to the Efficacy of Mandatory Medical Reporting of Drivers with Medical and Other Fitness to Drive Relevant Conditions by Medical and Other Health Practitioners. *J Transp Health* 2019, 12, 237-252. <https://doi.org/10.1016/j.jth.2019.02.005>
- [7] Mehdizadeh, M.; Shariat-Mohaymany, A.; Nordfjaern, T. Accident Involvement among Iranian Lorry Drivers: Direct and Indirect Effects of Background Variables and Aberrant Driving Behaviour. *Transp Res Part F Traffic Psychol Behav* 2018, 58, 39-55. <https://doi.org/10.1016/j.trf.2018.05.029>
- [8] Martinussen, L.M.; Hakamies-Blomqvist, L.; Møller, M.; Özkan, T.; Lajunen, T. Age, Gender, Mileage and the DBQ: The Validity of the Driver Behavior Questionnaire in Different Driver Groups. *Accid Anal Prev* 2013, 52, 228-236. <https://doi.org/10.1016/j.aap.2012.12.036>

- [9] Zhang, Y.; Jiang, C.; Zhang, P. Security-Aware Resource Allocation Scheme Based on DRL in Cloud-Edge-Terminal Cooperative Vehicular Network. *IEEE Internet Things J* 2024, 11, 95-104. <https://doi.org/10.1109/JIOT.2023.3293497>
- [10] Adrian, J.; Postal, V.; Moessinger, M.; Rascle, N.; Charles, A. Personality Traits and Executive Functions Related to On-Road Driving Performance among Older Drivers. *Accid Anal Prev* 2011, 43, 1652-1659. <https://doi.org/10.1016/j.aap.2011.03.023>
- [11] Elvik, R. Risk of Road Accident Associated with the Use of Drugs: A Systematic Review and Meta-Analysis of Evidence from Epidemiological Studies. *Accid Anal Prev* 2013, 60, 254-267. <https://doi.org/10.1016/j.aap.2012.06.017>
- [12] Lefrançois, R.; D'Amours, M. Exposure and Risk Factors among Elderly Drivers: A Case-Control Study. *Accid Anal Prev* 1997, 29, 267-275. [https://doi.org/10.1016/S0001-4575\(96\)00080-2](https://doi.org/10.1016/S0001-4575(96)00080-2)
- [13] Siren, A.; Meng, A. Cognitive Screening of Older Drivers Does Not Produce Safety Benefits. *Accid Anal Prev* 2012, 45, 634-638. <https://doi.org/10.1016/j.aap.2011.09.032>
- [14] Owsley, C.; Wood, J.M.; McGwin, G. A Roadmap for Interpreting the Literature on Vision and Driving. *Surv Ophthalmol* 2015, 60, 250-262. <https://doi.org/10.1016/j.survophthal.2015.01.005>
- [15] Kua, A.; Korner-Bitensky, N.; Desrosiers, J.; Man-Son-Hing, M.; Marshall, S. Older Driver Retraining: A Systematic Review of Evidence of Effectiveness. *J Safety Res* 2007, 38, 81-90. <https://doi.org/10.1016/j.jsr.2007.01.002>
- [16] Desapriya, E.; Subzwari, S.; Scime-Beltrano, G.; Samayawardhena, L.A.; Pike, I. Vision Improvement and Reduction in Falls after Expedited Cataract Surgery. *J Cataract Refract Surg* 2010, 36, 13-19. <https://doi.org/10.1016/j.jcrs.2009.07.032>
- [17] Blanchard, R.A.; Myers, A.M. Examination of Driving Comfort and Self-Regulatory Practices in Older Adults Using in-Vehicle Devices to Assess Natural Driving Patterns. *Accid Anal Prev* 2010, 42, 1213-1219. <https://doi.org/10.1016/j.aap.2010.01.013>
- [18] Asbridge, M.; Desapriya, E.; Ogilvie, R.; Cartwright, J.; Mehrnough, V.; Ishikawa, T.; Nuwan Weerasinghe, D. The Impact of Restricted Driver's Licenses on Crash Risk for Older Drivers: A Systematic Review. *Transp Res Part A Policy Pract* 2017, 97, 137-145. <https://doi.org/10.1016/j.tra.2017.01.006>
- [19] Braitman, K.A.; Chaudhary, N.K.; McCartt, A.T. Restricted Licensing among Older Drivers in Iowa. *J Safety Res* 2010, 41, 481-486. <https://doi.org/10.1016/j.jsr.2010.10.001>
- [20] O'Byrne, C.; Naughton, A.; O'Neill, D. Is Driver Licensing Restriction for Age-Related Medical Conditions an Effective Mechanism to Improve Driver Safety without Unduly Impairing Mobility? *Eur Geriatr Med* 2015, 6, 541-544. <https://doi.org/10.1016/j.eurger.2015.08.008>
- [21] Page, M.J.; McKenzie, J.E.; Bossuyt, P.M.; Boutron, I.; Hoffmann, T.C.; Mulrow, C.D.; Shamseer, L.; Tetzlaff, J.M.; Akl, E.A.; Brennan, S.E.; et al. The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews. *The BMJ* 2021, 372. <https://doi.org/10.1136/bmj.n71>
- [22] Alawadhi, M.; Almazrouie, J.; Kamil, M.; Khalil, K.A. A Systematic Literature Review of the Factors Influencing the Adoption of Autonomous Driving. *International Journal of Systems Assurance Engineering and Management* 2020. <https://doi.org/10.1007/s13198-020-00961-4>
- [23] Ortega, J.; Ortega, M.; Ismael, K.; Ortega, J.; Moslem, S. Systematic Review of Overtaking Maneuvers with Autonomous Vehicles. *Transportation Engineering* 2024, 17. <https://doi.org/10.1016/j.treng.2024.100264>
- [24] Peixoto, B.; Pinto, R.; Melo, M.; Cabral, L.; Bessa, M. Immersive Virtual Reality for Foreign Language Education: A PRISMA Systematic Review. *IEEE Access* 2021, 9, 48952-48962. <https://doi.org/10.1109/ACCESS.2021.3068858>
- [25] Martucci, A.; Gursesli, M.C.; Duradoni, M.; Guazzini, A. Overviewing Gaming Motivation and Its Associated Psychological and Sociodemographic Variables: A PRISMA Systematic Review. *Hum Behav Emerg Technol* 2023. <https://doi.org/10.1155/2023/5640258>
- [26] Abelha, M.; Fernandes, S.; Mesquita, D.; Seabra, F.; Ferreira-Oliveira, A.T. Graduate Employability and Competence Development in Higher Education-A Systematic Literature Review Using PRISMA. *Sustainability (Switzerland)* 2020, 12. <https://doi.org/10.3390/su12155900>
- [27] Seiler, S.; Schmidt, H.; Lechner, A.; Thomas, B.; and Sanin, G.; Ransmayr, G.; Lehner, R.; Dal-Bianco, P.; Santer, P.; Linortner, P.; et al. Driving Cessation and Dementia: Results of the Prospective Registry on Dementia in Austria (PRODEM). *PLoS One* 2012, 7. <https://doi.org/10.1371/journal.pone.0052710>

- [28] Meindorfner, C.; Körner, Y.; Möller, J.C.; Stiasny-Kolster, K.; Oertel, G.H.; Krüger, H.P. Driving in Parkinson's Disease:: Mobility, Accidents, and Sudden Onset of Sleep at the Wheel. *MOVEMENT DISORDERS* 2005, 20, 832-842. <https://doi.org/10.1002/mds.20412>
- [29] Cullen, N.; Krakowski, A.; Taggart, C. Early Neuropsychological Tests as Correlates of Return to Driving after Traumatic Brain Injury. *Brain Inj* 2014, 28, 38-43,. <https://doi.org/10.3109/02699052.2013.849005>
- [30] Sillanpää, M.; Shinnar, S. Obtaining a Driver's License and Seizure Relapse in Patients with Childhood-Onset Epilepsy. *Neurology* 2005, 64, 680-686. <https://doi.org/10.1212/01.WNL.0000151957.80848.0E>
- [31] Baca, C.B.; Barry, F.; Vickrey, B.G.; Caplan, R.; Berg, A.T. Social Outcomes of Young Adults with Childhood-Onset Epilepsy: A Case-Sibling-Control Study. *Epilepsia* 2017, 58, 781-791,. <https://doi.org/10.1111/epi.13726>
- [32] Willems, L.M.; Reif, P.S.; Knake, S.; Hamer, H.M.; Willems, C.; Kraemer, G.; Felix, R.; and Strzelczyk, A. Noncompliance of Patients with Driving Restrictions Due to Uncontrolled Epilepsy. *EPILEPSY & BEHAVIOR* 2019, 91, 86-89. <https://doi.org/10.1016/j.yebeh.2018.04.008>
- [33] Mesterman, R.; Leitner, Y.; Yifat, R.; Gabi, G.; and Levi-Hakeini, O.; Bitchonsky, O.; Rosenbaum, P.; Harel, S. Cerebral Palsy-Long-Term Medical, Functional, Educational, and Psychosocial Outcomes. *J Child Neurol* 2010, 25, 36-42, <https://doi.org/10.1177/0883073809336677>
- [34] Cullen, N.; Krakowski, A.; Taggart, C. Functional Independence Measure at Rehabilitation Admission as a Predictor of Return to Driving after Traumatic Brain Injury. *Brain Inj* 2014, 28, 189-195. <https://doi.org/10.3109/02699052.2013.862738>
- [35] Curry, A.E.; Metzger, K.B.; Carey, M.E.; Sartin, E.B.; Huang, P.; Yerys, B.E. Comparison of Motor Vehicle Crashes, Traffic Violations, and License Suspensions Between Autistic and Non-Autistic Adolescent and Young Adult Drivers. *J Am Acad Child Adolesc Psychiatry* 2021, 60, 913-923,. <https://doi.org/10.1016/j.jaac.2021.01.001>
- [36] Randall, K.N.; Ryan, J.B.; Stierle, J.N.; Walters, S.M.; Bridges, W. Evaluating and Enhancing Driving Skills for Individuals With Intellectual Disabilities Through Simulator Training. *Focus Autism Other Dev Disabl* 2021, 36, 191-200,. <https://doi.org/10.1177/1088357620985458>
- [37] Lubin, A.; Feeley, C. Transportation Issues of Adults on the Autism Spectrum Findings from Focus Group Discussions. *Transp Res Rec* 2016, 1-8. <https://doi.org/10.3141/2542-01>
- [38] Mcmanus, B.; Kana, R.; Rajpari, I.; Holm, H.; B.; Stavrinos, D. Risky Driving Behavior among Individuals with Autism, ADHD, and Typically Developing Persons. *Accid Anal Prev* 2024, 195. <https://doi.org/10.1016/j.aap.2023.107367>
- [39] Curry, A.E.; Yerys, B.E.; Huang, P.; Metzger, K.B. Longitudinal Study of Driver Licensing Rates among Adolescents and Young Adults with Autism Spectrum Disorder. *AUTISM* 2018, 22, 479-488. <https://doi.org/10.1177/1362361317699586>
- [40] Vincent, C.; Lachance, J.-P.; Deaudelin, I. Driving Performance Among Bioptic Telescope Users with Low Vision Two Years After Obtaining Their Driver's License: A Quasi-Experimental Study. *ASSISTIVE TECHNOLOGY* 2012, 24, 184-195. <https://doi.org/10.1080/10400435.2012.659955>
- [41] Schoettle, B.; Sivak, M. The Reasons for the Recent Decline in Young Driver Licensing in the United States. *Traffic Inj Prev* 2014, 15, 6-9. <https://doi.org/10.1080/15389588.2013.839993>
- [42] Gray, R.; Perkins, S.A.; Suryakumar, R.; Neuman, B.; Maxwell, W.A. Reduced Effect of Glare Disability on Driving Performance in Patients with Blue Light-Filtering Intraocular Lenses. *J Cataract Refract Surg* 2011, 37, 38-44. <https://doi.org/10.1016/j.jcrs.2010.07.034>
- [43] Casas, I. Social Exclusion and the Disabled: An Accessibility Approach. *PROFESSIONAL GEOGRAPHER* 2007, 59, 463-477. <https://doi.org/10.1111/j.1467-9272.2007.00635.x>
- [44] Romaniello, C.E.; Falls, A.C.; Ricketts, P.; Dega, A.; Elliott, J.O.; Jordan, K.M. Driving Impairment and Healthcare Provider Counseling in Rheumatoid Arthritis and Osteoarthritis Patients: A Cross-Sectional Survey. *CUREUS JOURNAL OF MEDICAL SCIENCE* 2022, 14. <https://doi.org/10.7759/cureus.26280>
- [45] Ortega, J.; Lengyel, H.; Szalay, Z. Overtaking Maneuver Scenario Building for Autonomous Vehicles with PreScan Software. *Transportation Engineering* 2020, 2, 100029. <https://doi.org/10.1016/j.treng.2020.100029>

- [46] Hoppe, C.; Beeres, K.; Witt, J.A.; Sassen, R.; Helmstaedter, C. How are they doing as adults? Psychosocial and socioeconomic outcomes 11-30 years after pediatric epilepsy surgery. *Epilepsia Open* 2023, 8, 1045-1056. <https://doi.org/10.1002/epi4.12766>
- [47] Ding, B.T.K.; Chan, M.L.; Yu, C.S.; Oh, J.Y.L. Return to Driving Is Safe 6 Weeks After Anterior Cervical Surgery for Symptomatic Cervical Degenerative Disc Disease. *Clinical Spine Surgery* 2023, 36, E1-E6. <https://doi.org/10.1097/BSD.0000000000001357>
- [48] Thorslund, B.; Lidestam, B. Self-reported challenges in the driving license process for adolescents with ADHD and ASD. *Transportation Research Part F: Traffic Psychology and Behaviour* 2025, 113, 250-262. <https://doi.org/10.1016/j.trf.2025.01.012>
- [49] Bron, A.M.; Viswanathan, A.C.; Thelen, U.; de Natale, R.; Ferreras, A.; Gundgaard, J.; Schwartz, G.; Buchholz, P. International vision requirements for driver licensing and disability pensions: using a milestone approach in characterization of progressive eye disease. *Clinical Ophthalmology* 2010, 4, 1361-1369. <https://doi.org/10.2147/OPTH.S15359>
- [50] Johnson, C.A. Vision requirements for driver's license examiners. *Optometry and Vision Science* 2005, 82, 766-771. <https://doi.org/10.1097/01.opx.0000174767.13915.40>
- [51] Nyberg, J.; Andersson, J.; Strandberg, T. Experienced processes and outcomes of driving license withdrawal due to visual field loss: A Swedish survey study of trust in authorities. *Transportation Research Interdisciplinary Perspectives* 2023, 18, 100779. <https://doi.org/10.1016/j.trip.2023.100779>
- [52] Rinnert, K. Can I Remain a Bus Driver With Insulin Treatment? A Representation of the Current Legislation With Regard to the Driving Ability of People With Diabetes Mellitus. *Austrian Journal of Clinical Endocrinology and Metabolism* 2010, 3, 14-19.
- [53] Cimino, L.; Deneufgermain, A.; Lalau, J.D. Driving license and mellitus diabetes. *Presse Medicale* 2015, 44, e309-e316. <https://doi.org/10.1016/j.lpm.2015.06.007>
- [54] García, D. Can I drive a car, doctor? Car driving evaluation for people with disability and the importance in rehabilitation. *Revista Medica de Chile* 2010, 138, 228-234. <https://doi.org/10.4067/S0034-98872010000200013>
- [55] Gonnelli, D.; Legré, R. Driving licence and hand surgery. *Chirurgie de la Main* 2011, 30, 79-84. <https://doi.org/10.1016/j.main.2011.01.006>
- [56] Spoladore, D.; Mahroo, A.; Davalli, A.; Sacco, M. Reconfiguring Vehicles for Drivers with Disability: A Knowledge-Based Decision Support System. *Electronics* 2024, 13, 398. <https://doi.org/10.3390/electronics13020398>
- [57] Jeong, Y.J.; Choi, J.S.; Jung, M.Y.; Kim, J.R.; Jeong, Y.G.; Park, K.Y.; Kong, M.J.; Lee, K.S. Determinants of successful driving rehabilitation training in licensed individuals with disabilities. *PLoS ONE* 2025, 20, e032201. <https://doi.org/10.1371/journal.pone.0322016>
- [58] Cohen Zada, O. Bypassing the disability: learning experiences and coping strategies of young adults with dyscalculia in the driver's licensing process. *Frontiers in Education* 2026. <https://doi.org/10.3389/feduc.2026.1803209>
- [59] Silva, L.; Chaves, J.; Videira, G.; Andrade, C. Migraine as an underrecognized functional disability with implications for driving safety. *Cephalalgia Reports* 2026. <https://doi.org/10.1177/25158163261443991>
- [60] Le Thai, V.; Antoni, M.; Clavert, P. Return to driving after surgical treatment of proximal humerus fractures. *Orthopaedics and Traumatology: Surgery and Research* 2026. <https://doi.org/10.1016/j.otsr.2025.104346>
- [61] Sarin, S.R.; Kigin, M.; Balk, E.; Diel, R.; Ling, J.; Greiner, M.A.; Sohn, E.H.; Wilkinson, M.E.; Brown, T.; Sales, C.S. Functional Assessment of Fuchs Endothelial Corneal Dystrophy in the National Advanced Driving Simulator: Initial Study of Nighttime Glare and Scheimpflug Imaging. *Cornea* 2026. <https://doi.org/10.1097/ICO.0000000000003894>