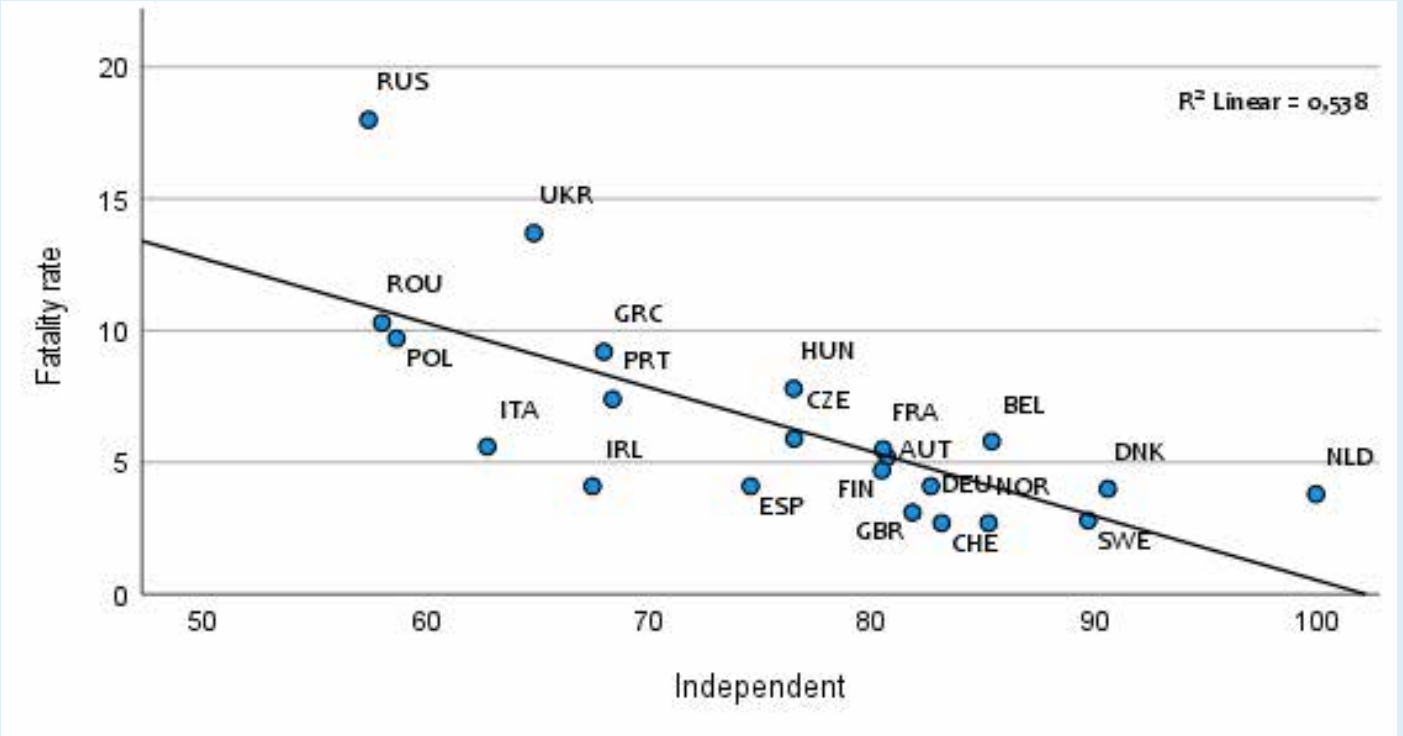
PANEL SESSION 2

Factors and impact of traffic safety culture

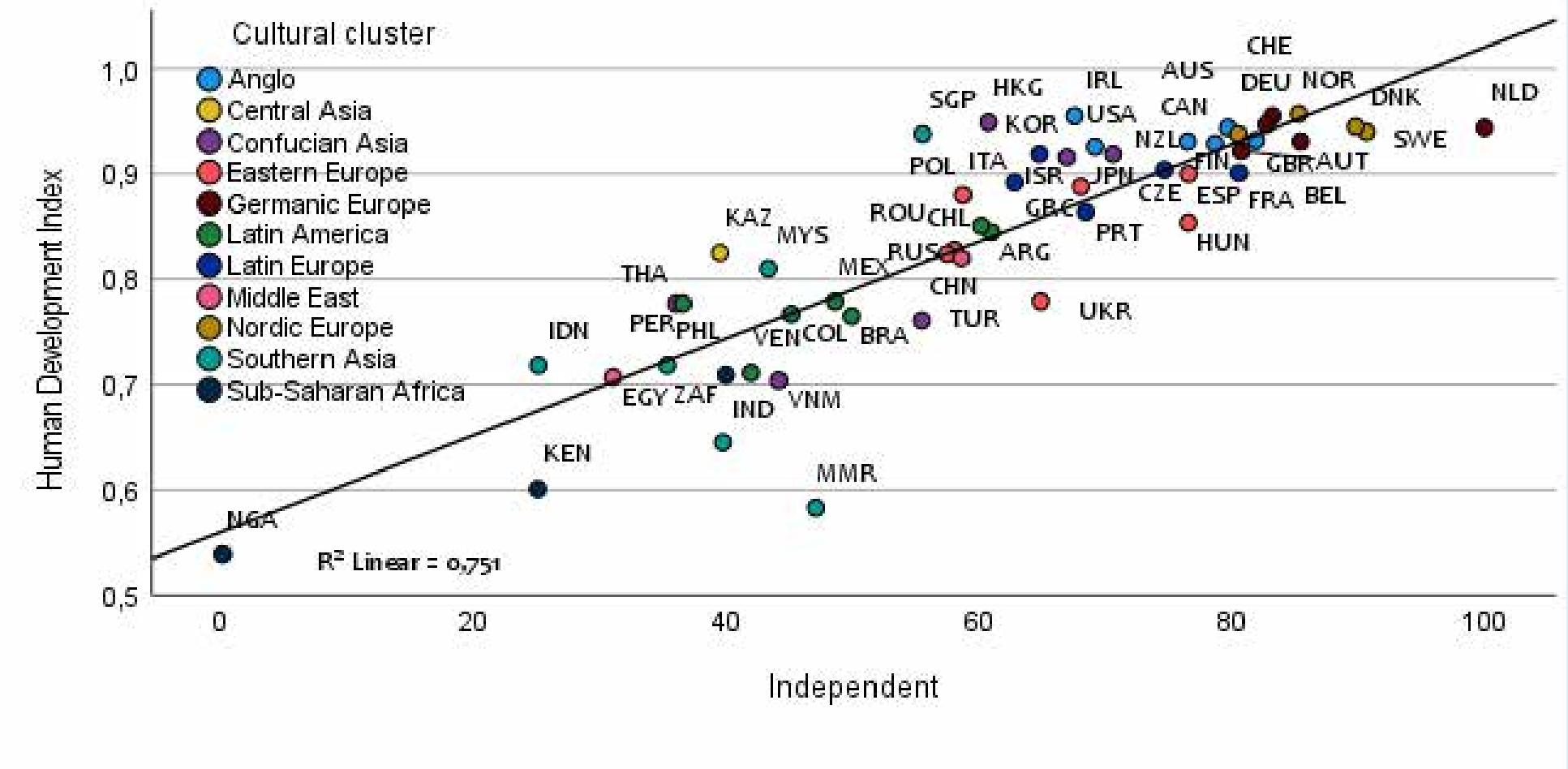
As the SEM analysis shows	National culture and traffic safety culture are associated with
• *Different factors contribute to traffic safety culture.* • *The relative importance of these factors differs between countries.* • *Many of these factors are interrelated.*	• *Social norm* • *Behaviour in traffic* • *Attitudes towards policy measures in road safety*

Correlation between culture and road fatality rate

- The Pearson correlation between Independent and fatality rate is r = -0.746 (p < 0.001)
- The Pearson correlation between Confucianist and fatality is r = -0.414 (p = 0.002).
- The higher a society is ranked on the Independent and Confucianist scales, the better its road safety performance.
- The associations still hold when only European countries are considered: over 50% of the variation in fatality rate can be explained by the dimension Independent.



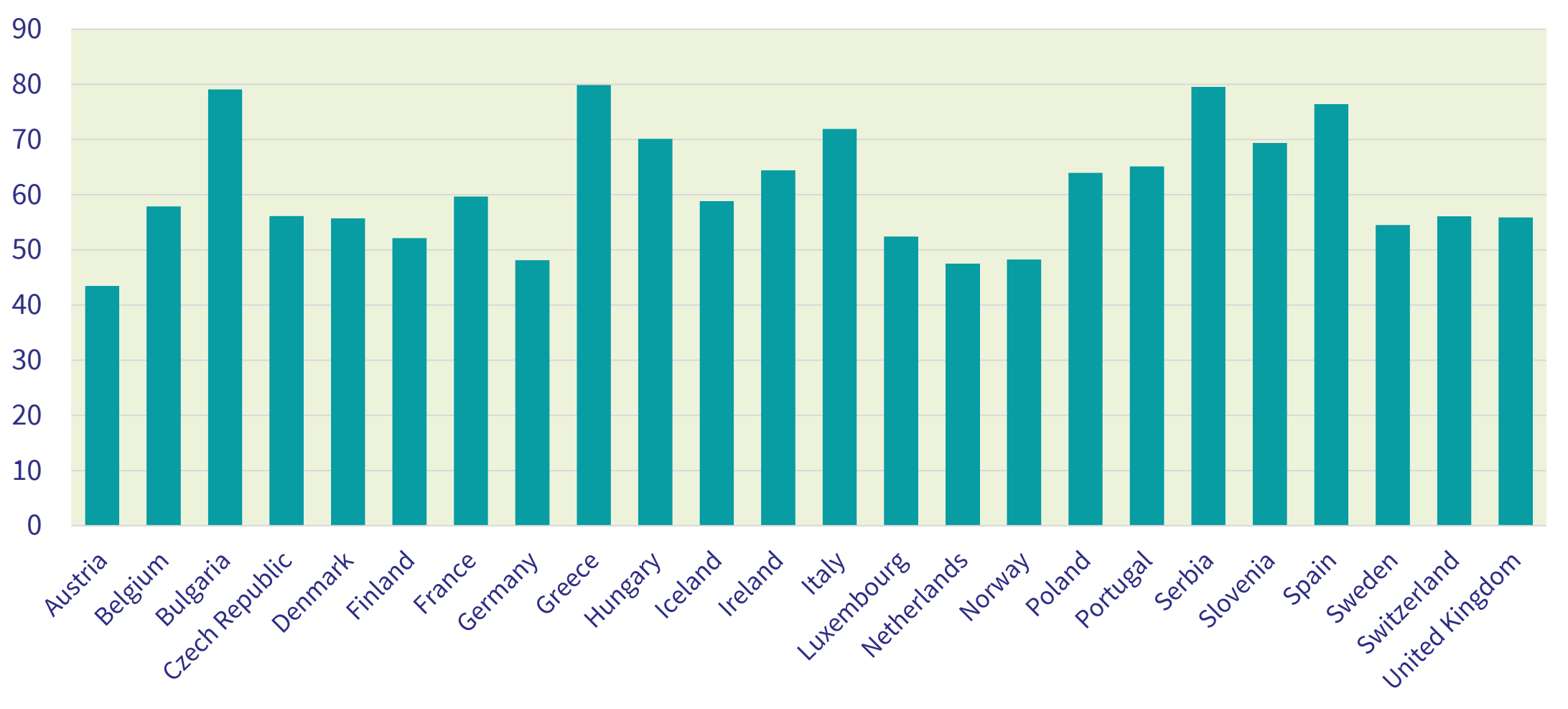
Link between culture and development (HDI)



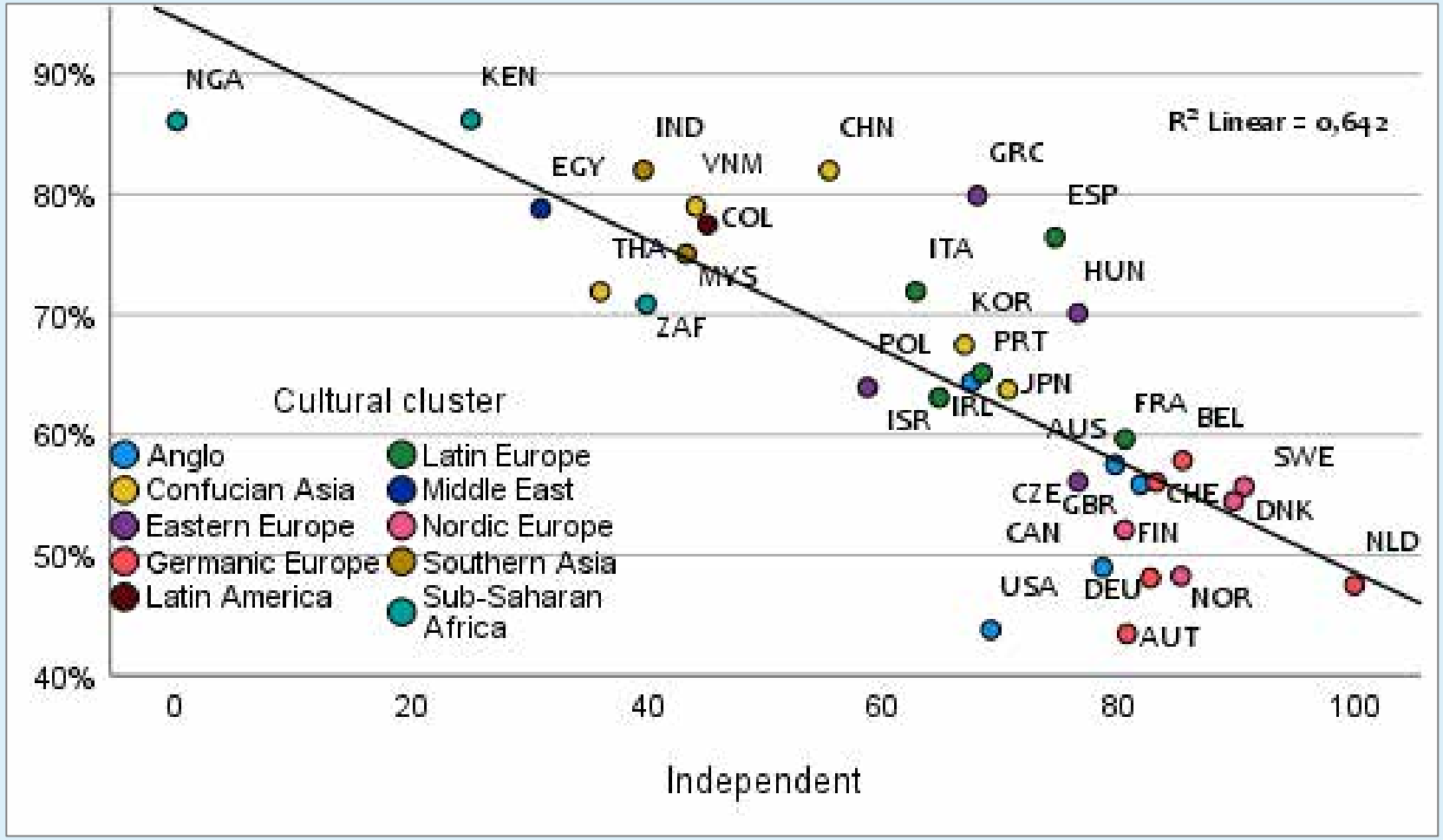
National culture is associated with behaviour in traffic

(% of road users)	Source	Correlation with	
		Independent	Confucianist
Car drivers exceeding speed limits in built-up areas	ESRA (41)	0.533**	0.291*
Car drivers exceeding speed limits outside built-up areas (except motorways)	ESRA (41)	0.658**	0.295
Car driver exceeding speed limits on motorways	ESRA (41)	0.572**	0.107
Car drivers driving over the BAC limit	ESRA (41)	-0.283*	-0.322*
Car drivers reading text messages while driving	ESRA (40)	-0.703**	-0.445**
Cyclists cycling without a helmet	ESRA (41)	0.203	0.218
Rear passengers of cars wearing seat-belt	WHO (32)	0.814**	0.552**
PTW riders wearing helmet	WHO (38)	0.620**	0.125
PTW passengers wearing helmet	WHO (33)	0.618**	0.039

Example: level of public support for ISA



Support for ISA is lowest in countries with a strong ‘Independent’ culture



Defining and measuring TSC

Challenges

- *No consensus on the definition of TSC*
- *No consensus on how to measure TSC*
- *Difference between “national” and “organisation” level*

Many attempts to “operationalise” TSC

- *Road safety performance indicators*
- *“Road safety maturity level”*
- *“Road safety index”*

ESRA data

- *Includes many (but not all) components of TSC at national level*
- *ESRA misses data on national actions*
- *ESRA is not suitable for the organisation level*

Priority research needs and policies

- Speed reduction in cities (30 km/h)
- Use more technology-based enforcement
- International benchmarking
- Safer rural roads; separation of traffic modes
- Safety of vulnerable road users
- Transfer of penalties within countries
- Benefits of vehicle automation
- Safety of e-scooters
- Helmets for cyclists
- Separate cycle tracks
- Promoting public transport
- Changing traffic safety culture

Thank you for your attention!

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NEXT

Round 2.

Role of cultural aspects in road safety

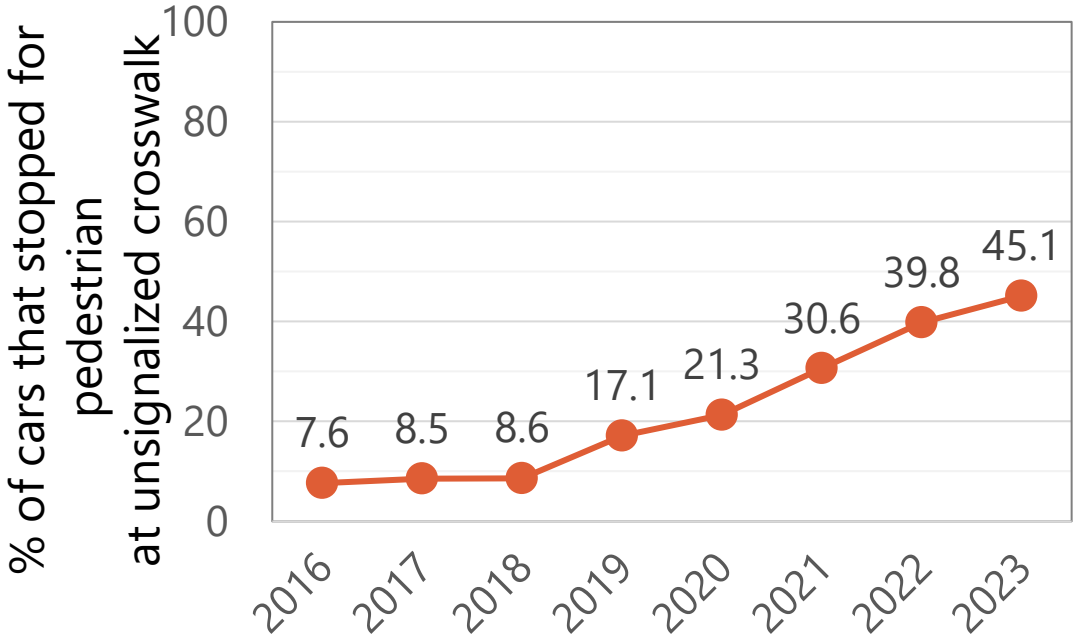
Japan: traffic safety at hand

- In general, people are disciplined to respect traffic safety.
  - Prefer harmony with others: Conflict-avoiding culture
- **Traffic safety culture has been created** through "traffic wars" since 1960s.
  - Infrastructure development, legislation, strengthened penalties, traffic safety education, vehicle technology development, etc.
- From childhood, people consider traffic safety as local problem.
  - **Elementary school children usually walk to school by their own.**

Local people support children's walk

Yachiyo City: Lollipop guide handbook

Japan: Pedestrian priority – gradual change of culture?

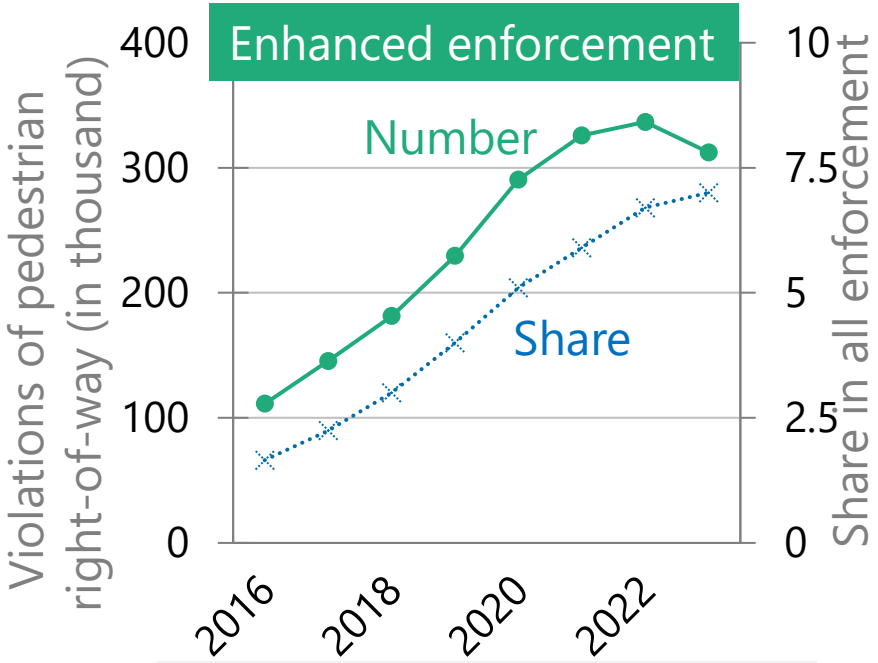


Japan Automobile Federation (JAF): Nation-wide survey 2023

Public relations

Police Net Chiba

Enhanced enforcement



e-Stat: enforcement for road traffic law

- Drivers were (are?) accustomed to disregard pedestrian priority at unsignalized crosswalks, inducing risks of pedestrians.
- Measures have been taken on various aspects.

Road geometry improvement

Asian countries: locally adopted transport modes

Manila

Bangkok


Kolkata


Kolkata


Manila

- Locally adopted transport modes (i.e., Paratransit, LAMAT) are widespread.
  - Door-to-door transport
  - Flexible in narrow roads and congestions
  - Low cost
- Safety challenges
  - Vulnerable riders
  - Uncontrolled loading/unloading
  - Low lane discipline

Asian countries: Streets as a place of people's activities

- Streets has traditionally been the places where people make activities.
  - Stall street, festivals on street
- Such activities had been abolished in Japan mostly, because of conflict with road traffic.

➡ Loss of culture and vitality of cities? (paradigm shift)

How to balance those?

NEXT

Interplay of Cultural Aspects & Road Safety: The Case of Arab Countries

(case of the UAE)

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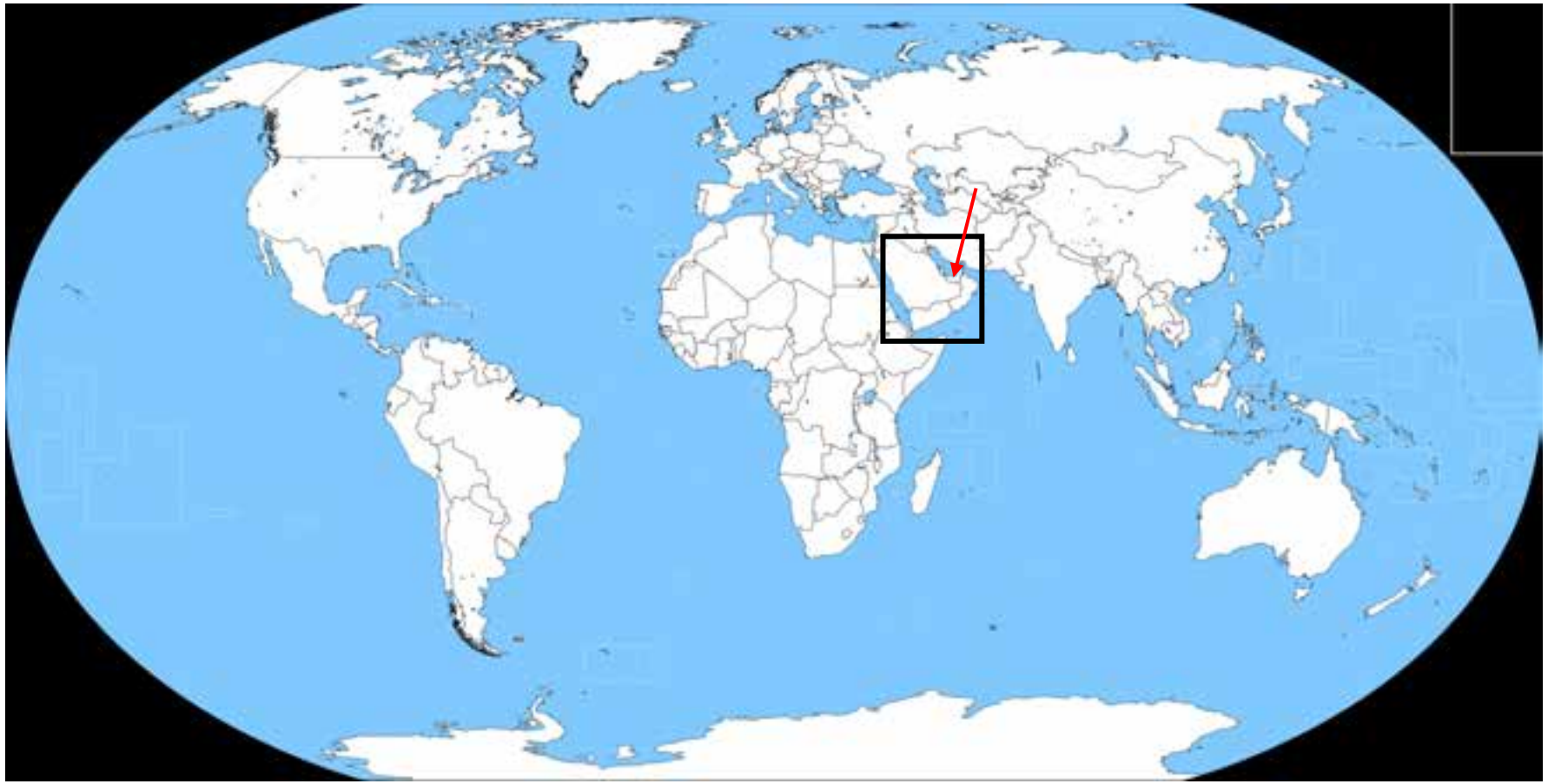
The 10th GIFTS 2024
International Perspectives on Traffic Safety Culture
Tokyo, Japan, Nov. 5-6




Iraq
Iran
Kuwait
Bahrain
Qatar
Saudi Arabia
UAE
Oman
Yemen
Arabian Sea

Q) To what extent cultural aspects play an important role in road safety?

(Answers based on data/information from the **United Arab Emirates, UAE)**

- **Representative** of Arabian/Persian Gulf countries
- **Not representative** of Arab Counties

Cultural aspects do play an important and sizable role in road safety in the UAE

- Cultural diversity
- Two cultural “structures”
  1. UAE Nationals
  2. Expatriate Communities
- They are distinct
  - Income/Economics
  - Social & cultural norms

1. UAE Nationals

- Less individualistic society
- Cultural values more communal and shared,
  - +ve and –ve Road Safety views and norms included
- Those values could potentially play a more instrumental role in addressing safety issues
- Not fully utilized
- Potential not recognized
- Mechanisms not developed

2. Expatriate Communities

- Diverse & distinct
  - Indian sub content
  - Philippines
  - Arab courtiers
  - Other
- Diverse safety & driving training and norms
- A Challenge & an opportunity
- Common Sub-cultural & communal shared values/interest within each
- Potential not recognized
- Mechanisms not developed

Q) What are the prioritized research needs or policies for the improvement of road safety in your region?

- How can we **bridge the gap** between modern infrastructure and safety trends, especially among UAE nationals?
- How can we **address intentions** to foster a safer culture?
- How can we **align values** and **intentions** early to tackle safety issues?
- How can we **counter misconceptions** and false beliefs that hinder safety?
- How can we **prioritize soft factors** like values, norms, education, and intentions to improve roadway safety?

Q) Are the new technological development (such as delivery services and micromobility) and the cultural adaptation of such modes creating emerging road safety issues?

- Yes,
- Some **new modes**, such as e-scooters, are seen largely as **fashionable**, cool, and novel
- **Not** necessarily considered **credible**, legitimate, or primary modes
- Still being explored, issues on
  - Ownership
  - Use
  - Equity
  - Priority
  - Cultural barriers

- **Tech integration** in transportation is **emerging** across development stages.

- **New modes**/technologies are mainly **addressed** in the planning phase.

- Design, construction, operation, and maintenance **lag in tech adoption**

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Road Safety Culture, Policy & Practice (PART 2)

Susanna Zammataro

IRF Director General

10TH GIFTS 2024

International Perspectives on Traffic Safety Culture

Tokyo, 7th December 2024

Cultural aspects in road safety worldwide

- Perception of Traffic Rules
- Risk Tolerance and Behavior
- Attitudes Toward Vulnerable Road Users
- Social Norms and Gender Roles
- Enforcement and Education
- Cultural Values of Community vs. Individualism
- Alcohol and Substance Use
- Role of Religion and Traditions

Italy - Distracted driving

Italy - Pedestrians & Cyclists Safety

Italy - Speeding and aggressive driving

One out of two Italians don't believe speeding is dangerous, according to a survey commissioned by highway agency ANAS.

A reported 51% of those polled thought driving over the speed limit "isn't dangerous", while 34.7% said respecting the speed limit is useful and 16.4% believed an "expert driver" can exceed the speed limit

Survey was carried out on a sample of 4,000 drivers and included over 3,500 direct road inspections.

Italy – Reform of the Road Code

Stricter Penalties for Violations

- **Speeding:** The penalties for speeding have been increased, especially for excessive speed. There are more stringent fines and longer suspensions for driving too fast.
- **Drink-driving:** The legal blood alcohol concentration (BAC) limit remains at 0.5 grams per liter for most drivers, but for professional drivers, novice drivers, and those involved in accidents, a stricter zero-tolerance policy applies.
- **Mobile phone use:** There are increased fines and more severe consequences (such as license suspension) for using mobile phones while driving, even when the car is stationary.
- **Seatbelt compliance:** A focus on increased enforcement of seatbelt use, with stricter penalties for non-compliance.

Micromobility - The safety challenge

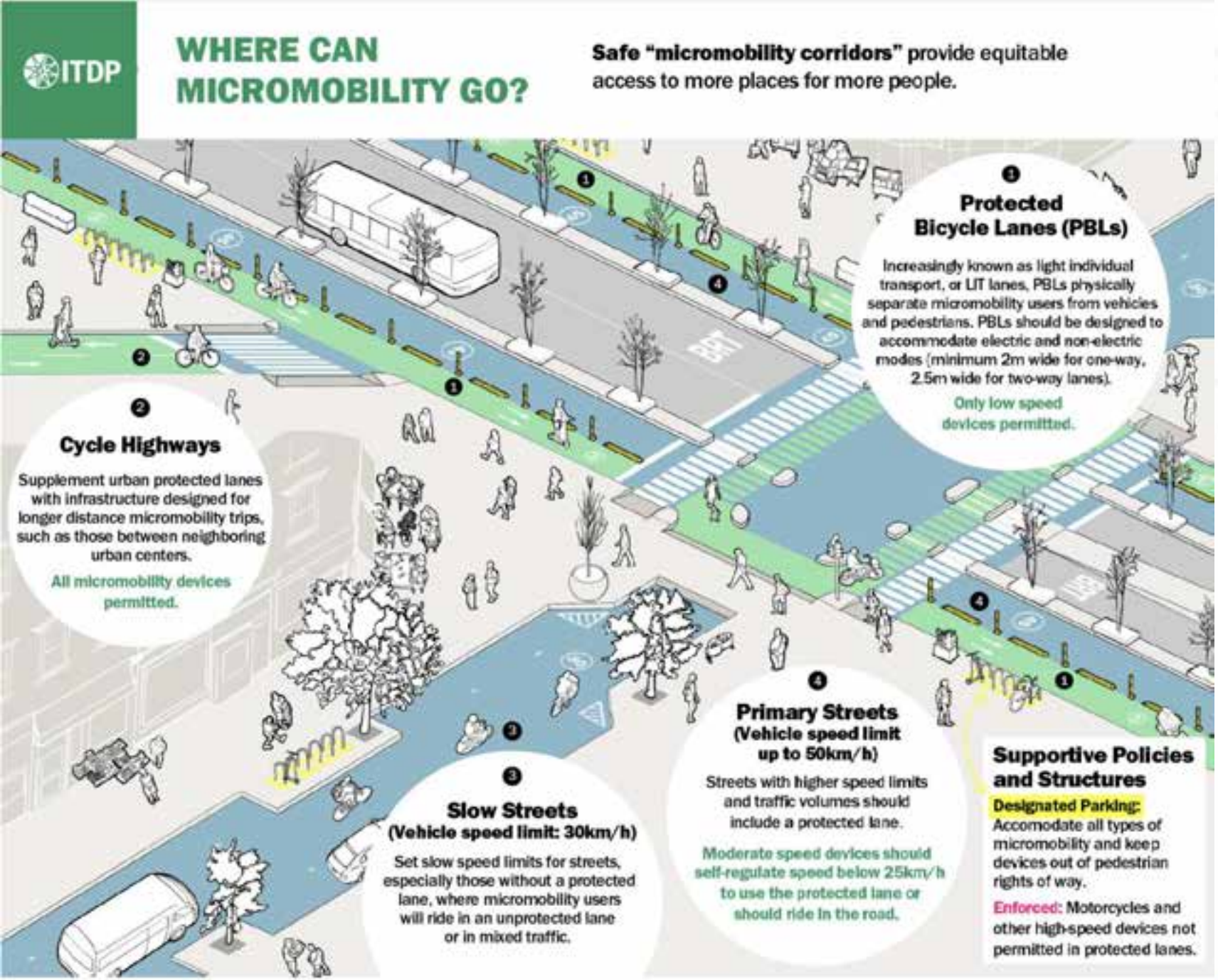
Lack of data on micromobility trips and crashes makes it hard to assess crash risk.

Most **e-scooter**-related crashes involve the rider and no other road user (93%)

Pedestrians are injured through collisions (30%) or tripping over parked e-scooters (59%).

Increase in severe injuries from e-scooter crashes is cause of concern.

ITF (2024), “Safer Micromobility”, International Transport Forum Policy Papers, No. 129, OECD Publishing, Paris.



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In Europe - 20 million users of e-scooters

Micromobility market could be valued at over €100 billion by 2030.

Urban mobility accounting for 40% of CO_2 emissions in Europe and the EU aiming to be climate-neutral by 2050

Potential should not be underestimated.

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Some recommendations

Policy

- Implement a **30km/h (**or lower) speed limit in areas with high micromobility use
- Establish **low-speed limits** for micromobility vehicles in pedestrian or shared zones
- Take **enforcement** action against risky micromobility use
- Promote the use of appropriate **helmets** Introduce rider education in secondary schools
- Enable real-time safety interventions via **telematics**

Infrastructure

- Proactively maintain micromobility infrastructure
- Establish micromobility **parking** policy and designate parking areas where needed
- Establish collaborative **partnerships** with authorities for infrastructure condition reporting
- Onboard parking zones in shared micromobility apps

Safe vehicles

- Set **universal technical requirements** for e-scooter design
- Adopt riding support systems in micromobility vehicles
- Enable context-dependent maximum speed control using **geofencing**
- Establish and **collect data** on distinct micromobility categories in safety statistics
- Enable in-vehicle or in-app **crash detection technology**

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